COMPROD INC.

High Quality • Superior Performance • Engineering Design • Excellent Technical Support

Trusted by over 1,000 customers worldwide

As a market leader in the design and manufacture of RF Antennas, Filtering Systems and In-Building solutions, Comprod puts innovation and customer satisfaction at the core of its business strategy. Over the past 40 years, we have set ourselves apart by adapting our offering to our client needs, while anticipating future industry trends and opportunities.

Building on our engineering expertise and experience, we offer a complete range of high-quality, reliable products that are designed for superior performance and operate in the harshest of environments – from the extreme cold of the Arctic to the heat and humidity of the equatorial tropics.

Our knowledge of the market, best-in-class technology and high level of customer service have made us a partner of choice for over 1,000 Public Safety, Utility, Telco, Transportation, Defense and Government Agencies worldwide.

Our North American manufacturing facilities are certified under ISO 9001:2008 Quality Assurance standards.

Comprod's Headquarter Facilities, Boucherville, QC, Canada

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
Email: sales@comprodcom.com
Fax: 1.800.554.1033

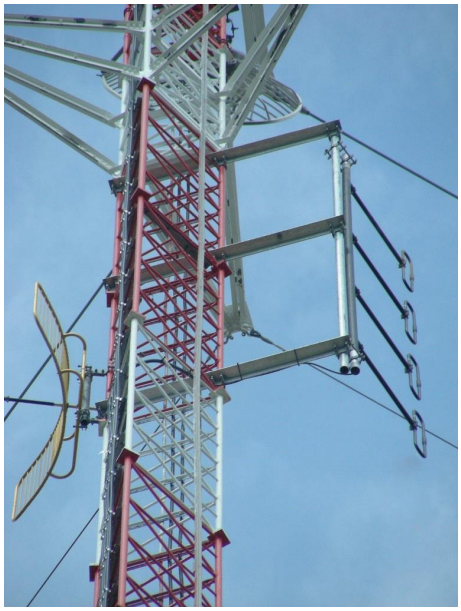
Our product catalog includes a portfolio of products that operate in the 27 MHz to 3.5 GHz frequency range:

Antennas

- Base Station Antennas
- Antenna Mounting Clamps
- Mobile/Transit Antennas
- Disguised Antennas (Covert Applications)

Filters

- Tx/Rx Combiners (VHF, UHF, 700/800/900MHz)
- Mobile Duplexers
- Isolators
- Receiver Multicoupler Systems
- Multicouplers (VHF, UHF, 700/800/900MHz)
- Duplexers (VHF, UHF, 700/800/900MHz)
- Couplers/Combiners/Dividers



In-Building Systems

- Single/Dual/Tri Band (VHF, UHF, 700/800/900MHz)
- Signal Boosters, including Uni-Directional and Bi-Directional Amplifiers (VHF, UHF, 700/800/900MHz)

This catalog provides detailed electrical and mechanical specifications. These specifications are subject to change without notice.

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IN-BUILDING SYSTEMS

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Base Station Antennas

COMPROD
Simplifying RF Solutions

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Renowned for their superior performance, quality and reliability, Comprod Inc.'s antennas are designed to excel in the most hostile environments.

Manufactured with the highest quality electrical and mechanical components, built with precision and strength, they feature sealed cable connections, crimped and soldered connectors, moisture-resistant wire harnesses and welded junctions which make them ideally suited for Mission-Critical applications.

Our technical sales and support staff will be pleased to help you select the right product for your application from our broad variety of market-proven products. Comprod Inc.'s antennas can also be tailored to fit specific needs, based on unique RF network or product applications (e.g. : increased mast height for higher elevation mounting, customized mast separated into two sections for easier handling inside elevators, etc.).

This catalog summarizes our most popular designs, documenting their electrical and mechanical specifications, images and RF propagation patterns: Data files for these antenna patterns can also be downloaded from our website in pat format, or on demand from our support team in any of the other popular data formats suitable for your network planning software.

KEY FEATURES AND OPTIONS:

1. Heavy Duty – Higher strength, designed to perform in high wind load, or unique situations where stronger designs are warranted.

2. Welded Design – All mechanical junctions are welded where possible to increase loading strength. This is ideal for high winds and winter conditions.

3. Black Anodized – A chemical-conversion coating ("Black Anodization") that is incorporated throughout the antenna assembly, colored black to absorb the sun's radiation to promote de-icing of the antenna. The anodization process results in enhanced protection against corrosive elements such as salty air, high humidity, and other corrosive environments (e.g. mining or petrochemical sites). The electrical performance and product life of the antenna is extended with this option.

4. Cable Lengths – Standard length of 2 feet. The feed line length can be adapted to your needs (up to 125 ft.).

5. Connectors – Type N is our standard connector, alternates can be ordered per requirements (e.g. SMA, TNC, DIN 7/16, etc.).

6. Custom Mounting Configurations can be offered depending on the style of antenna.

7. Custom Antennas – different frequency elements on single masts, different patterns (offset, opposing); dual assembly antennas, etc. Our Solutions Specialists can work to adapt a standard design to your unique coverage or installation requirements.

BASE STATION ANTENNAS

Model	Other	118-138	138-174	406-512	746-960	BW* 1.5:1	Type	Pattern	Gain dBd	Watts
265-70		•	•			6% C F	Ground Plane	Omni	1	300
266-70		•	•			1% C F	Ground Plane	Omni	2-3	250
267-70		118-136				15% C F	Ground Plane	Omni	1	250
268-70				406-470		1% C F	Ground Plane	Omni	2-3	100
201-70	25-174	•	•			2% C F	Omni	Omni	1	500
301-70				•		20	Omni	Omni	1	100
401-70					•	10% C F	Omni	Omni	1	100
928-70					•	75	Collinear Omni	Omni	8.5	500
531-70	30-76					7% C F	Exposed Dipole	Offset	2.5	300
532-70	30-76					7% C F	Exposed Dipole	Offset	5.5	300
871F-70FM	88-108					20	Exposed Dipole	Offset	2	200
872F-70FM	88-108					20	Exposed Dipole	Offset	5	450
874F-70FM	88-108					20	Exposed Dipole	Offset	8	450
871F-70AV		•				20	Exposed Dipole	Offset	2	200
872F-70AV		•				20	Exposed Dipole	Offset	5	450
874F-70AV		•				20	Exposed Dipole	Offset	8	450
871F-70			•			36	Exposed Dipole	Offset or Bi	2	200
872F-70			•			36	Exposed Dipole	Offset or Bi	5	450
874F-70			•			36	Exposed Dipole	Offset or Bi	8	450
871F-70-220	215-225					10	Exposed Dipole	Offset or Bi	2	200
872F-70-220	215-225					10	Exposed Dipole	Offset or Bi	5	300
874F-70-220	215-225					10	Exposed Dipole	Offset or Bi	8	500
871F-70LM			•			36	Exposed Dipole	Offset or Bi	2	200
872F-70LM			•			36	Exposed Dipole	Offset or Bi	5	450
874F-70LM			•			36	Exposed Dipole	Offset or Bi	8	500
832-70			148-174			14	Exposed Dipole	Offset	3/6	500
834-70			148-174			14	Exposed Dipole	Offset	6/9	500
842-70			148-174			14	Exposed Dipole	Offset	3/6	500
844-70			148-174			14	Exposed Dipole	Offset	6/9	500
882-70AV		108-138				30	Dipole Array	Omni or Bi	3/5.5	450
884-70AV		108-138				30	Dipole Array	Omni or Bi	6/8.5	500
882-70			•			36	Dipole Array	Omni or Bi	3/5.5	450
884-70			•			36	Dipole Array	Omni or Bi	6/8.5	500
771-70				•		106	Exposed Dipole	Offset or Bi	2	75
772-70				•		106	Exposed Dipole	Offset or Bi	5	150
774-70				•		106	Exposed Dipole	Offset or Bi	8	300
778-70				•		64	Exposed Dipole	Offset or Bi	11	300
782-70				•		64	Dipole Array	Omni or Bi	3-5.5	300
784-70				•		64	Dipole Array	Omni or Bi	6-8.5	300
776-70				•		106	Dual Dipole	Offset	5	300
845-70			148-174			14 (2:1)	Dual Dipole	Omni or Off	3/6	500
876-70			•			36	Dual Dipole	Offset	5	300
F-3676			•	406-470		36/64	Dual Dipole	Offset	8	300
F-3661			•	406-470		36/106	Dual Dipole	Offset	5	300
F-3647			•	406-470		36/106	Dual Dipole	Offset	2	300

*BW = Bandwidth in MHz or % of Center Frequency (CF)

BASE STATION ANTENNAS

Model	Other	118-138	138-174	406-512	746-960	BW 1.5:1	Type	Pattern	Gain	Watts
F-3729			•			36	Reflector	Directional	2.5	200
F-3713			•			36	Reflector	Directional	7	450
F-3766			•			36	Reflector	Directional	9	450
792-70					•	150	Encl. Dipole	Offset	5	150
794-70					•	150	Encl. Dipole	Offset	8	300
799-70					•	150	Encl. Dipole	Offset	10	500
792-70R					•	150	Encl. Dipole	Directional	Up to 8	150
794-70R					•	150	Encl. Dipole	Directional	Up to 13	300
799-70R					•	150	Encl. Dipole	Directional	Up to 15	500
291-70			•			3.75% CF	Yagi	Directional	3.5	350
295-70			•			4% C F	Yagi	Directional	6.5	350
290-70			•			4% C F	Yagi	Directional	9.5	350
250-70			•			36 (2:1)	Yagi	Directional	7	250
291-70-220	215-225					10	Yagi	Directional	3.5	350
295-70-220	215-225					10	Yagi	Directional	6.5	350
290-70-220	215-225					10	Yagi	Directional	9.5	350
F-3872				•		24	Yagi	Directional	3.5	350
433-70				•		24	Yagi	Directional	6.5	350
430-70				•		24	Yagi	Directional	10	350
480-70				406-470		64	Yagi	Directional	10	350
982-70					•	30	Yagi	Directional	3.5	200
983-70					•	85	Yagi	Directional	6.5	200
980-70					•	85	Yagi	Directional	10	200
987-70					•	85	Yagi	Directional	12	200
490-70					806-960	85	Yagi	Directional	10	200
425-70				•		20	Radome Yagi	Directional	10	250
426-70				•		20	Radome Yagi	Directional	10	250
490-70R					•	72	Radome Yagi	Directional	10	150
470-70			132-174			15% C F	Corner Refl.	Directional	7	250
471-70			132-174			15% C F	Corner Refl.	Directional	10	250
470-70-220	215-225					10	Corner Refl.	Directional	7	250
471-70-220	215-225					10	Corner Refl.	Directional	10	250
440-70				•		64	Corner Refl.	Directional	9.5	100
442-70				•		64	Corner Refl.	Directional	12	100
365-70				406-470		20	Parabolic Refl.	Directional	15	250
965-70					764-960	72	Parabolic Refl.	Directional	16.5	200
635-70			132-174			42	Log Periodic	Directional	6	500
645-70			132-174			42	Log Periodic	Directional	6	500
638-70			132-174			36	Log Periodic	Directional	8	500
415-70				•		40	Log Periodic	Directional	1	250
465-70				•		64	Log Periodic	Directional	6	250
590-75BSMO					902-928	26	Data	Omni	2	200

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GROUND PLANE ANTENNA 108-470 MHz

Ground Plane Antenna Series

The Ground Plane Antenna Series are available in VHF and UHF configurations. These omnidirectional antennas are either wide band unity or 2-3 dB gain antennas. They are constructed from high strength, corrosion resistant aluminum alloy and stainless steel. All of our antennas can be completely customized to your particular applications.

- Each antenna has a rugged design to withstand the most extreme environmental conditions.
- Wide frequency band applications.
- The mounting hardware supplied will permit 0.75" to 2.38" O.D. pipe installation.
- DC ground for lightning protection.
- Ideal for mounting on buildings.

267-70

Electrical Specifications	265-70	266-70	267-70	268-70
Frequency Range, MHz	118-174	118-174	118-136	406-470
Nominal Gain, dBd	Unity	2-3.0	Unity	2-3.0
Bandwidth 1.5:1 VSWR, MHz (% Ctr. Freq.)	6%	1%	15.6% (2:1)	1%
Tuning	Field Adj.	Field Adj.	Fixed	Field Adj.
Polarization	Vertical	Vertical	Vertical	Vertical
Vertical Beamwidth (Ver. Pol.)	80º	40º	71º	38º
Pattern	Omni	Omni	Omni	Omni
Power Rating, Watts	300	250	250	100
Nominal Impedance, Ohms	50	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male	Type N Male

Mechanical Specifications	265-70	266-70	267-70	268-70
Max. Length, in (mm)	58 (1473)	108 (2743)	67 (1702)	46 (1168)
Width, in (mm)	55 (1397)	46 (1168)	26.5 (673)	20 (508)
Weight, lbs. (kg)	6.8 (3.3)	6.5 (3.0)	6.0 (2.7)	1.5 (0.7)
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)	125 (201)	125 (201)	125 (201)
Rated Wind Velocity, 0.5" (13mm) Ice, mph (km/h)	140(225)	85 (137)	110 (177)	85 (137)
Lateral Thrust @ 100 mph wind, lbs. (kg)	31.8 (14.4)	40 (18.1)	24 (10.7)	7.3 (3.3)
Bending Moment @top clamp: 100 mph, ft*lb (kg*m)	41 (5.7)	94 (13)	28 (3.9)	12 (1.6)
Projected Area, ft^2 (m^2)	1.2 (0.110)	1.57 (0.146)	0.88 (0.082)	0.27 (0.03)
Mounting Information	167-85 Clamp	167-85 Clamp	167-85 Clamp	167-85 Clamp

Order Information	Black Anodized	406-430	430-450	450-470	118-136	136-148	148-174
265-70	N/A	N/A	N/A	N/A	265-70*1	265-70*2	265-70*3
266-70	N/A	N/A	N/A	N/A	266-70*1	266-70*2	266-70*3
267-70	267-70B	N/A	N/A	N/A	267-70	N/A	N/A
268-70	N/A	268-70*1	268-70*2	268-70*3	N/A	N/A	N/A

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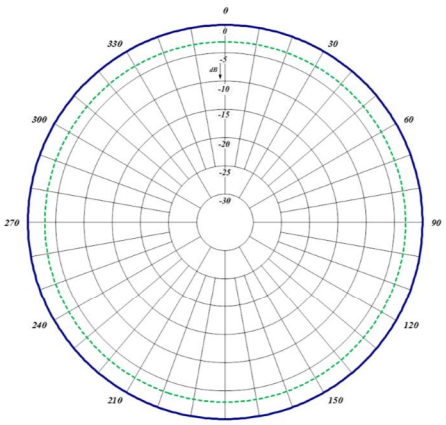
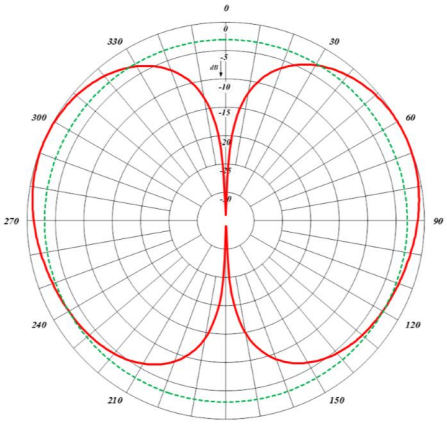
GROUND PLANE ANTENNA 108-470 MHz

265-70



Horizontal Pattern



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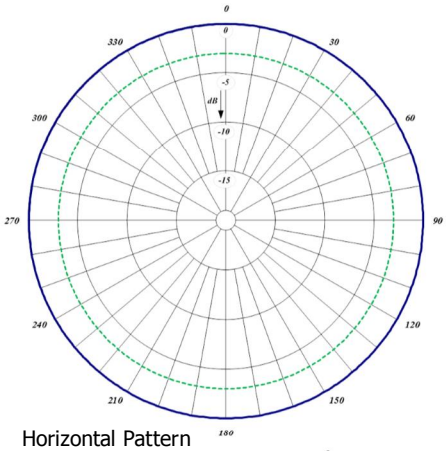

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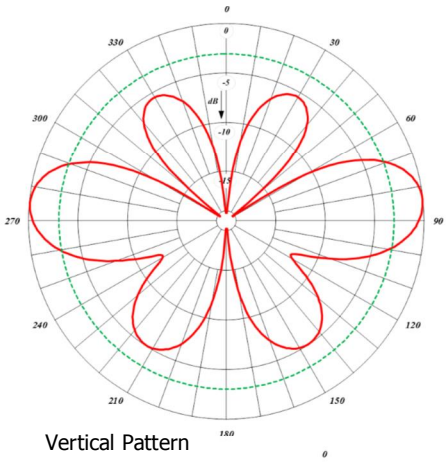
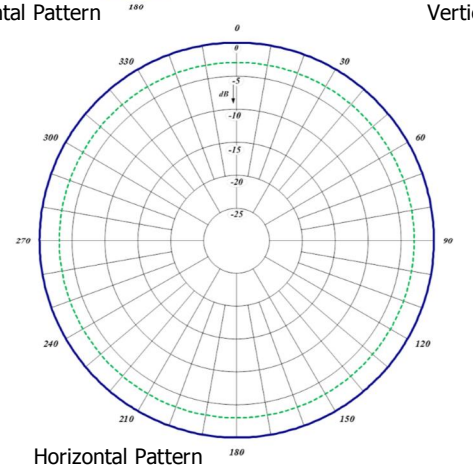


Vertical Pattern

266-70

267-70



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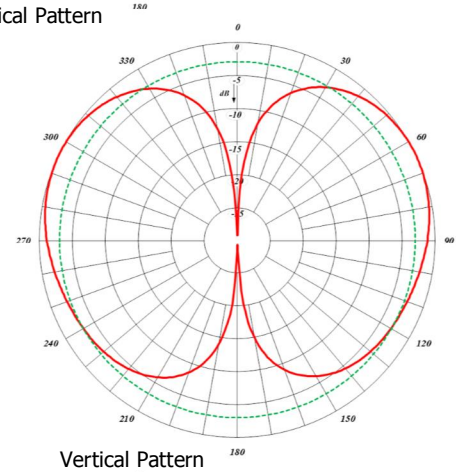

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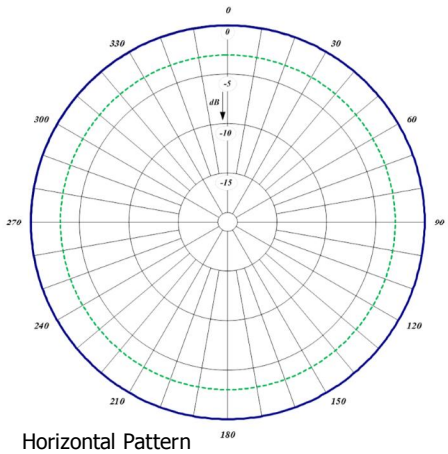

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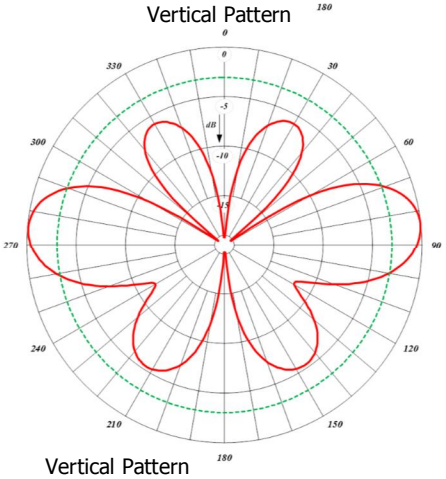
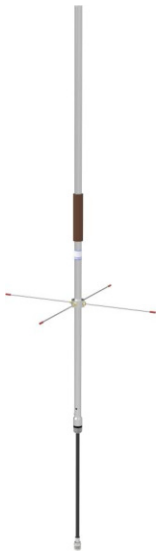


Vertical Pattern

268-70



OMNIDIRECTIONAL ANTENNA SERIES 25 - 960 MHz

Omnidirectional Antenna Series

The Omnidirectional Antenna Series are available in VHF, UHF and 700/800/900 MHz configurations. These omnidirectional antennas are wide-band and unity gain. They are constructed from high strength, corrosion resistant aluminum alloy and stainless steel. All of our antennas can be completely customized to your particular applications.

- Each antenna has a rugged design to withstand the most extreme environmental conditions.
- The mounting hardware supplied will permit 0.75" to 2.3/8" O.D. pipe installation.
- DC ground for lightning protection.
- Because of the very large bandwidth, these are ideal antennas to stock, whether for emergency use or for resale.

401-70

Electrical Specifications	201-70	301-70	401-70
Frequency Range, MHz	25-174 MHz	406-512	700-960
Nominal Gain, dBd	Unity	Unity	Unity
Bandwidth 1.5:1 VSWR, MHz	2%	20	10%
Polarization	Vertical	Vertical	Vertical
Vertical Beam width (Ver. Pol.)	78º	75º	75º
Pattern	Omni	Omni	Omni
Power Rating, Watts	500	100	100
Nominal Impedance, Ohms	50	50	50
Lightning Protection	Star Gap	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male

Mechanical Specifications	201-70	301-70	401-70
Max. Length, in (mm)	229 (5817)	24 (610)	21 (533)
Skirt Diameter, in (mm)	2.625 (67)	N/A	N/A
Whip Diameter, in (mm)	0.75 (19)	N/A	N/A
Weight, lbs. (kg)	17 (7.7)	1.4 (0.7)	1 (0.45)
Rated Wind Velocity, no ice, mph (km/h)	115 (185)	150 (241)	150 (241)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	N/A	100 (161)	100 (161)
Lateral Thrust @ 100 mph, ft*lb (kg*m)	67 (30.4)	3.9 (1.8)	3.4 (1.6)
Bending Moment @top clamp: 100 mph, ft*lb (kg*m)	308 (42.6)	1.84 (0.25)	1.87 (0.26)
Projected Area, ft^2 (m^2)	2.5 (0.23)	0.15 (0.014)	0.13 (0.019)
Mounting Information Mast O.D. (mm)	1.7" (42) O.D.	167-85 Clamp	167-85 Clamp

Order Information	406-430 MHz	430-450 MHz	450-470 MHz	746-806 MHz	806-896 MHz	896-960 MHz
201-70	N/A	N/A	N/A	N/A	N/A	N/A
301-70	301-70*1	301-70*2	301-70*3	N/A	N/A	N/A
401-70	N/A	N/A	N/A	401-70*1	401-70*2	401-70*3

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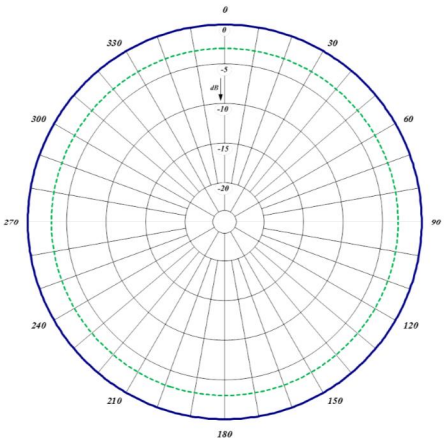
OMNIDIRECTIONAL ANTENNA 25 - 960 MHz



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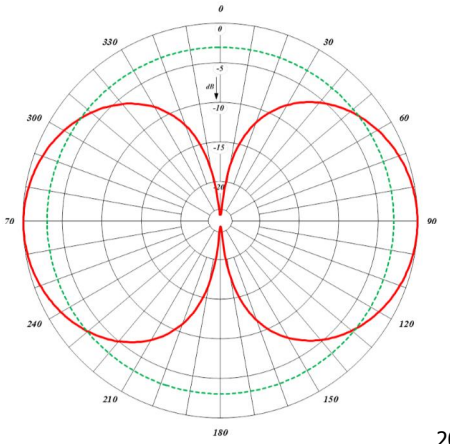
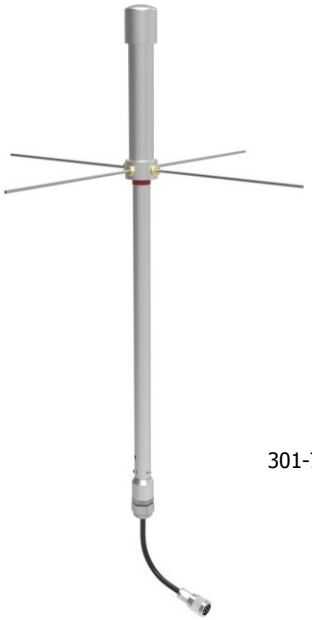
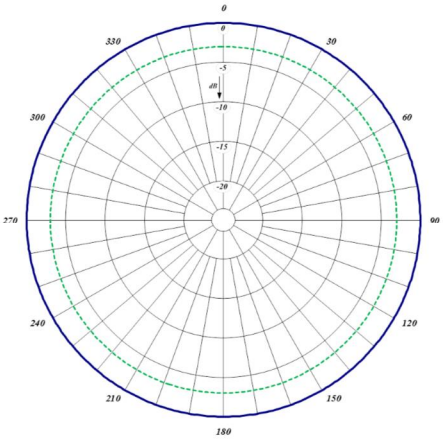


Vertical Pattern

201-70



301-70



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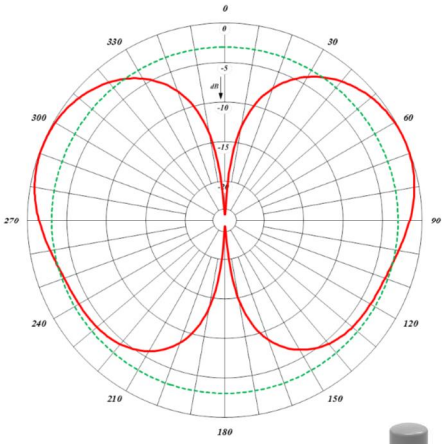

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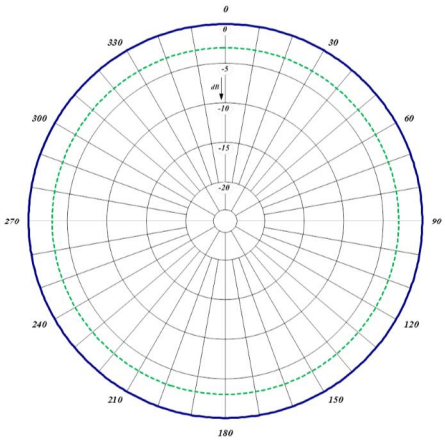

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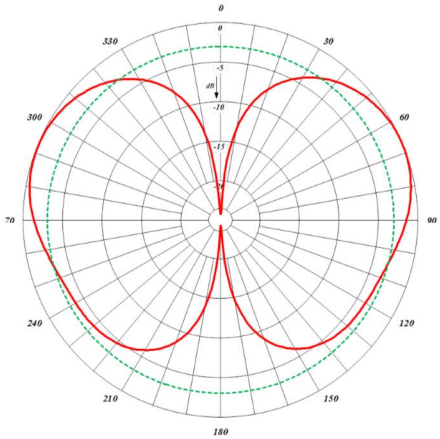

Vertical Pattern

401-70

COLLINEAR OMNIDIRECTIONAL ANTENNA 746-960 MHz

Collinear Omnidirectional Antenna

The 928-70 Collinear Omni Antenna is available in three frequency splits: 746-806; 806-869 or 885-960 within the 746 to 960 MHz range.

The antennas have an 8.5 dBd gain, and offer 6 fixed Electrical Downtilt options, based on customer requirements.

The antenna is constructed with a high quality fiberglass light-grey radome. The aluminum mounting hardware is included with the antenna.

928-70

Electrical Specifications	928-70–1; 928-70-2; 928-70-3
Frequency Range, MHz (per Model 928-70-1; 928-70-2; 928-70-3)	746-806; 806-869; 885-960
Nominal Gain, dBd	8.5
Bandwidth 1.4:1 VSWR, MHz	75
Polarization	Vertical
Horizontal Beamwidth (°)	360
Vertical Beamwidth (°)	6.5
Electrical Downtilt—Fixed (Options) (°)	0, 1, 2, 3, 4, 5, 6
Pattern	Omnidirectional
3rd Order Intermodulation @ 2 X 43 dBm, dBc	< -150
Power Rating, Watts	500
Nominal Impedance, Ohms	50
Lightning Protection	DC Ground
Standard Termination	7/16 DIN-Female

Mechanical Specifications	928-70-1/2/3
Max. Length, in (mm)	130 (3310)
Diameter, in (mm)	2 (52)
Weight, lbs. (kg) - with mounting kit	26 (11.8)
Rated Wind Velocity, mph (km/h)	124 (200)
Radome Material	Fiberglass, light grey, RAL 7035
Radiating Element Material	Brass
Operational Temperature, °C	-55 to 70
Mounting Information	Pole mount included (U-bolts not included)

Order Information	746-806 MHz	806-869 MHz	885-960 MHz
Model	928-70-1	928-70-2	928-70-3

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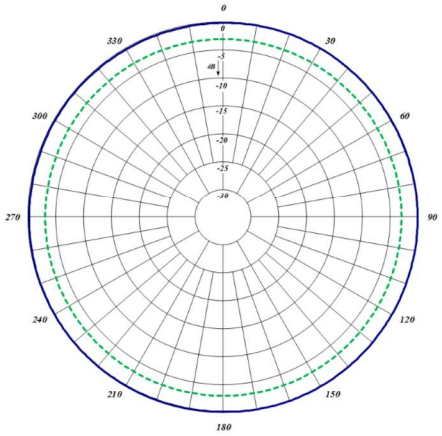
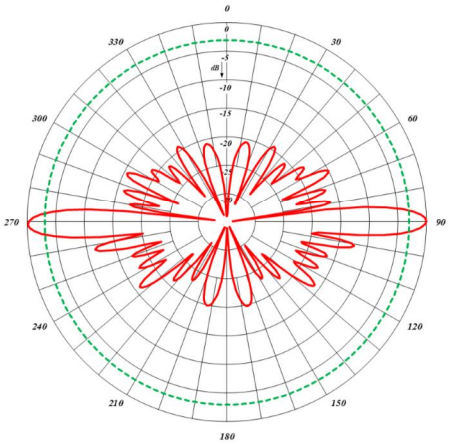
COLLINEAR OMNIDIRECTIONAL ANTENNA 746-960 MHz



Horizontal Pattern



Vertical Pattern

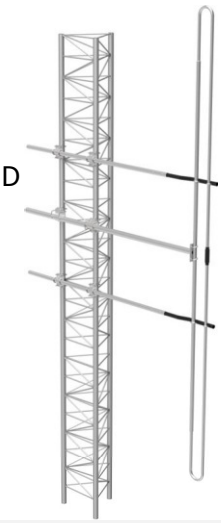
928-70

EXPOSED DIPOLE ANTENNA 30-76 MHz

530 Series Low Band Exposed Dipole Antenna

The Low Band Exposed Dipole Antenna Series are available in our standard or heavy duty construction. These exposed dipole antennas come in both single and dual configurations, depending on the gain required. They are constructed from high strength, corrosion resistant aluminum alloy, hot galvanized steel mounting hardware, and use unique PVC off-set support arms. Our heavy duty versions have dual support braces and use a superior anti-torque support. All components are oversized.

- Each antenna has a rugged design to withstand the most extreme environmental conditions.
- Supplied with anti-torque supports.
- DC ground for lightning protection.
- Can be black anodized coating for enhanced anti-corrosion and de-icing properties



Electrical Specifications	531-70	531-70HD	532-70	532-70HD
Frequency Range, MHz	30-76	30-76	30-76	30-76
Nominal Gain, dBd	2.5	2.5	5.5	5.5
Bandwidth 1.5:1 VSWR, MHz	7%	7%	7%	7%
Polarization	Vertical	Vertical	Vertical	Vertical
Pattern	Offset	Offset	Offset	Offset
Power Rating, Watts	300	300	300	300
Nominal Impedance, Ohms	50	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male	Type N Male

Mechanical Specifications	531-70	531-70HD	532-70	532-70HD
Length @ 30 MHz, in (mm)	189 (4800)	189 (4800)	472 (11989)	472 (11989)
Width, in (mm)	87 (2210)	87 (2210)	87 (2210)	87 (2210)
Weight, lbs. (kg)	37 (17)	43 (19.5)	79 (36)	91 (41)
Rated Wind Velocity, No Ice, mph (km/h)	143 (230)	200 (322)	143 (230)	200 (322)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	98 (158)	160 (258)	98 (158)	160 (258)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	133 (60.8)	160 (72.3)	266 (121.6)	320 (144.6)
Projected Area, ft² (m²)	4.98 (0.46)	5.94 (0.55)	9.96 (0.92)	11.88 (1.10)
Mounting Information Mast O.D. (mm)	(4) 1.25"-2.38"	(6) 1.25"-2.38"	(8) 1.25"-2.38"	(12) 1.25"-2.38"

Order Information	30-32 MHz	32-34 MHz	34-36 MHz	36-38 MHz	38-41 MHz	41-44 MHz	44-47 MHz	47-50 MHz
531-70	531-70*1	531-70*2	531-70*3	531-70*4	531-70*5	531-70*6	531-70*7	531-70*8
532-70	532-70*1	532-70*2	532-70*3	532-70*4	532-70*5	532-70*6	532-70*7	532-70*8
531-70HD	531-70HD*1	531-70HD*2	531-70HD*3	531-70HD*4	531-70HD*5	531-70HD*6	531-70HD*7	531-70HD*8
532-70HD	532-70HD*1	532-70HD*2	532-70HD*3	532-70HD*4	532-70HD*5	532-70HD*6	532-70HD*7	532-70HD*8

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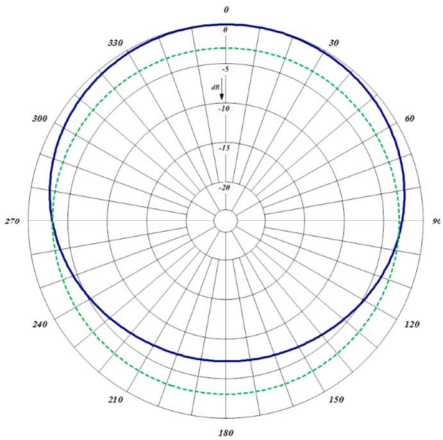
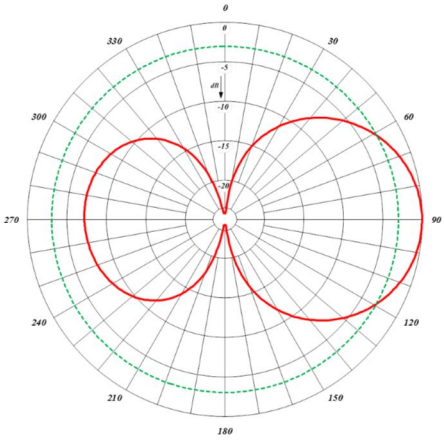
EXPOSED DIPOLE ANTENNA 30-76 MHz



Horizontal Pattern



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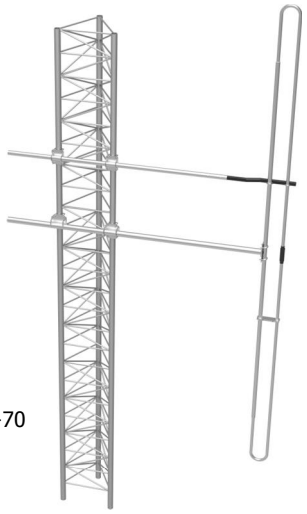
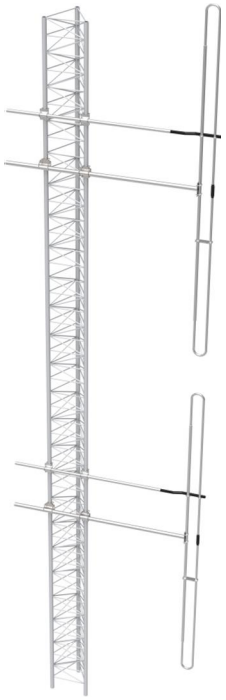
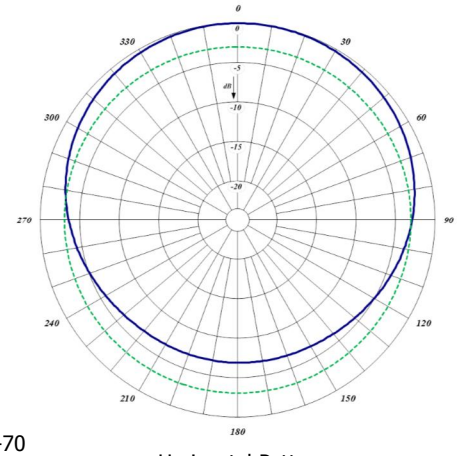


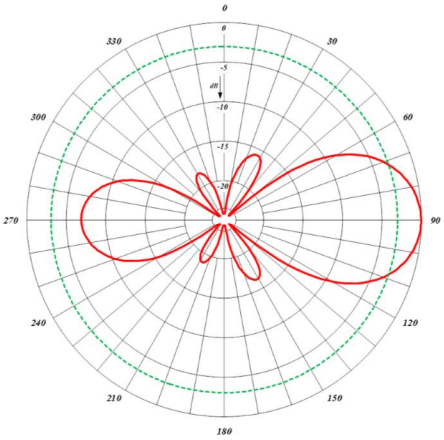
531-70



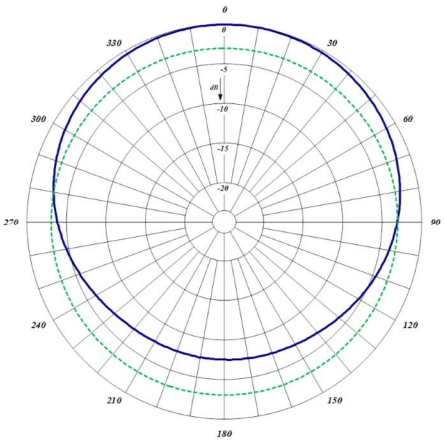
532-70



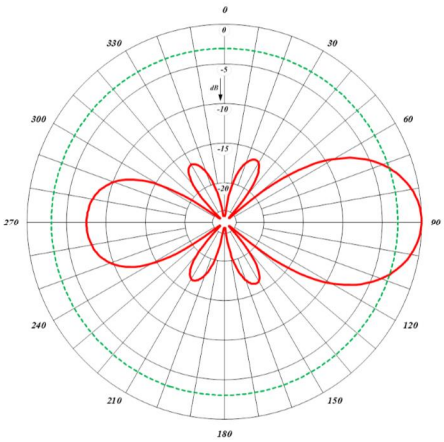
Horizontal Pattern



Vertical Pattern

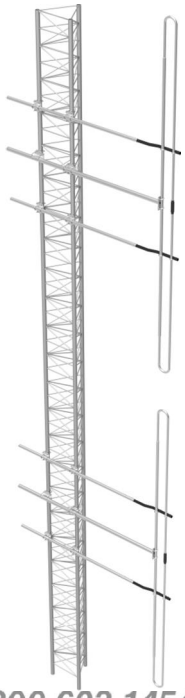


Horizontal Pattern



Vertical Pattern

532-70HD



FM EXPOSED DIPOLES 88-108 MHz

870 FM Series Exposed Dipole

The 870 FM Series Exposed Dipoles are available in 1, 2, 4 dipole configurations. All of our antennas can be completely customized to your particular applications. Our antennas can be black anodized, adjustable, or fixed, side or top mount, and heavy duty versions are available.

- Each antenna is offered in a 1/4 or 3/8 wave spacing versions.
- The 87XA-70 has external cabling and a field-adjustable pattern.
- The 87XF-70 has internal cabling and fixed dipole-mast spacing.
- Heavy duty versions are available. Please contact a Comprod Inc. Technical support technician for consultation.

872-70FM

Electrical Specifications	871F-70FM	872F-70FM	874F-70FM
Frequency Range, MHz	88-108	88-108	88-108
Nominal Gain, dBd	2.0-2.5	5.0-5.5	8.0-8.5
Number of Dipoles	1	2	4
Bandwidth 1.5:1 VSWR, MHz	20	20	20
Polarization	Vertical	Vertical	Vertical
Pattern	Offset	Offset	Offset
Power Rating, Watts	200	450	450
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male

Mechanical Specifications	871F-70FM	872F-70FM	874F-70FM
Length, in (mm)	114 (2896)	198 (5029)	350 (8890)
Width(3/8 Wave Spacing), in (mm)	47 (1194)	47 (1194)	49 (1245)
Weight, lbs. (kg)	19.1 (8.7)	37 (16.8)	137 (62)
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)	128 (206)	105 (169)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	118 (190)	100 (161)	84 (135)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	75 (34)	139 (63)	332 (151)
Bending Moment @ top clamp: 100 mph, ft*lb (kg*m)	60 (8.2)	596 (82)	3565 (493)
Projected Area, ft^2 (m^2)	2.8 (0.26)	5.3 (0.49)	12.5 (1.17)
Mounting Information Mast O.D. (mm)	2.4" (61)	2.4" (61)	3.5" (89)

Order Information	Adjustable	Heavy Duty	Side Mount	Top Mount	Black Anodized
871-70FM	871A-70FM	871F-70FMHD	871F-70FMSM	871F-70FMTM	871F-70FMHDB
872-70FM	872A-70FM	872F-70FMHD	872F-70FMSM	872F-70FMTM	872F-70FMHDB
874-70FM	874A-70FM	874F-70FMHD	874F-70FMSM	874F-70FMTM	874F-70FMHDB

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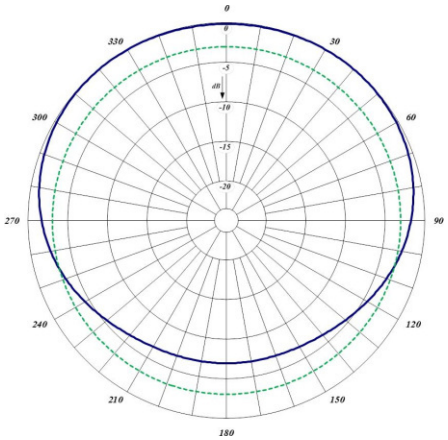
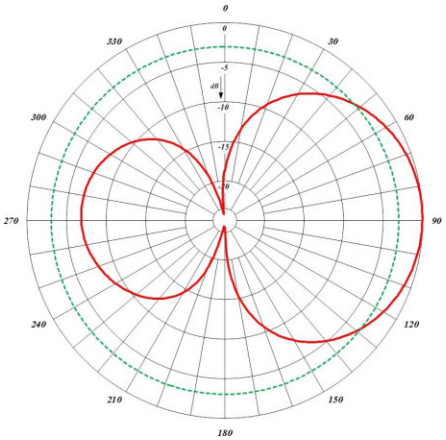
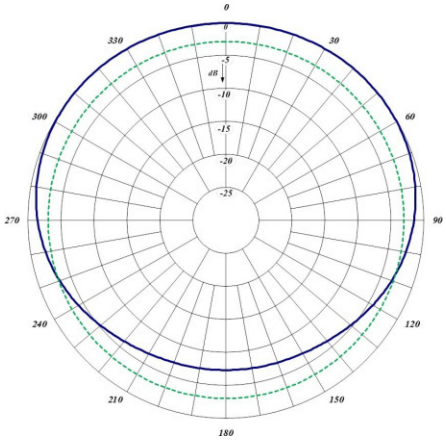
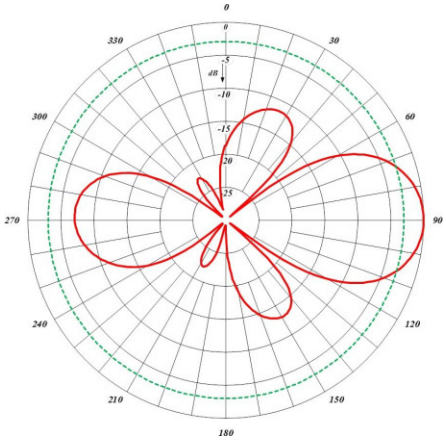
FM EXPOSED DIPOLES 88-108 MHz



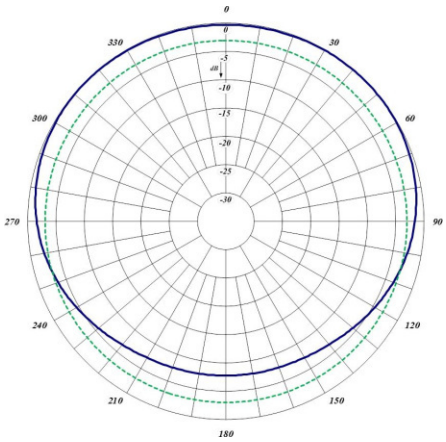


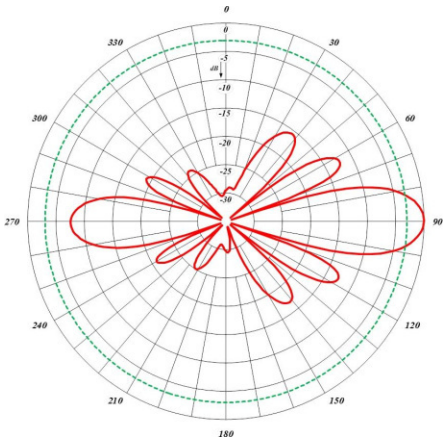
871F-70FM Quarter-wave Spacing Horizontal Quarter-wave Spacing Vertical





Quarter-wave Spacing Horizontal Quarter-wave Spacing Vertical 872F-70FM





874F-70FM Quarter-wave Spacing Horizontal Quarter-wave Spacing Vertical

VHF EXPOSED DIPOLES 118-138 MHz

870 Series VHF Exposed Dipole

The 870 Series AV – Aviation Series VHF Exposed Dipoles are available in 1, 2, 4, 8 and dual dipole configurations. All of our antennas can be completely customized to your particular applications. Our antennas can be black anodized, adjustable or fixed, side mount or top mount, and heavy duty versions are available.

- Each antenna is offered in a 1/4 or 3/8 wave spacing versions.
- The 87XA-70 has external cabling and a field-adjustable pattern.
- The 87XF-70 has internal cabling and fixed dipole-mast spacing.
- Heavy duty versions are available. Please contact Comprod Inc. Technical support technician for consultation.

872F-70AV

Electrical Specifications	871F-70AV	872F-70AV	874F-70AV
Frequency Range, MHz	118-138	118-138	118-138
Nominal Gain, dBd	2.0-2.5	5.0-5.5	8.0-8.5
Number of Dipoles	1	2	4
Bandwidth 1.5:1 VSWR, MHz	20	20	20
Polarization	Vertical	Vertical	Vertical
Pattern	Offset	Offset	Offset
Power Rating, Watts	200	450	450
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male

Mechanical Specifications	871F-70AV	872F-70AV	874F-70AV
Length, in (mm)	78 (1981)	162 (4115)	294 (7468)
Width (3/8 Wave Spacing), in (mm)	54 (1372)	54 (1372)	55 (1397)
Weight, lbs. (kg)	16 (7.3)	31 (14.1)	93 (42)
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)	145 (3341)	120 (193)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	105 (169)	100 (161)	95 (153)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	57 (26)	120 (54.5)	231 (105)
Bending Moment @ top clamp: 100 mph, ft*lb (kg*m)	82 (11)	420 (58)	1437 (199)
Projected Area, ft^2 (m^2)	2.2 (0.2)	4.6 (0.43)	8.8 (0.82)
Mounting Information Mast O.D. (mm)	2.4" (61)	2.4" (61)	2.9" (73)

Order Information	Adjustable	Heavy Duty	Side Mount	Top Mount	Black Anodized
871-70AV	871A-70AV	871F-70AV-HD	871F-70AV-SM	871F-70AV-TM	871F-70AV-HDB
872-70AV	872A-70AV	872F-70AV-HD	872F-70AV-SM	872F-70AV-TM	872F-70AV-HDB
874-70AV	874A-70AV	874F-70AV-HD	874F-70AV-SM	874F-70AV-TM	874F-70AV-HDB

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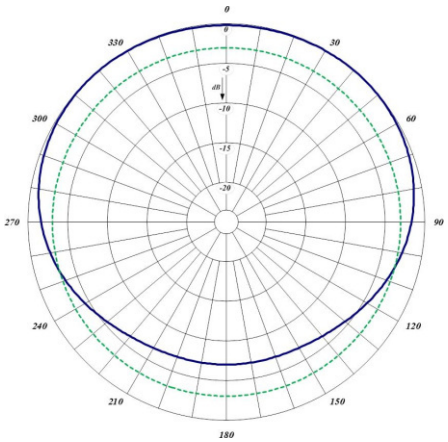
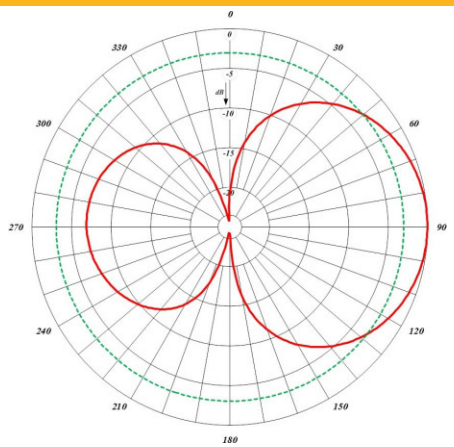
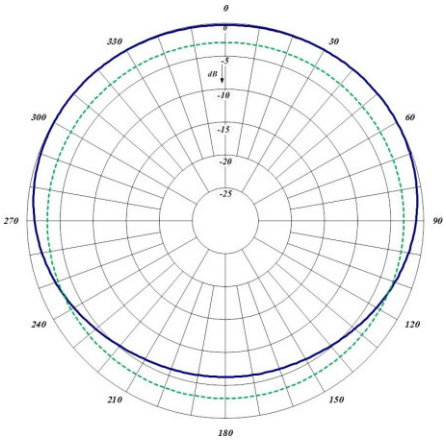
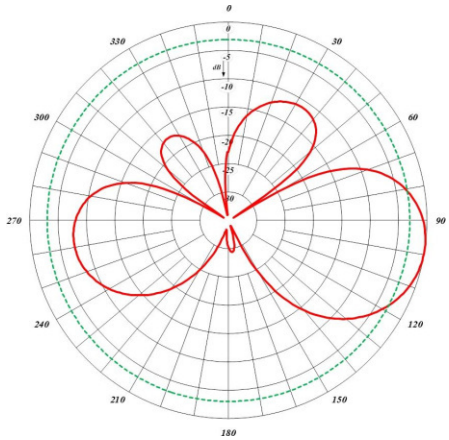
VHF EXPOSED DIPOLES 118-138 MHz



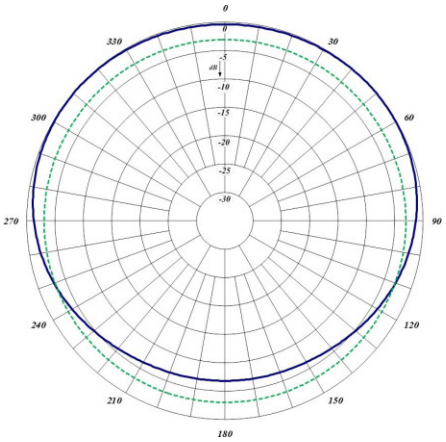


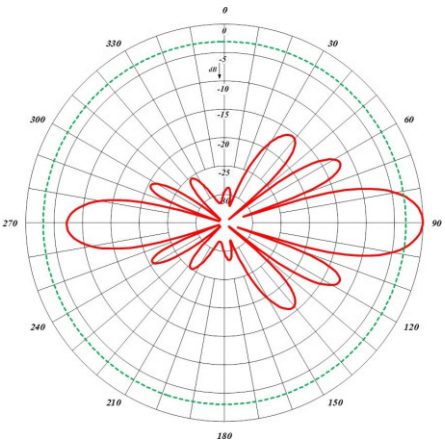
871F-70AV Quarter-wave Spacing Horizontal Quarter-wave Spacing Vertical





Quarter-wave Spacing Horizontal Quarter-wave Spacing Vertical 872F-70AV





874F-70AV Quarter-wave Spacing Horizontal Quarter-wave Spacing Horizontal

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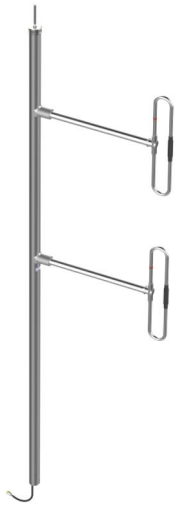
VHF EXPOSED DIPOLES 138-174 MHz

870 Series VHF Exposed Dipoles

The 870 Series VHF Exposed Dipoles are available in 1, 2, 4, 8, dipole and dual dipole configurations. All of our antennas can be completely customized to your particular applications. Our antennas can be black anodized, adjustable or fixed, side mount or top mount, and heavy duty versions are available.

- Each antenna is offered in a 1/4, 3/8, or 1/2 wave spacing versions.
- The 87XA-70 has external cabling and a field-adjustable pattern.
- The 87XF-70 has internal cabling and fixed dipole-mast spacing.
- Heavy duty versions are available. Please contact Comprod Inc. Technical support technician for consultation.

872F-70



Electrical Specifications	871F-70	872F-70	874F-70
Frequency Range, MHz	138-174	138-174	138-174
Nominal Gain, dBd	2.0-2.5	5.0-5.5	8.0-8.5
Number of Dipoles	1	2	4
Bandwidth 1.5:1 VSWR, MHz	36	36	36
Polarization	Vertical	Vertical	Vertical
Pattern	Offset / bi	Offset / bi	Offset / bi
Power Rating, Watts	200	450	450
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male

Mechanical Specifications	871F-70	872F-70	874F-70
Length, in (mm)	78 (1981)	126 (3200)	246 (6248)
Width(1/2 Wave Spacing), in (mm)	40 (1016)	40 (1016)	40 (1016)
Weight, lbs. (kg)	13 (6)	24 (10.8)	67 (30)
Rated Wind Velocity, No Ice, mph (km/h)	170 (274)	150 (241)	110 (177)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	145 (217)	135 (217)	85 (137)
Lateral Thrust @ 100 mph, wind, lbs. (N)	45 (199)	92 (407)	206 (914)
Bending Moment @ top clamp: 100 mph, ft*lb (N*m)	18 (24)	205 (278)	1440 (1953)
Projected Area, ft^2 (m^2)	1.7 (0.16)	3.5 (0.33)	7.7 (0.72)
Mounting Information Mast O.D. (mm)	1.9" (48)	2.4" (61)	2.9" (73)

Order Information	Adjustable	Heavy Duty	Side Mount	Top Mount	Black Anodized
871-70	871A-70	871F-70HD	871F-70SM	871F-70TM	871F-70HDB
872-70	872A-70	872F-70HD	872F-70SM	872F-70TM	872F-70HDB
874-70	874A-70	874F-70HD	874F-70SM	874F-70TM	874F-70HDB

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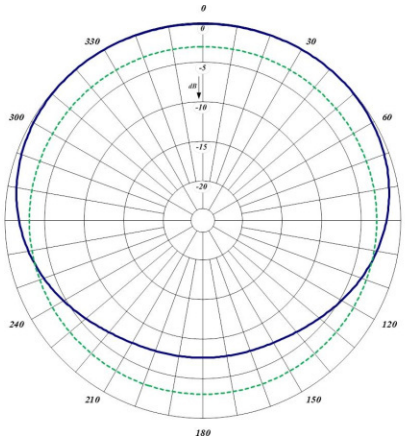
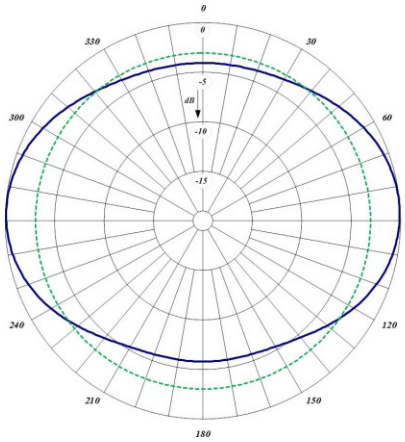
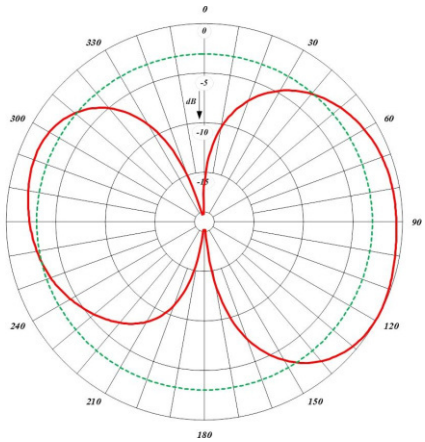
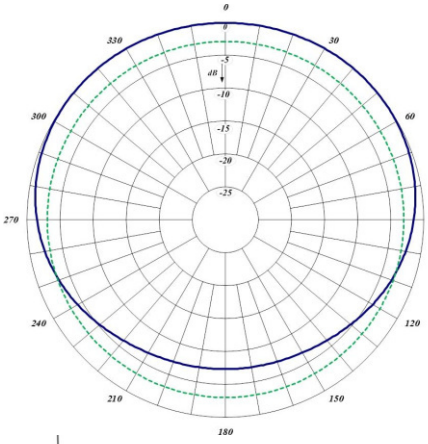
VHF EXPOSED DIPOLES 138-174 MHz

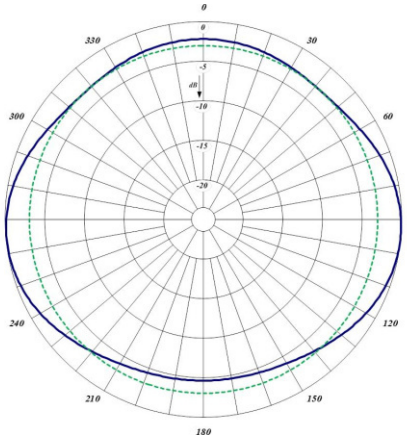


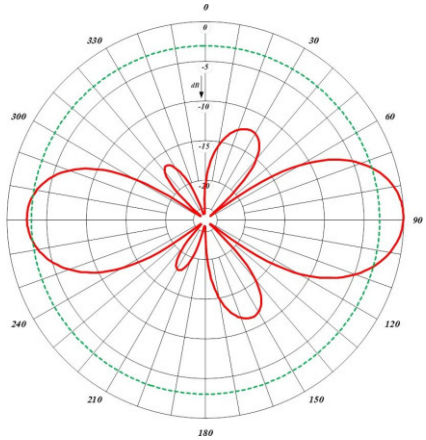




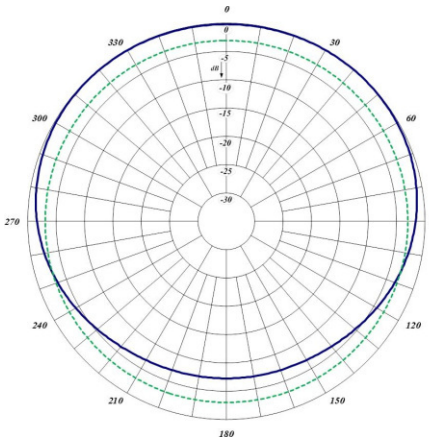
871F-70 Quarter-wave Spacing Horizontal Half-wave Spacing Horizontal Half-wave Spacing Vertical

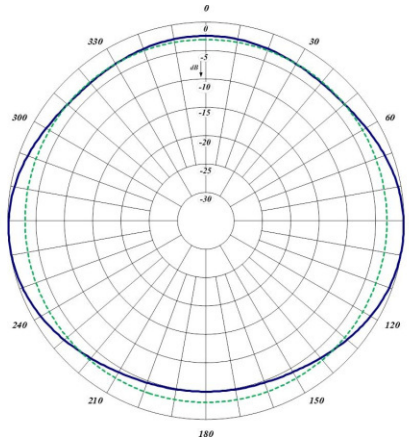


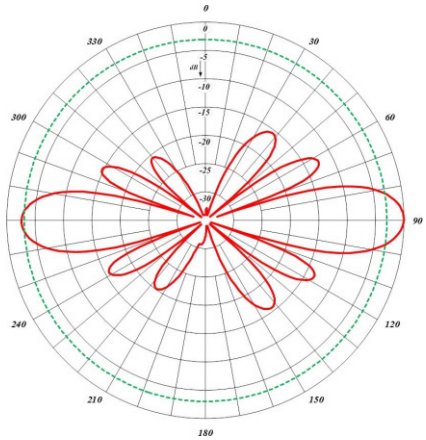




Quarter-wave Spacing Horizontal Half-wave Spacing Horizontal Half-wave Spacing Vertical 872F-70







874F-70 Quarter-wave Spacing Horizontal Half-wave Spacing Horizontal Half-wave Spacing Vertical

220MHz EXPOSED DIPOLES 215-225 MHz

870 Series 220MHz Exposed Dipoles

The 870 Series 220MHz Exposed Dipoles are available in 1, 2, 4, 8 dipole configurations. All of our antennas can be completely customized to your particular applications. Our antennas can be black anodized, adjustable, or fixed, side mount or top mount, and heavy duty versions are available.

- Each antenna is offered in a 1/4, 3/8 or 1/2 wave spacing versions.
- The 87XA-70 has external cabling and a field-adjustable pattern.
- The 87XF-70 has internal cabling and fixed dipole-mast spacing.
- Heavy duty versions are available. Please contact Comprod Inc. Technical support technician for consultation.

872F-70-220

Electrical Specifications	871F-70-220	872F-70-220	874F-70-220
Frequency Range, MHz	215-225	215-225	215-225
Nominal Gain, dBd	2.0-2.5	5.0-5.5	8.0-8.5
Number of Dipoles	1	2	4
Bandwidth 1.5:1 VSWR, MHz	10	10	10
Polarization	Vertical	Vertical	Vertical
Pattern	Offset / bi	Offset / bi	Offset / bi
Power Rating, Watts	200	300	500
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male

Mechanical Specifications	871F-70-220	872F-70-220	874F-70-220
Length, in (mm)	66 (1676)	112 (2845)	200 (5080)
Width(1/2 Wave Spacing), in (mm)	31 (787)	31 (787)	32 (813)
Weight, lbs. (kg)	12.5 (5.7)	21 (9.5)	51 (23)
Rated Wind Velocity, No Ice, mph (km/h)	165 (266)	150 (241)	145 (233)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	140 (225)	130 (209)	105 (177)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	40 (18)	66 (30)	143 (65)
Bending Moment @ top clamp: 100 mph, ft*lb (kg*m)	58 (8)	150 (21)	610 (84)
Projected Area, ft^2 (m^2)	1.5 (0.14)	2.6 (0.24)	5.5 (0.51)
Mounting Information Mast O.D. (mm)	1.9" (48)	1.9" (48)	2.4" (60)

Order Information	Heavy Duty	Side Mount	Top Mount	Black Anodized
871-70-220	871F-70-220HD	871F-70-220SM	871F-70-220TM	871F-70-220HDB
872-70-220	872F-70-220HD	872F-70-220SM	872F-70-220TM	872F-70-220HDB
874-70-220	874F-70-220HD	874F-70-220SM	874F-70-220TM	874F-70-220HDB

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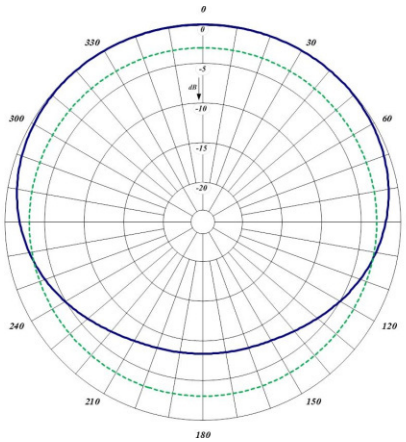
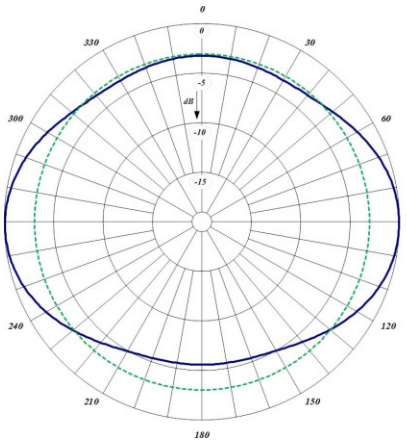
220MHz EXPOSED DIPOLES 215-225 MHz

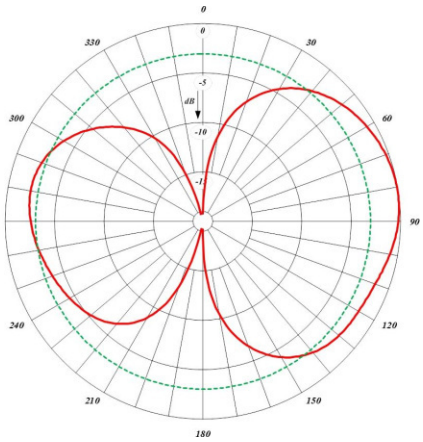
871F-70-220



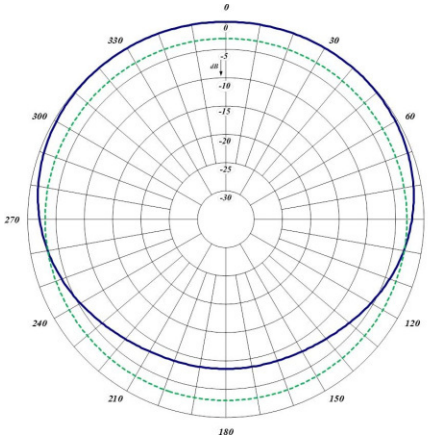
Quarter-wave Spacing Horizontal



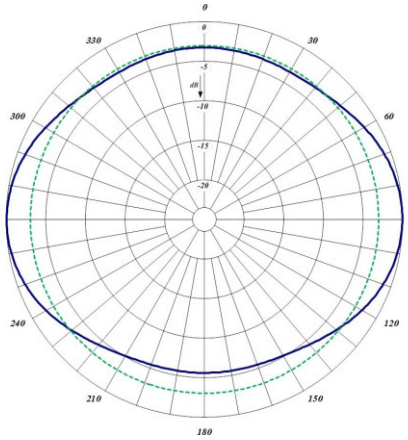
Half-wave Spacing Horizontal



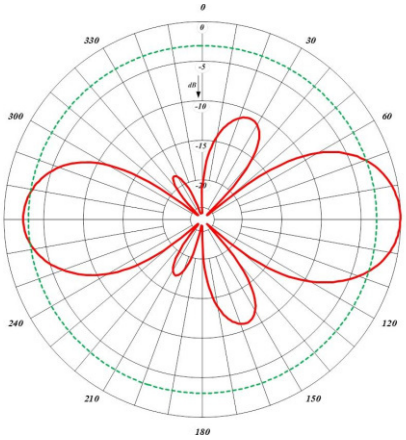
Half-wave Spacing Vertical



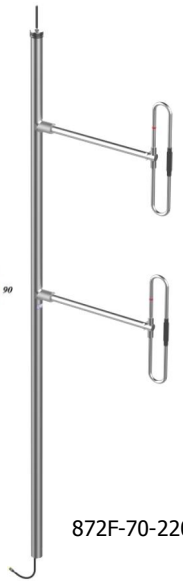
Quarter-wave Spacing Horizontal



Half-wave Spacing Horizontal

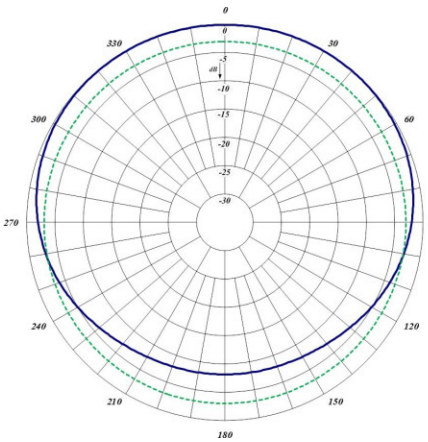


Half-wave Spacing Vertical

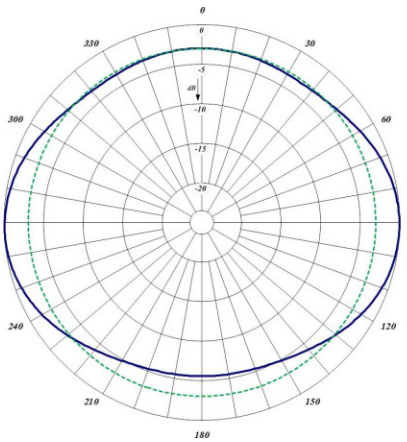


872F-70-220

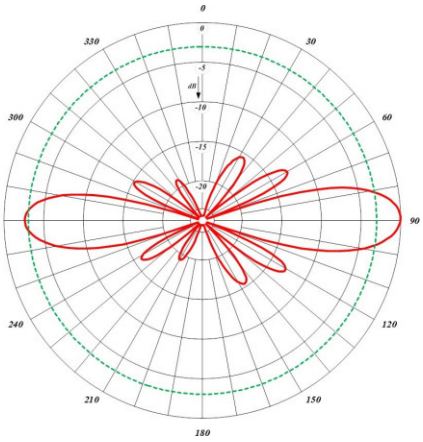
874F-70-220



Quarter-wave Spacing Horizontal



Half-wave Spacing Horizontal



Half-wave Spacing Vertical

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
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870 LM Series VHF Exposed Dipoles

The 870 LM Series VHF Exposed Dipoles are available in 1, 2, 4, 8, dipole configurations. The LM stands for "Less Mast". The product includes the dipole, boom and clamps to mount the dipoles but no mast is supplied. All of our antennas can be completely customized to your particular applications. Our antennas can be black anodized, adjustable-only, side mount or top mount, and heavy duty versions are available.

871F-70LM

- Each antenna is offered in a 1/4, 3/8 or 1/2 wave spacing versions.
- The 870 LM series has external cabling and is field adjustable pattern
- Heavy-duty versions are available. Please contact a Comprod Inc. Technical support technician for consultation.

Electrical Specifications	871-70LM	872-70LM	874-70LM
Frequency Range, MHz	138-174	138-174	138-174
Nominal Gain, dBd	2.0-2.5	5.0-5.5	8.0-8.5
Number of Dipoles	1	2	4
Bandwidth 1.5:1 VSWR, MHz	36	36	36
Polarization	Vertical	Vertical	Vertical
Pattern	Offset / bi	Offset / bi	Offset / bi
Power Rating, Watts	200	450	500
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male

Mechanical Specifications	871-70LM	872-70LM	874-70LM
Length, in (mm)	Mast Not Incl.	Mast Not Incl.	Mast Not Incl.
Width(1/2 Wave Spacing), in (mm)	40 (1016)	40 (1016)	40 (1016)
Weight, lbs. (kg)	4.5 (2.0)	19 (8.6)	38 (17.2)
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)	150 (241)	150 (241)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	135 (217)	135 (217)	135 (217)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	20 (9.1)	40 (18.2)	80 (36.5)
Projected Area, ft^2 (m^2)	0.92 (0.08)	1.84 (0.17)	3.64 (0.34)
Mounting Information: Clamp Included	181-85	115R-85	115R-85

Order Information	Heavy Duty	Black Anodized	With Mast
871-70LM	871-70LMHD	871-70LMHDB	871A-70
872-70LM	872-70LMHD	872-70LMHDB	872A-70
874-70LM	874-70LMHD	874-70LMHDB	874A-70

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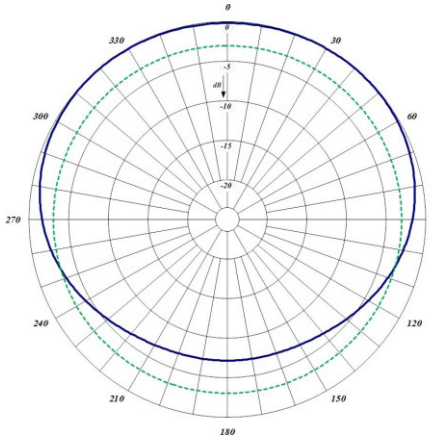
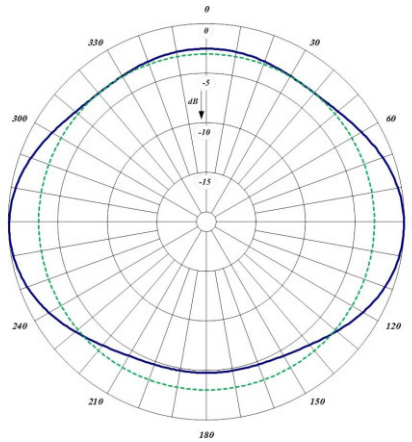
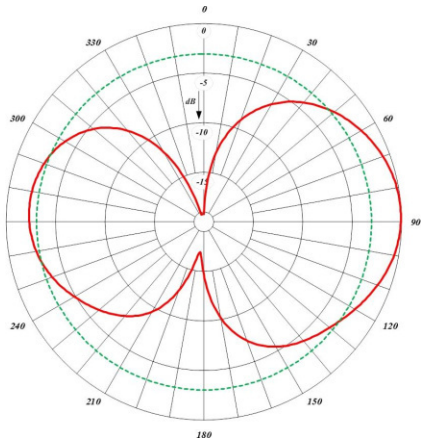
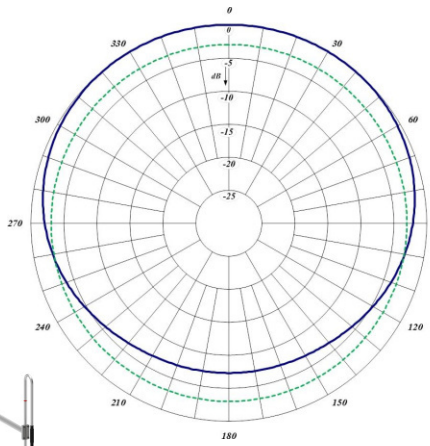
VHF EXPOSED DIPOLES 138-174 MHz

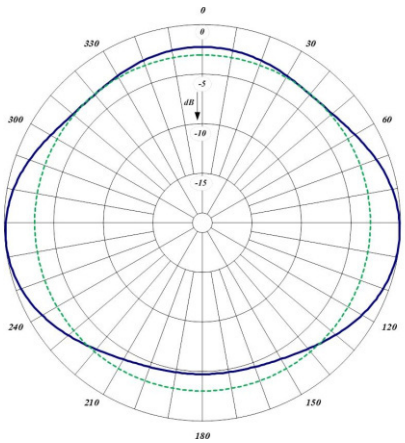


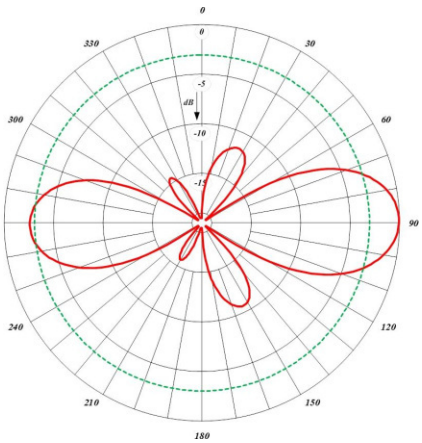




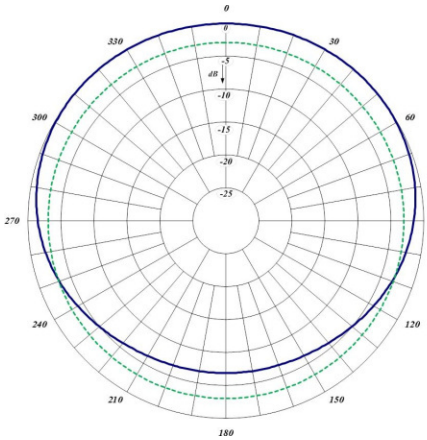
871F-70LM | Quarter-wave Spacing Horizontal | Half-wave Spacing Horizontal | Half-wave Spacing Vertical

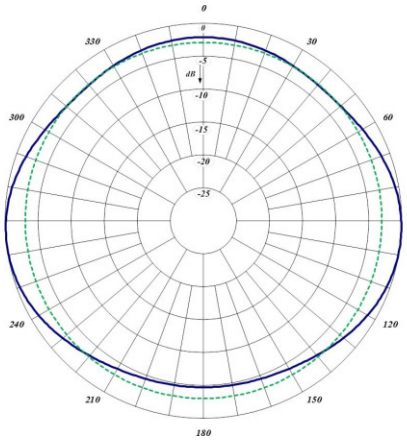


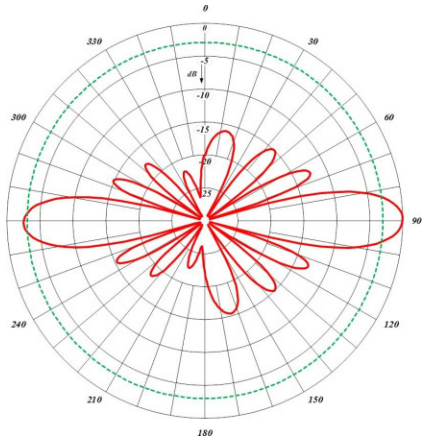




Quarter-wave Spacing Horizontal | Half-wave Spacing Horizontal | Half-wave Spacing Vertical | 872F-70LM







874F-70LM | Quarter-wave Spacing Horizontal | Half-wave Spacing Horizontal | Half-wave Spacing Vertical

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VHF EXPOSED DIPOLES 148-174 MHz

830 Series Light Duty VHF Dipoles

The 830 Series Light Duty VHF Exposed Dipoles are available in 2 and 4 dipole configurations. All of our antennas can be completely customized to your applications.

- Low VSWR version with maximum gain over specified frequency.
- The 830 series has external cabling and fixed dipole-mast spacing.
- These antennas have an adjustable pattern for omnidirectional or offset coverage.
- The 834-70 antenna is shipped in two sections to be assembled on site.

832-70

Electrical Specifications	832-70	834-70
Frequency Range, MHz	148-174	148-174
Nominal Gain, dBd	3.0/6.0	6.0/9.0
Number of Dipoles	2	4
Bandwidth 1.5:1 VSWR, MHz	14	14
Polarization	Vertical	Vertical
Pattern	Offset	Offset
Power Rating, Watts	500	500
Nominal Impedance, Ohms	50	50
Lightning Protection	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male

Mechanical Specifications	832-70	834-70
Length, in (mm)	120 (3048)	244 (6198)
Width(1/2 Wave Spacing), in (mm)	9 (229)	9 (229)
Weight, lbs. (kg)	12 (5.5)	29 (13)
Rated Wind Velocity, No Ice, mph (km/h)	125 (201)	90 (145)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	90 (145)	65 (105)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	45 (200)	69 (307)
Bending Moment @ top clamp: 100 mph, ft*lb (kg*m)	150 (203)	787 (1067)
Projected Area, ft^2 (m^2)	1.7 (0.16)	4.2 (0.39)
Mounting Information	107-85 clamp set	107-85 clamp set

Order Information	148-162 MHz	160-174 MHz
832-70	832-70*1	832-70*2
834-70	834-70*1	834-70*2

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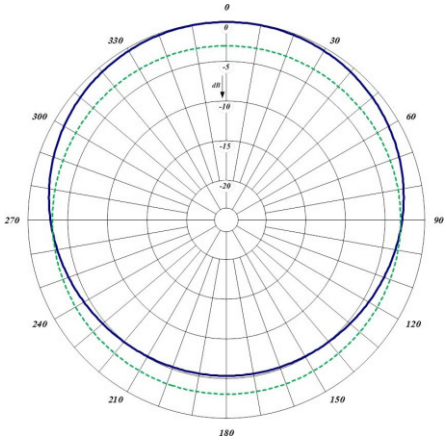
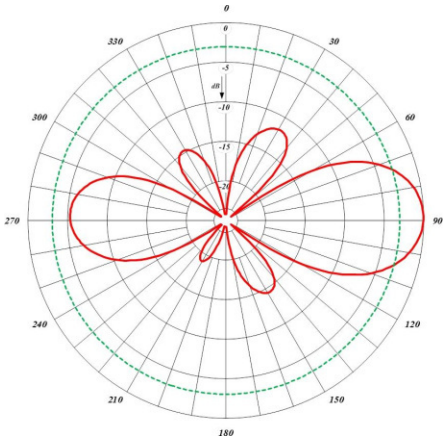
VHF EXPOSED DIPOLES 148-174 MHz

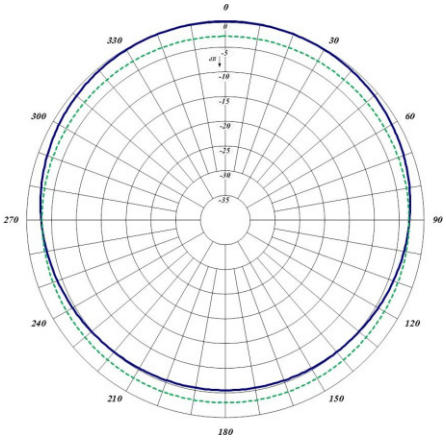
832-70



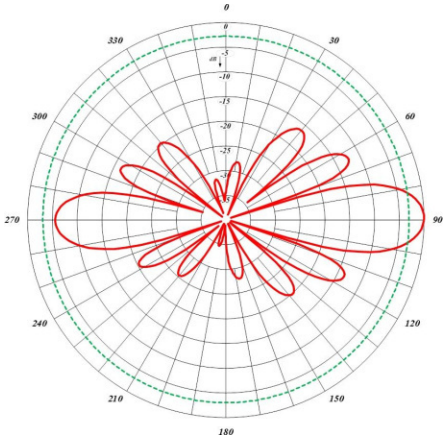
Horizontal Pattern



Vertical Pattern



Horizontal Pattern



Vertical Pattern

834-70

VHF EXPOSED DIPOLES 148-174 MHz

840 Series Light Duty VHF Dipoles

The 840 Series Light Duty VHF Exposed Dipoles are available in 2 and 4 dipole configurations. All of our antennas can be completely customized to your applications.

- Low VSWR version with maximum gain over specified frequency.
- The 840 series has internal cabling and fixed dipole-mast spacing.
- These antennas have an adjustable pattern for omnidirectional or offset coverage.

842-70

Electrical Specifications	842-70	844-70
Frequency Range, MHz	148-174	148-174
Nominal Gain, dBd	3.0/6.0	6.0/9.0
Number of Dipoles	2	4
Bandwidth 1.5:1 VSWR, MHz	14	14
Polarization	Vertical	Vertical
Pattern	Offset	Offset
Power Rating, Watts	500	500
Nominal Impedance, Ohms	50	50
Lightning Protection	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male

Mechanical Specifications	842-70	844-70
Length, in (mm)	138 (3500)	270 (6858)
Width(1/2 Wave Spacing), in (mm)	9 (229)	9 (229)
Weight, lbs. (kg)	22 (10)	40 (18)
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)	110 (177)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	115 (185)	80 (129)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	70 (31.8)	139 (63)
Bending Moment @ top clamp: 100 mph, ft*lb (kg*m)	167 (23.1)	514 (71)
Projected Area, ft^2 (m^2)	2.6 (0.24)	5.2 (0.48)
Mounting Information	107-85 clamp set	107-85 clamp set

Order Information	148-162 MHz	160-174 MHz
842-70	842-70*1	842-70*2
844-70	844-70*1	844-70*2

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Email: sales@comprodcom.com
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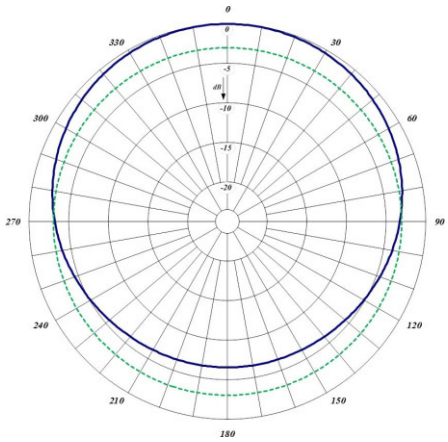
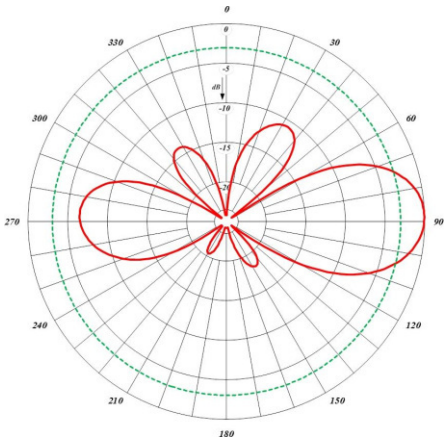
VHF EXPOSED DIPOLES 148-174 MHz

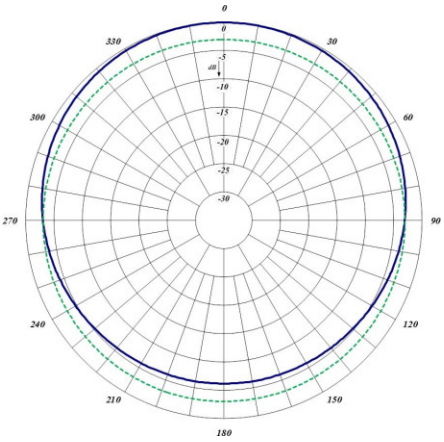
842-70



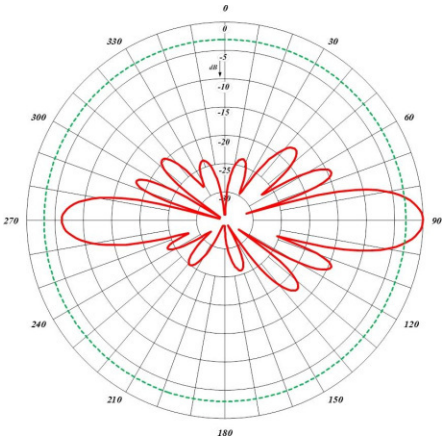
Horizontal Pattern



Vertical Pattern



Horizontal Pattern



Vertical Pattern

844-70

AVIATION EXPOSED DIPOLE ARRAY 108-138 MHz

880AV Series VHF Exposed Dipole Array

The 880AV Series VHF Exposed Dipole Array are available in 2 and 4 dipole set configurations. All of our antennas can be completely customized to your particular applications. Our antennas can be black anodized, top mount only, and heavy duty versions are available.

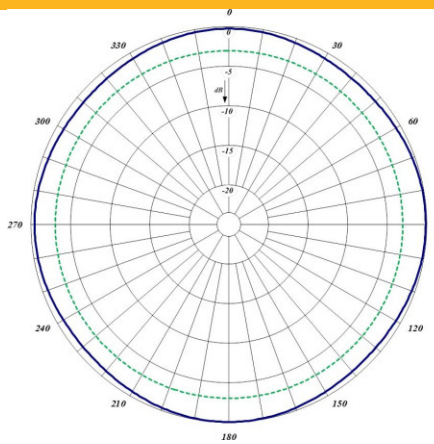
- Each antenna is offered in two versions: Omni or bidirectional. (Image shows Omni)
- These antennas have only internal cabling, fixed dipole-mast spacing and adjustable pattern control.
- Heavy-duty versions are available. Please contact a Comprod Inc. Technical support technician for consultation.

882-70AV

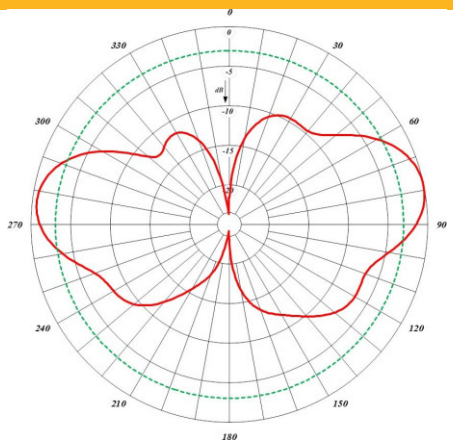
Electrical Specifications	882-70AV	884-70AV
Frequency Range, MHz	108-138	108-138
Nominal Gain, dBd	3.0-5.5	6.0-8.5
Number of Dipoles	2 Sets	4 Sets
Bandwidth 1.5:1 VSWR, MHz	30	30
Polarization	Vertical	Vertical
Pattern	Omni or Bi-Dir.	Omni or Bi-Dir.
Power Rating, Watts	450	500
Nominal Impedance, Ohms	50	50
Lightning Protection	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male
Mechanical Specifications	**882-70AV**	**884-70AV**
Length, in (mm)	157 (3988)	306 (7772)
Width , in (mm)	45 (1143)	46 (1168)
Weight, lbs. (kg)	49 (8.6)	105 (47.6)
Rated Wind Velocity, No Ice, mph (km/h)	140 (225)	100 (162)
Rated Wind Velocity, 0.5” (13mm) ice, mph (km/h)	110 (177)	80 (129)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	154 (70)	307 (139)
Bending Moment @ top clamp: 100 mph, ft*lb (kg*m)	524 (72.5)	2039 (282)
Projected Area, ft^2 (m^2)	5.6 (0.52)	11 (1.04)
Mounting Information: Mast O.D. (mm)	2.9" (73)	3.5" (89)
Order Information	**Heavy Duty**	**Black Anodized**
882-70AV	882-70AVHD	882-70AVHDB
884-70AV	884-70AVHD	884-70AVHDB

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
Email: sales@comprodcom.com
Fax: 1.800.554.1033

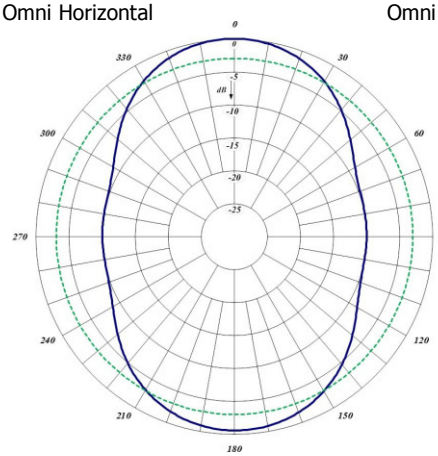
AVIATION EXPOSED DIPOLE ARRAY 108-138 MHz



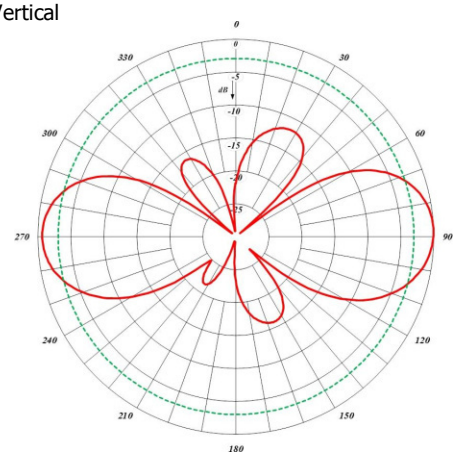
882-70AV Omni Horizontal



Omni Vertical

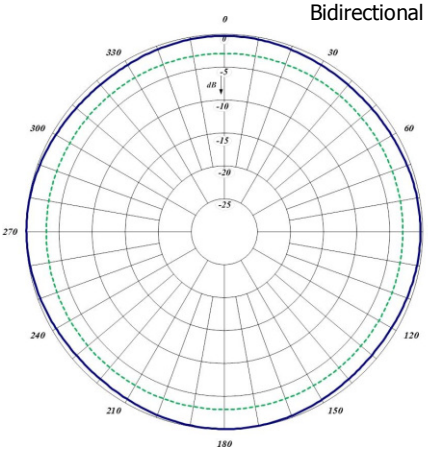


Bidirectional Horizontal

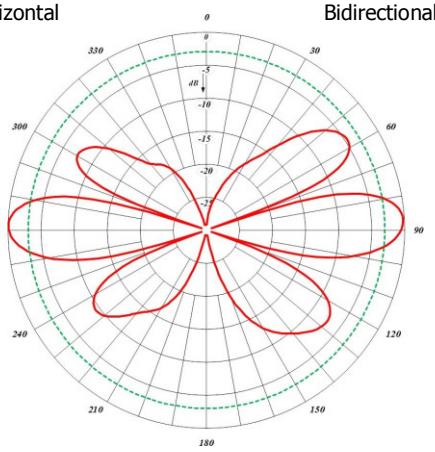


Bidirectional Vertical

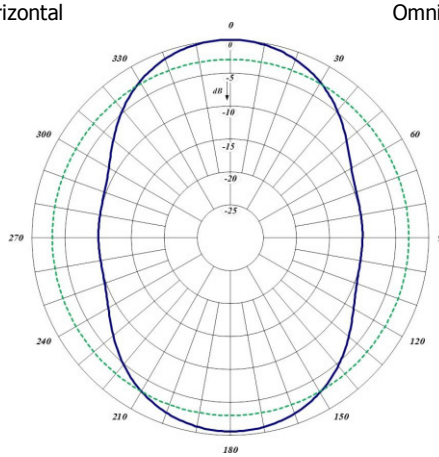
882-70AV



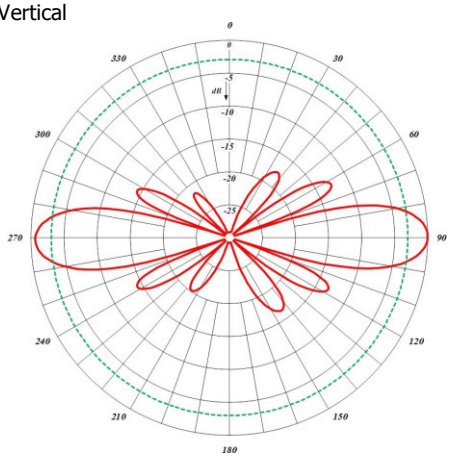
884-70AV Omni Horizontal



Omni Vertical



Bidirectional Horizontal



Bidirectional Vertical

884-70AV

VHF EXPOSED DIPOLE ARRAY 138-174 MHz

880 Series VHF Exposed Dipole Array

The 880 Series VHF Exposed Dipole Array are available in 2 and 4 dipole set configurations. All of our antennas can be completely customized to your particular applications. Our antennas can be black anodized, top mount only, and heavy duty versions are available.

- Each antenna is offered in two versions: Omni or bidirectional. (Image shows Omni)
- These antennas have only internal cabling, fixed dipole-mast spacing, and adjustable pattern control.
- Heavy-duty versions are available. Please contact a Comprod Inc. Technical support technician for consultation.

882-70

Electrical Specifications	882-70	884-70
Frequency Range, MHz	138-174	138-174
Nominal Gain, dBd	3.0-5.5	6.0-8.5
Number of Dipoles	2 Sets	4 Sets
Bandwidth 1.5:1 VSWR, MHz	36	36
Polarization	Vertical	Vertical
Pattern	Omni or Bi-Dir.	Omni or Bi-Dir.
Power Rating, Watts	450	500
Nominal Impedance, Ohms	50	50
Lightning Protection	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male

Mechanical Specifications	882-70	884-70
Length, in (mm)	138 (3500)	246 (6248)
Width , in (mm)	30 (762)	31 (787)
Weight, lbs. (kg)	36 (16.3)	78 (35)
Rated Wind Velocity, No Ice, mph (km/h)	120 (162)	110 (177)
Rated Wind Velocity, 0.5” (13mm) ice, mph (km/h)	95 (137)	80 (129)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	113 (51)	236 (107)
Bending Moment @ top clamp: 100 mph, ft*lb (kg*m)	351(49)	1264 (175)
Projected Area, ft^2 (m^2)	4.1 (0.38)	8.7 (0.81)
Mounting Information: Mast O.D. (mm)	2.4" (61)	2.9" (73)

Order Information	Heavy Duty	Black Anodized
882-70	882-70HD	882-70HDB
884-70	884-70HD	884-70HDB

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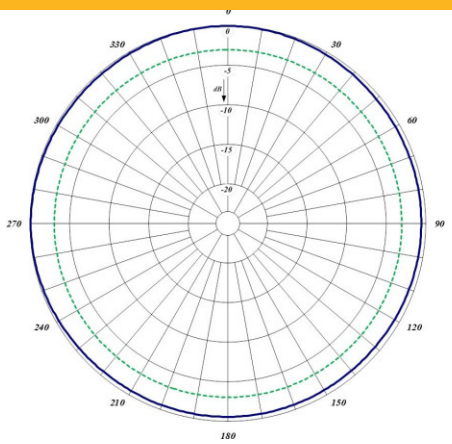
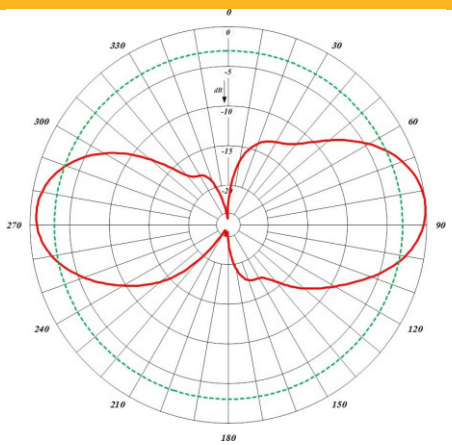
Email: sales@comprodcom.com
Fax: 1.800.554.1033

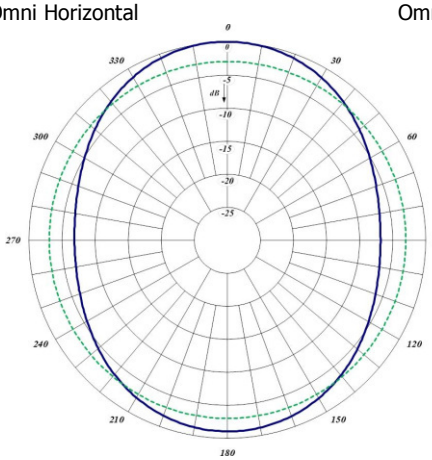
VHF EXPOSED DIPOLE ARRAY 138-174 MHz



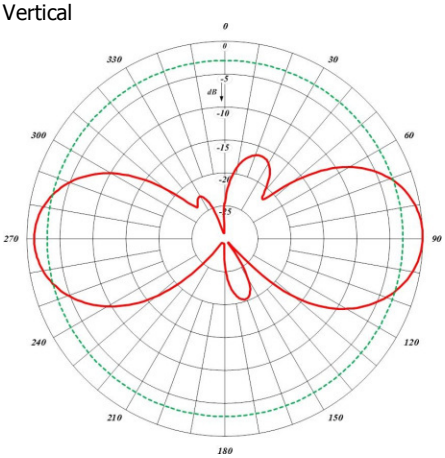
882-70 Omni Horizontal



Omni Vertical

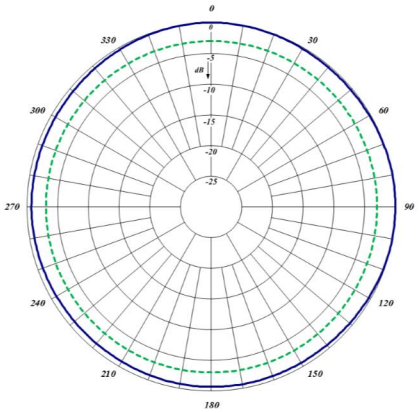


Bidirectional Horizontal

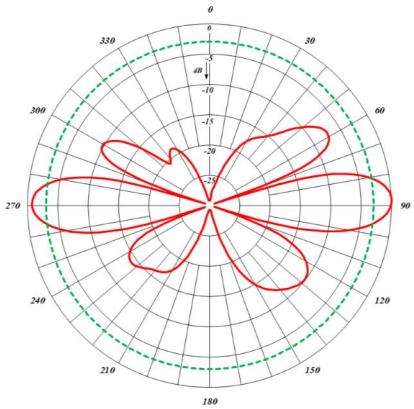


Bidirectional Vertical

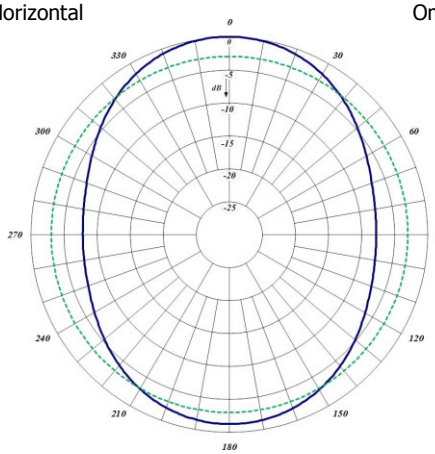
882-70



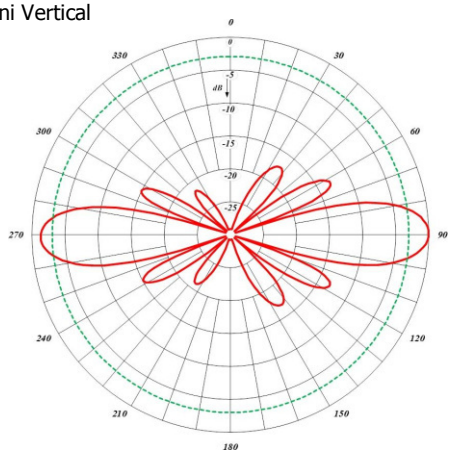
884-70 Omni Horizontal



Omni Vertical



Bidirectional Horizontal



Bidirectional Vertical

884-70

UHF EXPOSED DIPOLES 406-512 MHz

770 Series UHF Exposed Dipoles

The 770 Series UHF Exposed Dipoles are available in 1, 2, 4, 8 and dual dipole configurations. All of our antennas can be completely customized to your particular applications. Our antennas can be black anodized, adjustable or fixed, side mount or top mount, and heavy duty versions are available.

772-70

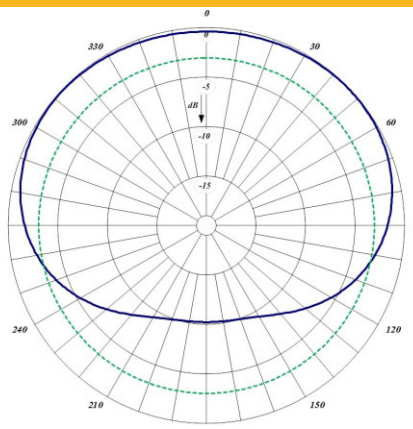
- Each antenna is offered in a 1/4, 3/8, or 1/2 wave versions.
- The 77X-70 has internal cabling and fixed dipole-mast spacing.
- Heavy-duty Versions are available. Please contact a Comprod Inc. Technical support technician for consultation.

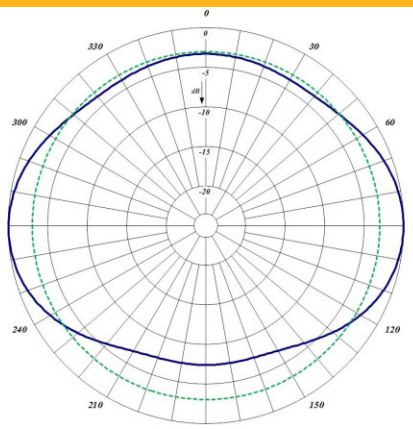
Electrical Specifications	771-70	772-70	774-70	778-70
Frequency Range, MHz	406-512	406-512	406-512	406-512
Nominal Gain, dBd	2.0-2.5	5.0-5.5	8.0-8.5	11.0-11.5
Number of Dipoles	1	2	4	8
Bandwidth 1.5:1 VSWR, MHz	106	106	106	64
Polarization	Vertical	Vertical	Vertical	Vertical
Pattern	Offset / Bi	Offset / Bi	Offset / Bi	Offset / Bi
Power Rating, Watts	75	150	300	300
Nominal Impedance, Ohms	50	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male	Type N Male
Mechanical Specifications	**771-70**	**772-70**	**774-70**	**778-70**
Length, in (mm)	66 (1676)	86 (2184)	126 (3200)	210 (5334)
Width, in (mm)	16 (406)	16 (406)	16 (406)	17 (432)
Weight, lbs. (kg)	8.6 (3.9)	12.6 (5.7)	21 (9.5)	52 (23.6)
Rated Wind Velocity, No Ice, mph (km/h)	170 (274)	160 (257)	150 (241)	140 (225)
Rated Wind Velocity, 0.5” (13mm) ice, mph (km/h)	145 (233)	135 (217)	120 (193)	105 (169)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	27 (12.3)	39 (17.8)	64 (29)	134 (61)
Bending Moment @ top clamp: 100 mph, ft*lb (kg*m)	33.5 (4.6)	72 910)	177 (24.5)	655 (91)
Projected Area, ft² (m²)	1 (0.09)	1.5 (0.14)	2.4 (0.23)	5.1 (0.472)
Mounting Information: Mast O.D. (mm)	1.9" (48)	1.9" (48)	1.9" (48)	2.4" (61)

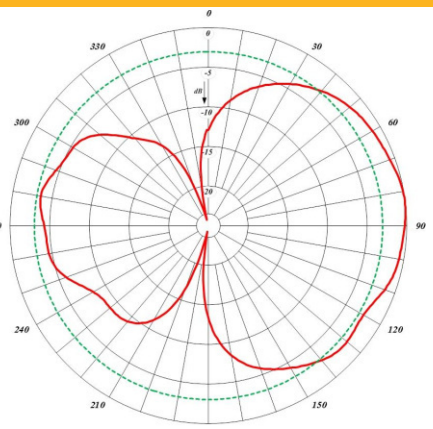
Order Information	Side Mount	Top Mount	Heavy Duty	Welded	Black Anodized
771-70	771-70SM	771-70TM	771-70HD	771-70HDW	771-70HDB
772-70	772-70SM	772-70TM	772-70HD	772-70HDW	772-70HDB
774-70	774-70SM	774-70TM	774-70HD	774-70HDW	774-70HDB
778-70	778-70SM	778-70TM	778-70HD	778-70HDW	778-70HDB

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
Email: sales@comprodcom.com
Fax: 1.800.554.1033

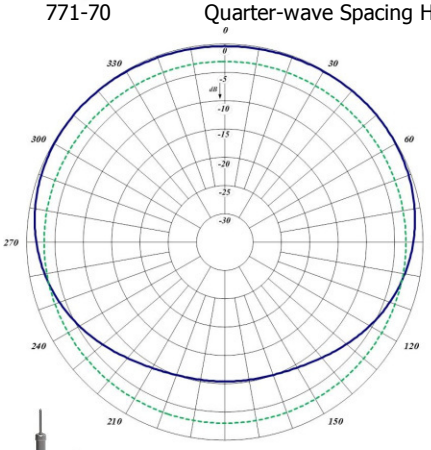
UHF EXPOSED DIPOLES 406-512 MHz

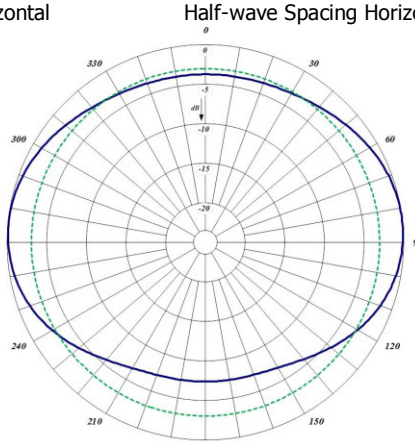


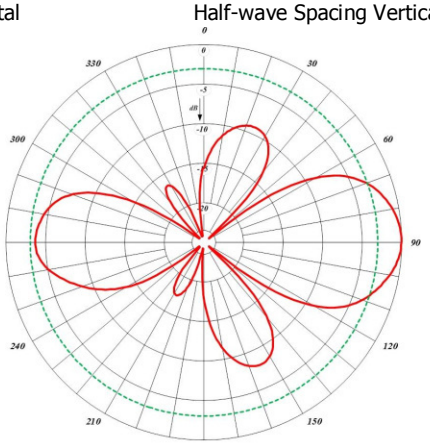




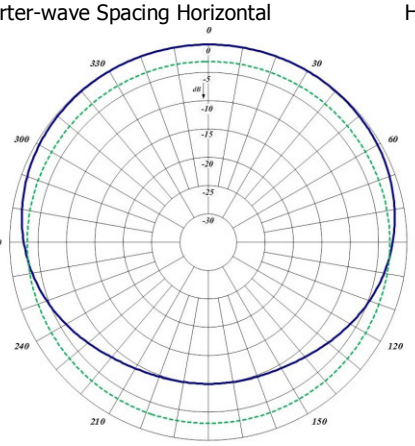
771-70 Quarter-wave Spacing Horizontal Half-wave Spacing Horizontal Half-wave Spacing Vertical

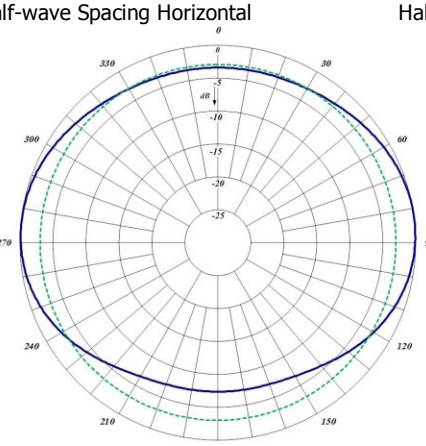


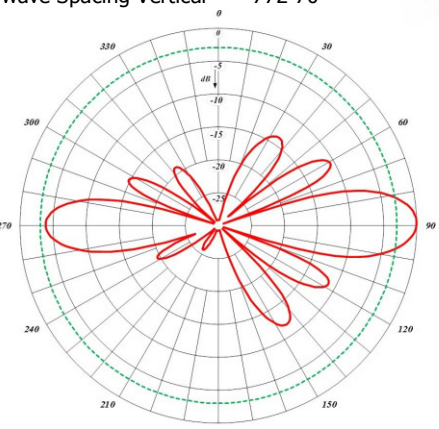




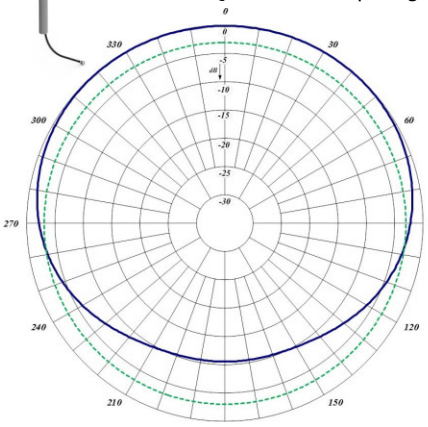
Quarter-wave Spacing Horizontal Half-wave Spacing Horizontal Half-wave Spacing Vertical 772-70

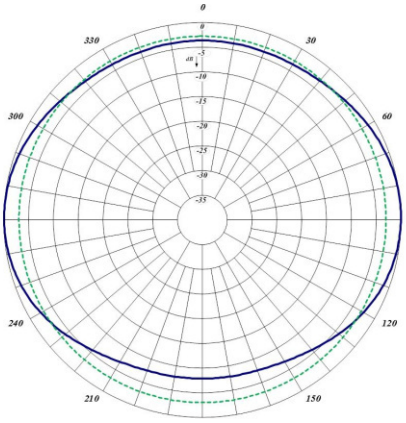


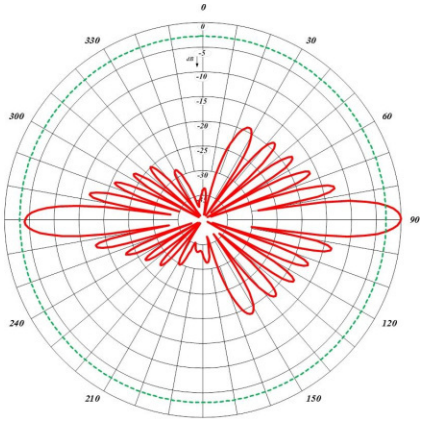




774-70 Quarter-wave Spacing Horizontal Half-wave Spacing Horizontal Half-wave Spacing Vertical







Quarter-wave Spacing Horizontal Half-wave Spacing Horizontal Half-wave Spacing Vertical 778-70

UHF EXPOSED DIPOLE ARRAY 406-512 MHz

780 Series UHF Exposed Dipole Array

The 780 Series UHF Exposed Dipole Arrays are available in 2 and 4 dipole set configurations. All of our antennas can be completely customized to your particular applications. Our antennas can be black anodized, top or side mount configuration, and heavy duty versions are available.

782-70

- Each antenna is offered in two versions: Omni or bidirectional.
- Antennas have complete internal cabling, fixed dipole-mast spacing, and adjustable pattern control.
- Heavy duty versions are available. Please contact a Comprod Inc. Technical support technician for consultation.

Electrical Specifications	782-70	784-70
Frequency Range, MHz	406-512	406-512
Nominal Gain, dBd	3.0-5.5	6.0-8.5
Number of Dipoles	2 Sets	4 Sets
Bandwidth 1.5:1 VSWR, MHz	64	64
Polarization	Vertical	Vertical
Pattern	Omni or Bi-Dir.	Omni or Bi-Dir.
Power Rating, Watts	300	300
Nominal Impedance, Ohms	50	50
Lightning Protection	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male

Mechanical Specifications	782-70	784-70
Length, in (mm)	90 (2286)	126 (3200)
Width, in (mm)	12.75 (324)	12.75 (324)
Weight, lbs. (kg)	25 (11.3)	38 (17)
Rated Wind Velocity, No Ice, mph (km/h)	145 (233)	130 (209)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	100 (161)	90 (145)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	54 (24.5)	101 (46)
Bending Moment @ top clamp: 100 mph, ft*lb (kg*m)	137 (19)	426 (59)
Projected Area, ft^2 (m^2)	2.0 (0.19)	3.5 (0.33)
Mounting Information: Mast O.D. (mm)	1.9" (48)	2.4" (60)

Order Information	Heavy Duty	Black Anodized	406-470MHz	450-512MHz
782-70	782-70HD	782-70HDB	782-70*1	782-70*2
784-70	784-70HD	784-70HDB	784-70*1	784-70*2

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
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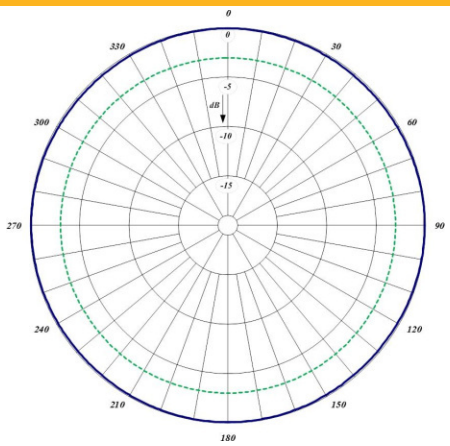
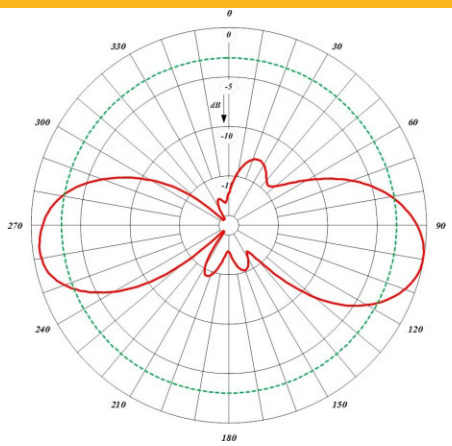
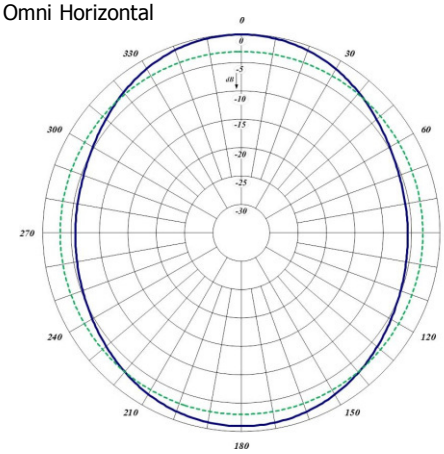
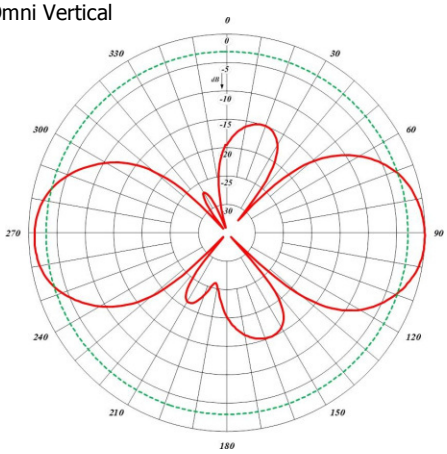
UHF EXPOSED DIPOLE ARRAY 406-512 MHz



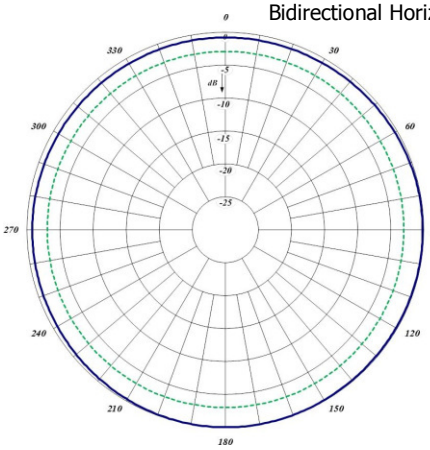


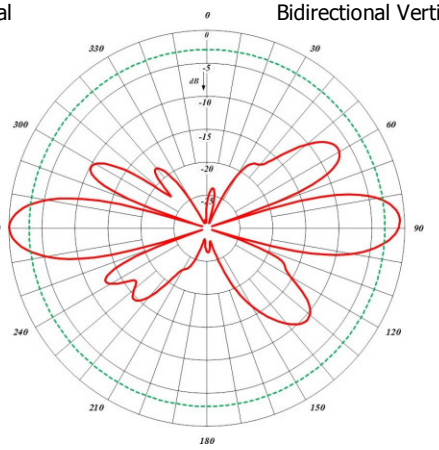
782-70 Omni Horizontal Omni Vertical



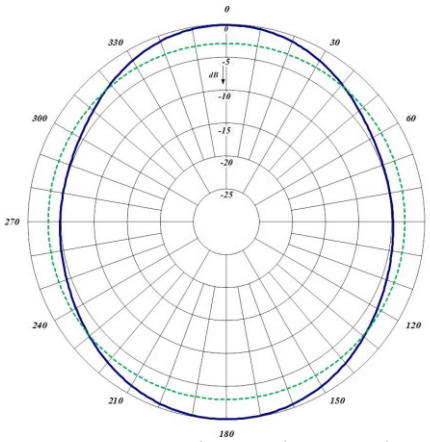


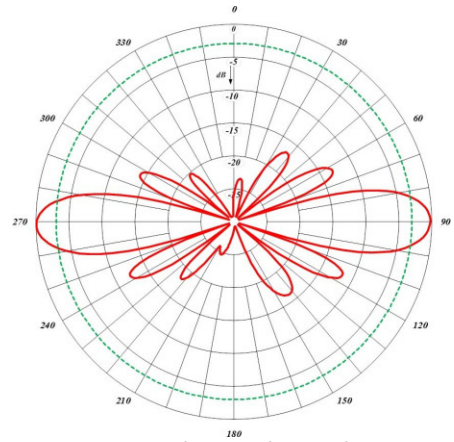
Bidirectional Horizontal Bidirectional Vertical 782-70





784-70 Omni Horizontal Omni Vertical





Bidirectional Horizontal Bidirectional Vertical 784-70

DUAL EXPOSED DIPOLE ARRAY 138-512 MHz

Dual Feed Exposed Dipole Array

The Dual Feed Exposed Dipole Arrays are available in many different configurations. Our VHF, UHF or 700/800/900 MHz antennas can be combined into one mast. These antennas can be mixed and matched with our 840, 870, 880, 770 and 790 series antennas. All of our antennas can be completely customized to your particular applications. Our antennas can be configured for side mount or top mount.

- Low VSWR version with maximum gain over specified frequency.
- Ideal for applications where costs are calculated per antenna.
- Heavy duty versions are available.
- The 845 series has an adjustable pattern for 3 dBd omnidirectional or 6 dBd offset coverage.
- Typical antenna to antenna isolation is 30dB, 40 dB of isolation is also available.

776-70-40

Electrical Specifications	776-70	845-70	876-70
Frequency Range, MHz	406-512	148-174	138-174
Nominal Gain, dBd	5.0-5.5	3.0 or 6.0	5.0-5.5
Number of Dipoles	2 sets of 2	2 sets of 2	2 sets of 2
Bandwidth VSWR, MHz	1.5:1 (106)	2:1 (14)	1.5:1 (36)
Polarization	Vertical	Vertical	Vertical
Pattern	Offset	Omni or Offset	Offset
Power Rating, Watts	300	500	300
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male

Mechanical Specifications	776-70	845-70	876-70
Length, in (mm)	126 (3200)	270 (6858)	246 (6248)
Width (1/2 Wave Spacing), in (mm)	16 (406)	9 (229)	40 (1016)
Weight, lbs. (kg)	19 (8.6)	42 (19)	67 (30)
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)	110 (177)	145 (233)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	150 (241)	80 (129)	95 (153)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	44 (20)	139 (63)	160 (72.6)
Bending Moment @ top clamp: 100 mph, ft*lb (kg*m)	193 (26.7)	514 (71)	1364 (188.7)
Projected Area, ft² (m²)	1.38 (0.128)	5.2 (0.48)	7 (0.65)
Mounting Information Mast O.D. (mm)	1.9" (48)	107-85 clamp	2.9" (61)

Order Info	Frequency	Equivalent to	40 dB Isolation	Side Mount	Top Mount	Black Anodized
776-70	406-512MHz	Dual 772-70	776-70-40dB	N/A	N/A	776-70HDB
845-70*1	148-162MHz	Dual 842-70	N/A	N/A	N/A	N/A
845-70*2	160-174MHz	Dual 842-70	N/A	N/A	N/A	N/A
876F-70	138-174MHz	Dual 872-70	876F-70-40dB	876F-70SM	876F-70TM	876F-70HDB

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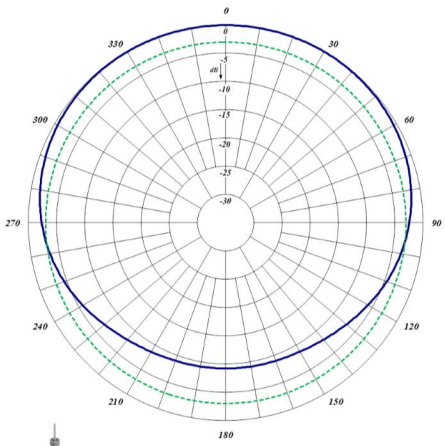
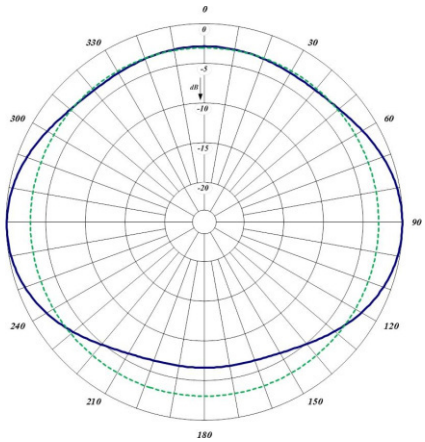
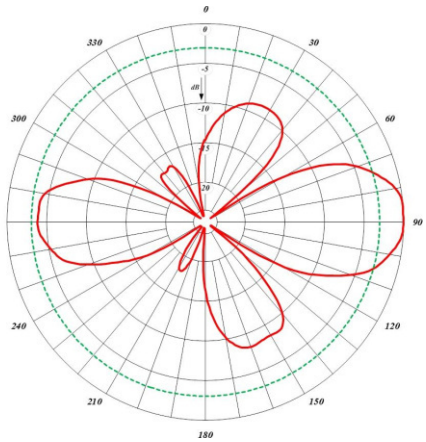
DUAL EXPOSED DIPOLE ARRAY 138-512 MHz



Quarter-wave Spacing Horizontal



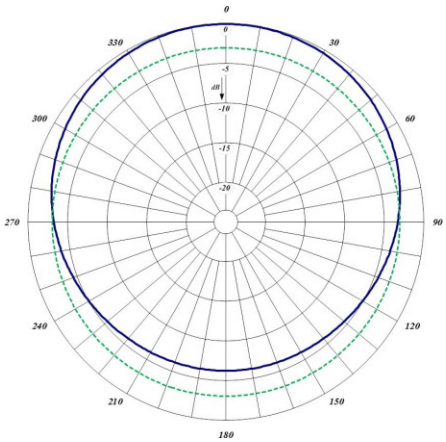
Half-wave Spacing Horizontal



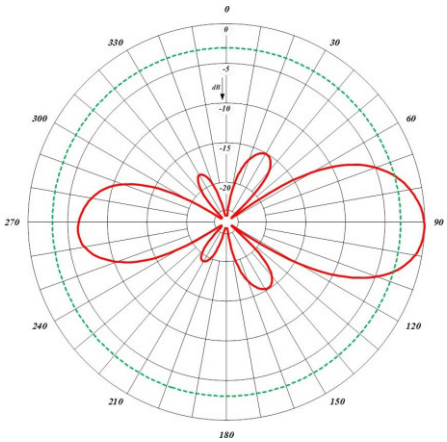
Half-wave Spacing Vertical

776-70

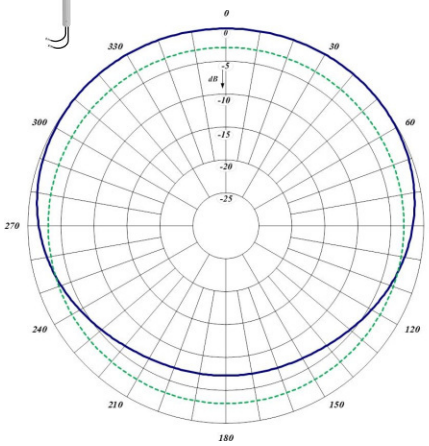
845-70



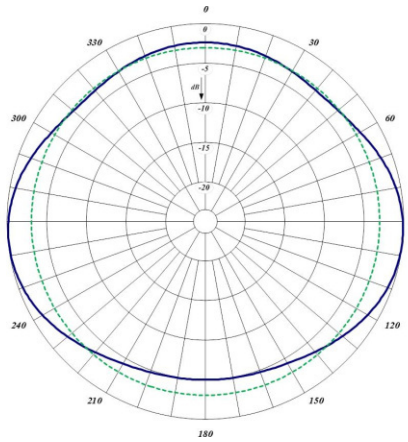
Horizontal Pattern



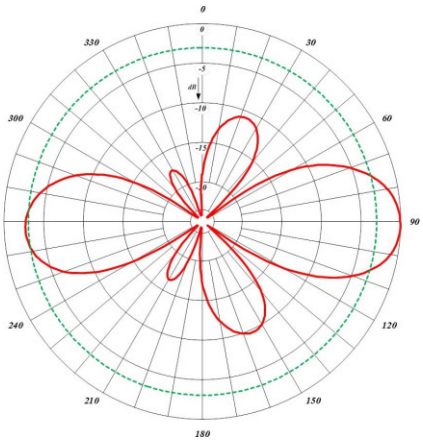
Vertical Pattern



Quarter-wave Spacing Horizontal



Half-wave Spacing Horizontal



Half-wave Spacing Vertical

876F-70

DUAL ANTENNA ARRAY 137-512 MHz

Dual Antenna Array

The Dual Antenna Arrays are available in many different configurations. Our VHF, UHF, or 700/800/900 MHz antennas can be combined onto one mast. These antennas can be mixed and matched from our 870, 770 and 790 series antennas. All of our antennas can be completely customized to your particular applications. Our antennas can be configured for top or side mount.

- A low VSWR version, with maximum gain over the specified frequencies.
- Ideal for applications where the costs are calculated per antenna.
- Heavy duty versions are available.
- Multiple combinations are offered and customizable. Please contact a Comprod Inc. Technical support technician for additional details.

F-3661

Electrical Specifications	F-3676		F-3661		F-3647	
Frequency Range, MHz	137-174	406-470	137-174	406-470	137-174	406-470
Nominal Gain, dBd	8.0-8.5	8.0-8.5	5.0-5.5	5.0-5.5	2.0-2.5	2.0-2.5
Number of Dipoles	4	4	2	2	1	1
Bandwidth 1.5:1 VSWR, MHz	36	64	36	106	36	106
Polarization	Vertical		Vertical		Vertical	
Pattern	Offset		Offset		Offset	
Power Rating, Watts	300		300		300	
Nominal Impedance, Ohms	50		50		50	
Lightning Protection	DC Ground		DC Ground		DC Ground	
Standard Termination	Type N Male		Type N Male		Type N Male	

Mechanical Specifications	F-3676	F-3661	F-3647
Length, in (mm)	354 (8992)	186 (4724)	126 (3200)
Width(1/2 Wave Spacing), in (mm)	41 (1041)	40 (1016)	40 (1016)
Weight, lbs. (kg)	117 (53)	59 (26.8)	26 (11.9)
Rated Wind Velocity, No Ice, mph (km/h)	110 (177)	150 (241)	170 (272)
Rated Wind Velocity, 0.5” (13mm) ice, mph (km/h)	85 (137)	110 (177)	140 (225)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	315 (143)	154 (70)	67 (30.5)
Bending Moment @ top clamp: 100 mph, ft*lb (kg*m)	2469 (341)	720 (100)	110 (15)
Projected Area, ft² (m²)	12 (1.12)	5.7 (0.53)	2.5 (0.23)
Mounting Information Mast O.D. (mm)	3.5" (89)	2.9" (73)	1.9" (48)

Order Information	Side Mount	Top Mount	Heavy Duty	Black Anodized
F-3676	F-3676SM	F-3676TM	F-3676HD	F-3676HDB
F-3661	F-3661SM	F-3661TM	F-3661HD	F-3661HDB
F-3647	F-3647SM	F-3647TM	F-3647HD	F-3647HDB

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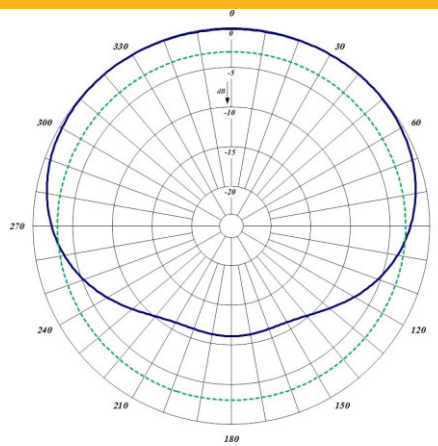
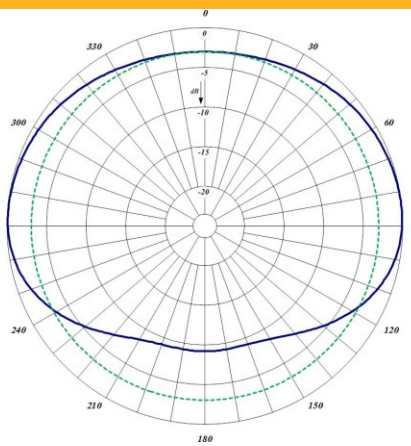
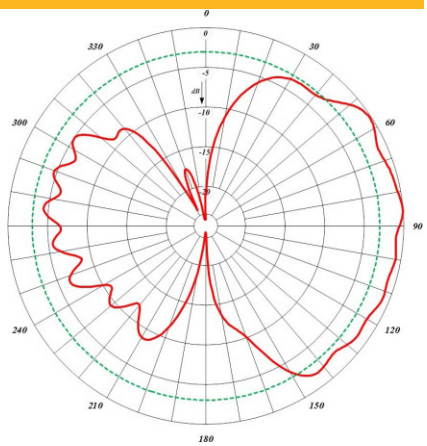
DUAL ANTENNA ARRAY 137-512 MHz



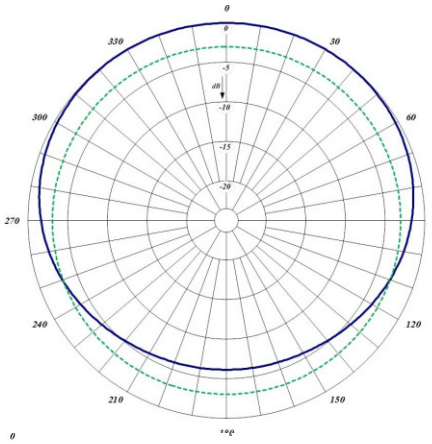
F-3647 Quarter-wave Spacing Horizontal

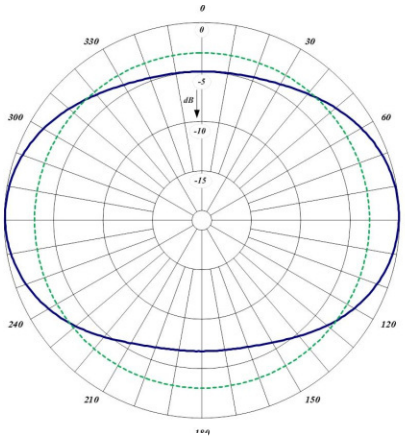


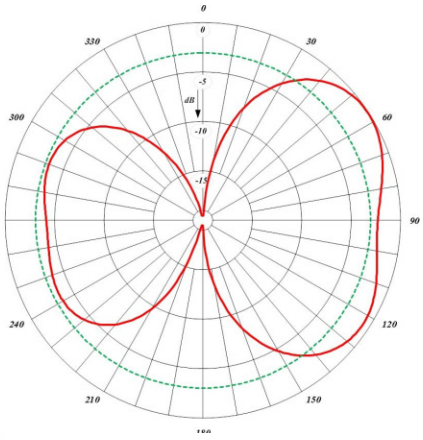
Half-wave Spacing Horizontal

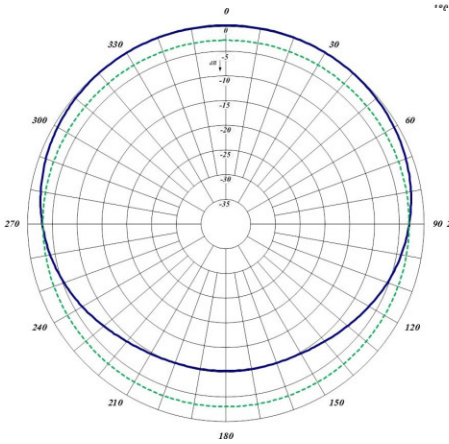


Half-wave Spacing Vertical

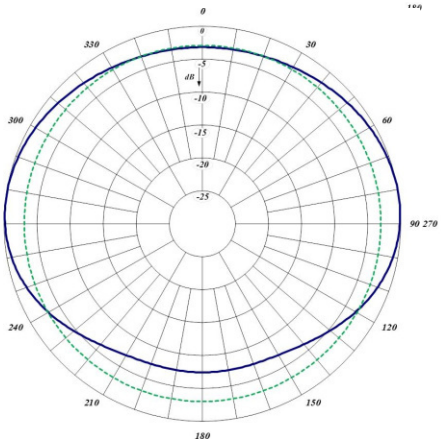




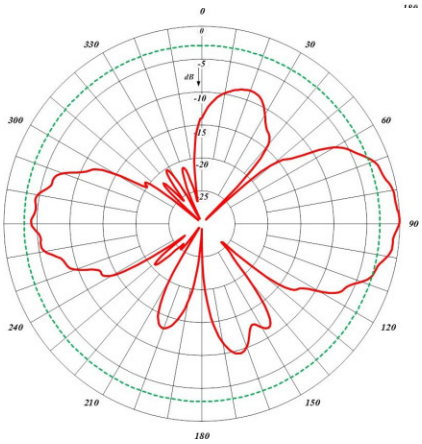




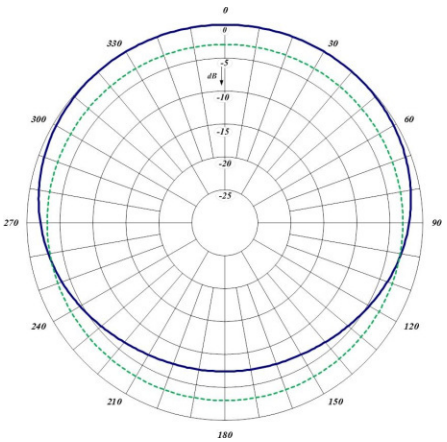
Quarter-wave Spacing Horizontal

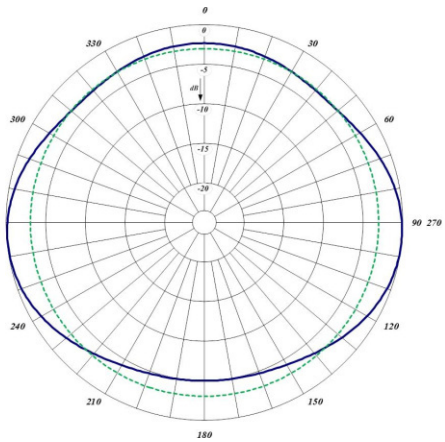


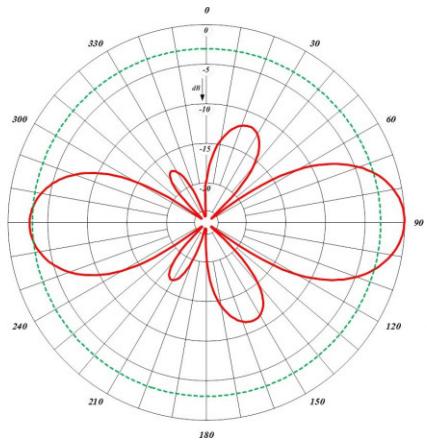
Half-wave Spacing Horizontal



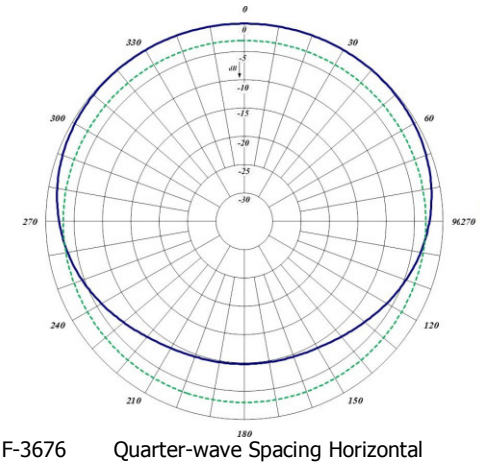
Half-wave Spacing Vertical F-3661



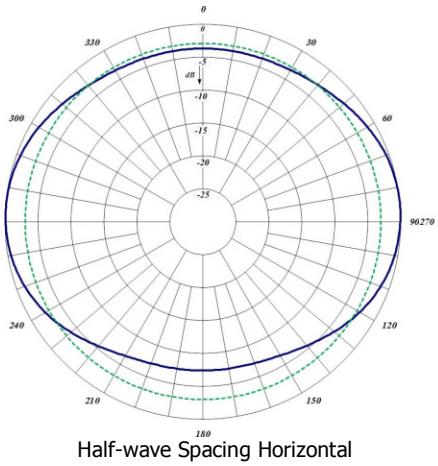




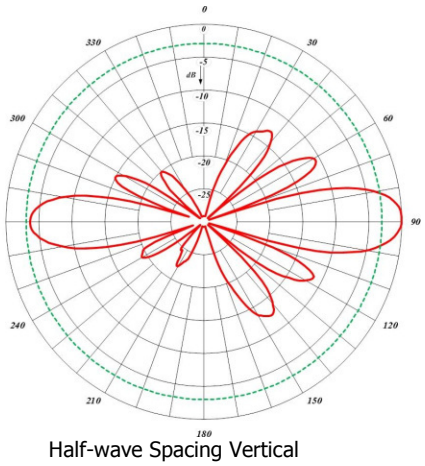
DUAL ANTENNA ARRAY 137-512 MHz



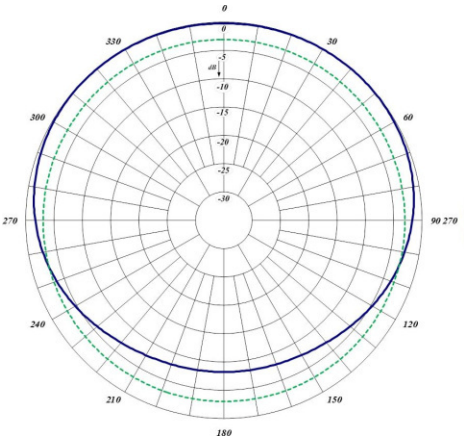
F-3676 Quarter-wave Spacing Horizontal

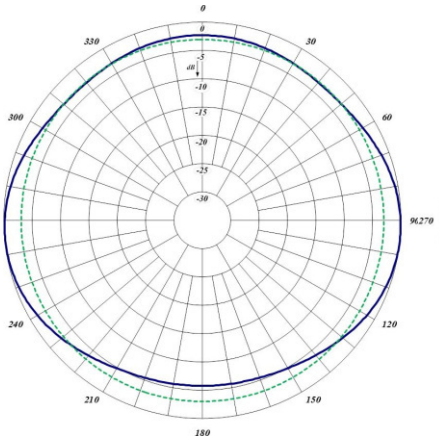


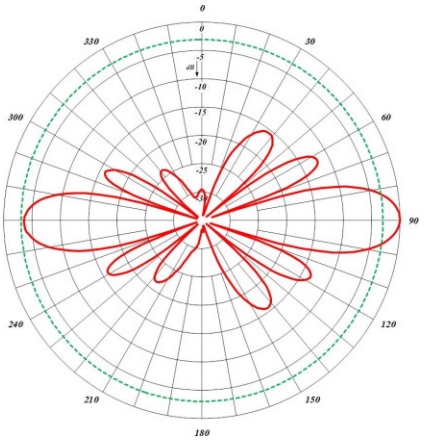
Half-wave Spacing Horizontal



Half-wave Spacing Vertical







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VHF EXPOSED DIPOLES W/REFLECTORS 138-174 MHz

870 Series VHF Exposed Dipoles with Reflectors

The F-37XX Series antennas are our 870 Series VHF Exposed Dipoles with Reflectors. They are available in 1, 2, 4 dipole configurations. All of our antennas can be completely customized to your applications. Our antennas can be black anodized, fully welded, side mount or top mount, and heavy duty versions are available.

The Reflectors provide a higher degree of directivity. This product is ideal for state or country borders. We have seen great success with being able to shape the RF patterns in the 870 series antenna line.

- Each antenna is configured as a 3/8 wave version.
- The reflectors provide more directivity and greater front-to-back ratios.
- These exposed dipoles have internal cabling and fixed dipole to mast spacing.
- Heavy-duty versions are available. Please contact a Comprod Inc. Technical support technician for consultation.

F-3713

Electrical Specifications	F-3729	F-3713	F-3766
Frequency Range, MHz	138-174	138-174	138-174
Nominal Gain, dBd	2.5-3.0	7.0	9.0-10.0
Number of Dipoles	1	2	4
Number of Reflectors	6	6	6
Bandwidth 1.5:1 VSWR, MHz	36	36	36
Polarization	Vertical	Vertical	Vertical
Pattern	Directional	Directional	Directional
Power Rating, Watts	200	450	450
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male

Mechanical Specifications	F-3729	F-3713	F-3766
Length, in (mm)	72 (1829)	120 (3048)	240 (6096)
Width(1/2 Wave Spacing), in (mm)	50 (1270)	53 (1346)	53 (1346)
Weight, lbs. (kg)	34.3 (15.6)	57.2 (26)	100.3 (45.5)
Mounting Information Mast O.D. (mm)	2.4" (61)	2.4" (61)	2.9" (73)

Order Information	Side Mount	Top Mount	Black Anodized
F-3729	F-3729SM	F-3729TM	F-3729SMB
F-3713	F-3713SM	F-3713TM	F-3713SMB
F-3766	F-3766SM	F-33228 (Mid Mount)	F-3766SMB

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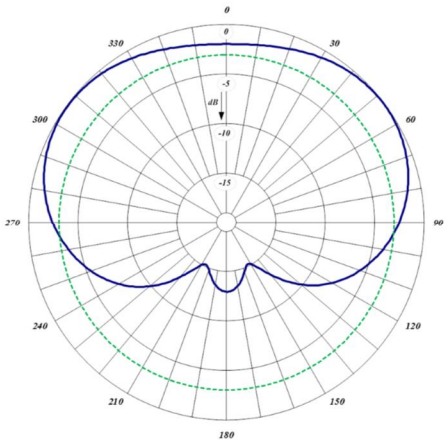
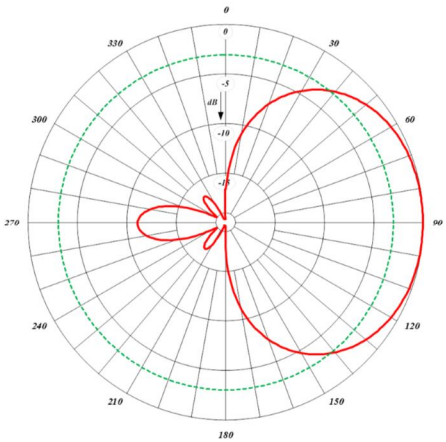
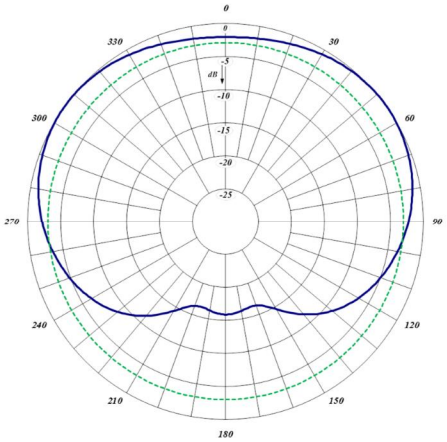
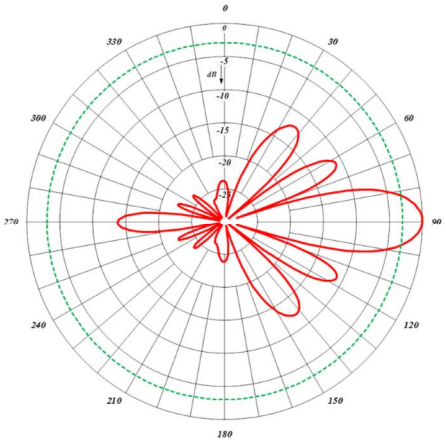
VHF EXPOSED DIPOLES W/REFLECTORS 138-174 MHz



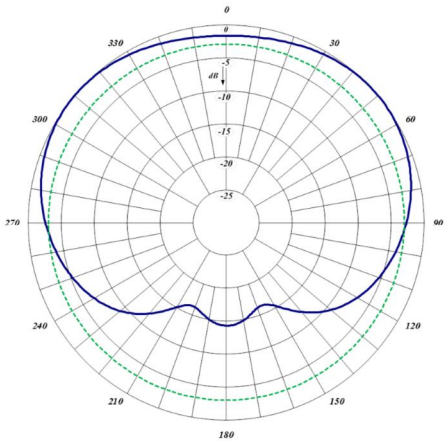


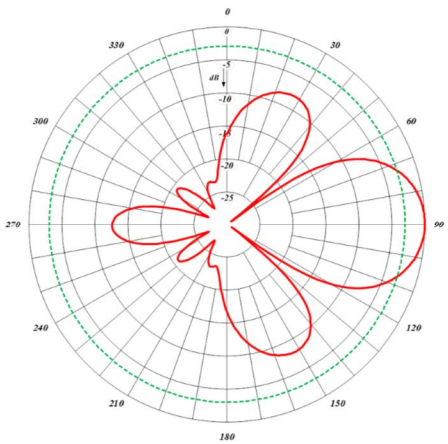
F-3729 3/8 Spacing Horizontal 3/8 wave Spacing Vertical





3/8 Spacing Horizontal 3/8 Spacing Vertical F-3766





F-3713 3/8 Spacing Horizontal 3/8 Spacing Vertical

790 SERIES ENCLOSED DIPOLE 746-960 MHz

790 Series Enclosed Dipoles

The 790 Series Enclosed Dipoles are available in 2, 4, or 8 dipole configurations. All of our antennas can be completely customized to your particular applications.

- Each antenna is offered in an offset pattern.
- Broadband antennas are ideal for trunking or cellular applications.
- Weatherproof radome to ensure continuous service during severe environmental conditions.
- Versions with 3, 6, and 9 degree downtilt are also available.

794-70

Electrical Specifications	792-70	794-70	799-70
Frequency Range, MHz	746-960	746-960	746-960
Nominal Gain, dBd	5.0	8.0	10.0
Number of Dipoles	2	4	8
Bandwidth 1.5:1 VSWR, MHz	150	150	150
Polarization	Vertical	Vertical	Vertical
Pattern	Offset	Offset	Offset
Power Rating, Watts	150	300	500
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male

Mechanical Specifications	792-70	794-70	799-70
Length, in (mm)	22 (559)	44.5 (1130)	94 (2388)
Width(1/2 Wave Spacing), in (mm)	2.5 (64)	2.5 (64)	2.5 (64)
Weight, lbs. (kg)	8.8 (4)	14 (6.5)	24 (11)
Rated Wind Velocity, No Ice, mph (km/h)	100 (162)	100 (162)	100 (162)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	85 (137)	85 (137)	85 (137)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	36.4 (16.5)	73 (33)	153 (59)
Projected Area, ft² (m²)	1.4 (0.13)	2.7 (0.25)	5.7 (0.53)
Mounting Information (Clamps included)	1.5-2.88" O.D.	1.5-2.88" O.D.	1.5-2.88" O.D.

Order Information	746-896MHz	806-960MHz
792-70	792-70*1	792-70*2
794-70	794-70*1	794-70*2
799-70	799-70*1	799-70*2

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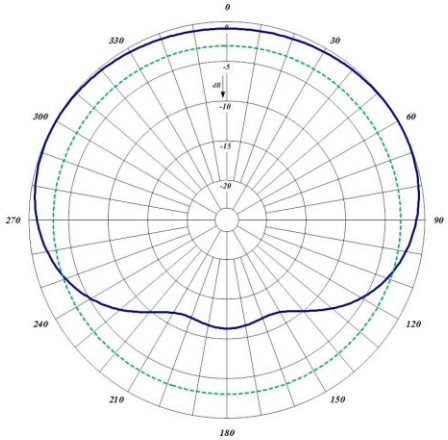
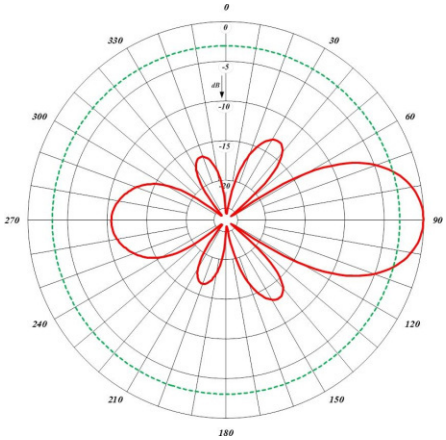
790 SERIES ENCLOSED DIPOLE 746-960 MHz

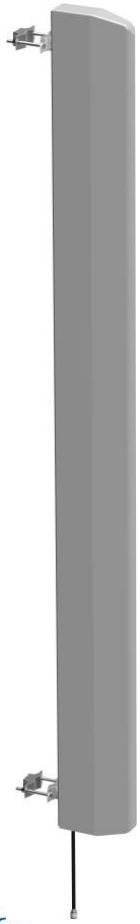
792-70



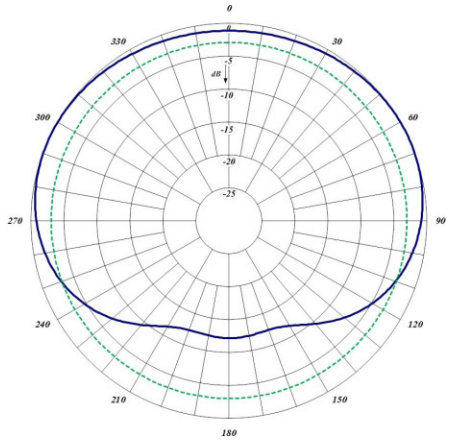
Horizontal Pattern



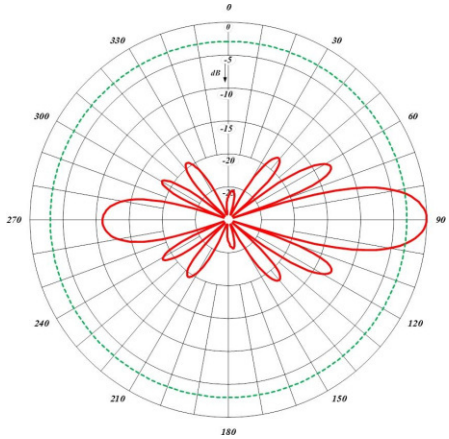
Vertical Pattern



799-70

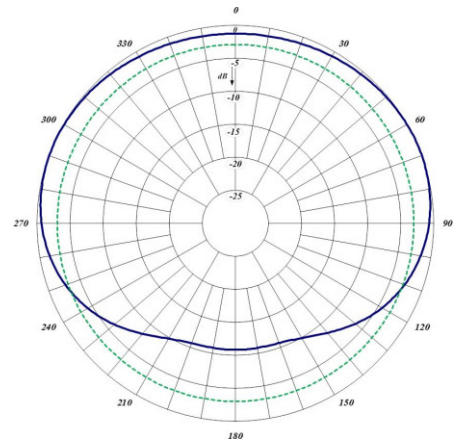


Horizontal Pattern

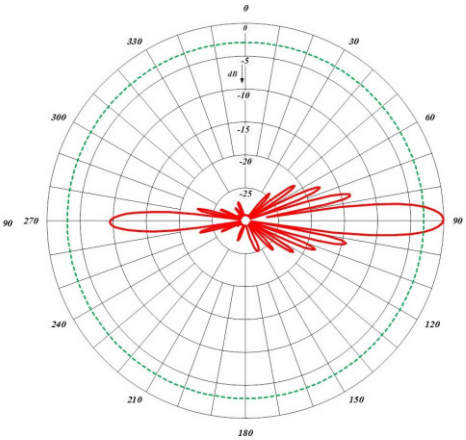


Vertical Pattern

794-70



Horizontal Pattern



Vertical Pattern

790 SERIES ENCLOSED DIPOLE W/REFLECTOR 746-960 MHz

790 Series Enclosed Dipoles with Reflector

The 790 Series Enclosed Dipoles with Reflector are available in 2, 4, or 8 dipole configurations. These antennas can be adjusted from 60º to 160º. All of our antennas can be completely customized to your particular applications.

- Broadband antennas are ideal for trunking or cellular applications.
- Reflector is field adjustable and has 5 positions: 60º, 90º, 105º, 130º and 160º.
- Weatherproof radome to ensure continuous service during severe environmental conditions.
- Heavy duty versions are available. Please contact Comprod Inc. Technical support technician for consultation.

794-70R

Electrical Specifications	792-70R	794-70R	799-70R
Frequency Range, MHz	746-960	746-960	746-960
Nominal Gain, dBd	Up to 8.0	Up to 13.5	Up to 15.0
Number of Dipoles	2	4	8
Bandwidth 1.5:1 VSWR, MHz	150	150	150
Polarization	Vertical	Vertical	Vertical
Pattern	Directional	Directional	Directional
Power Rating, Watts	150	300	500
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male

Mechanical Specifications	792-70R	794-70R	799-70R
Length, in (mm)	22 (559)	44.5 (1130)	94.5 (2395)
Width(1/2 Wave Spacing), in (mm)	25 (635)	25 (635)	25 (635)
Weight, lbs. (kg)	16.5 (7.5)	24 (10.9)	42 (19)
Rated Wind Velocity, No Ice, mph (km/h)	100 (162)	100 (162)	100 (162)
Rated Wind Velocity, 0.5” (13mm) ice, mph (km/h)	85 (137)	85 (137)	85 (137)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	57(26)	115 (52)	243 (110)
Projected Area, ft² (m²)	2.0 (0.19)	4.3 (0.40)	9 (0.84)
Mounting Information (Clamps included)	1.5-2.88" O.D.	1.5-2.88" O.D.	1.5-2.88" O.D.

Order Information	746-896MHz	806-960MHz
792-70R	792-70R*1	792-70R*2
794-70R	794-70R*1	794-70R*2
799-70R	799-70R*1	799-70R*2

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
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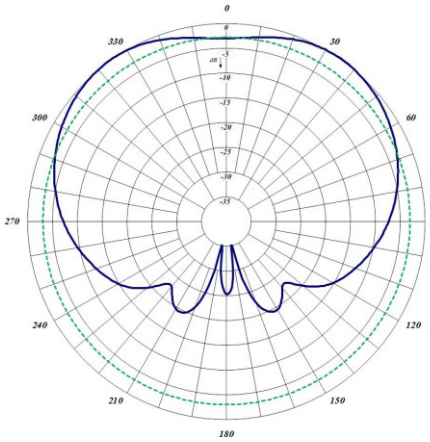
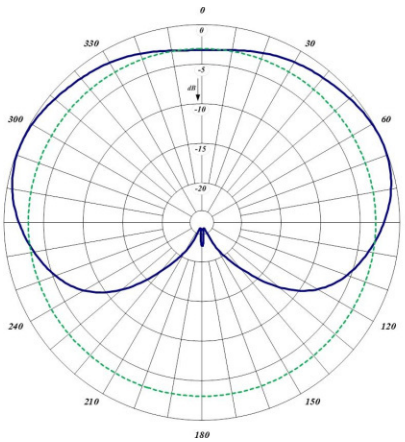
790 SERIES ENCLOSED DIPOLE W/REFLECTOR 746-960 MHz



792-70R90



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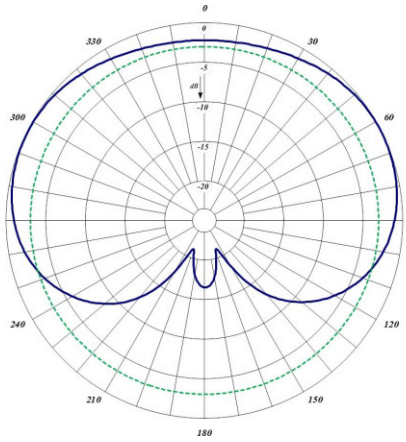
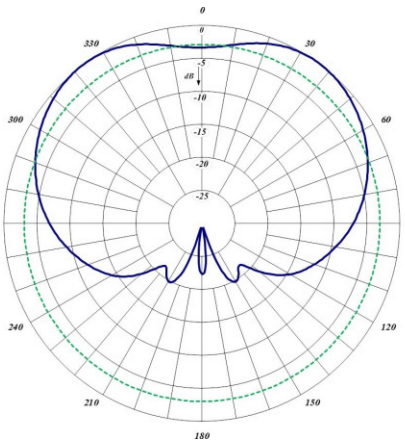


792-70R160

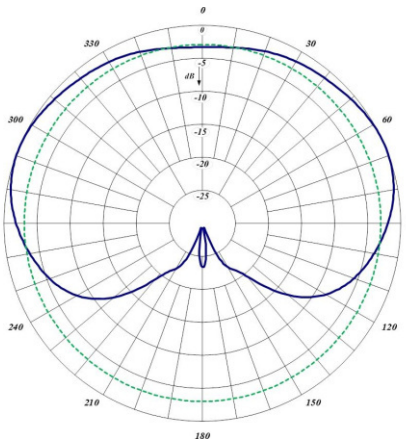
792-70R

Call for additional patterns

794-70R



794-70R90



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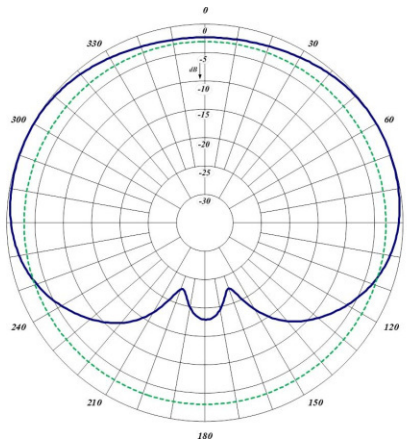

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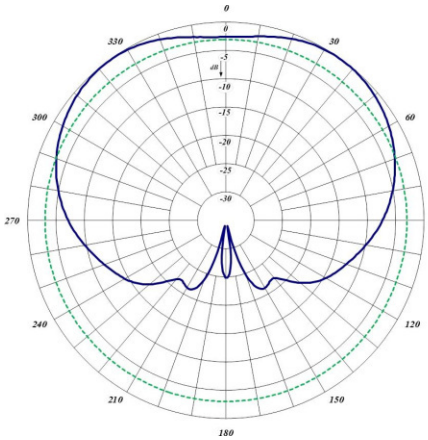
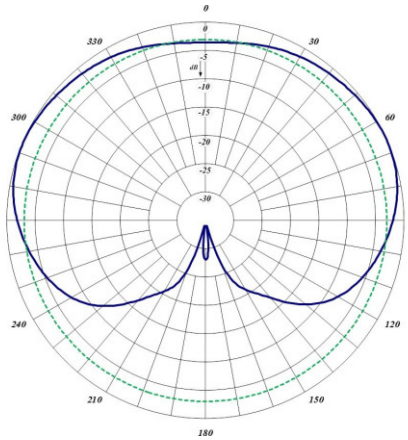


799-70R90



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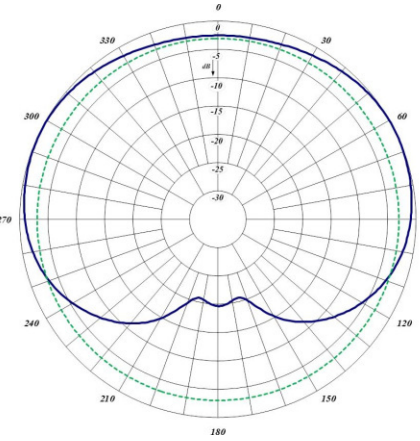


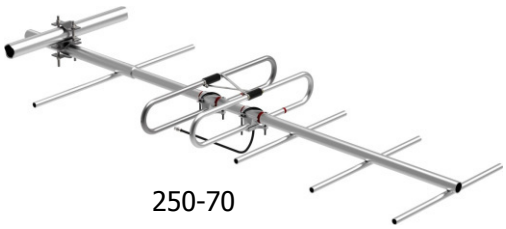
799-70R160

799-70R

VHF YAGI ANTENNA 138-174MHz

290 Series VHF Yagi Antennas

The 290 Series VHF Yagi Antenna are available in 2, 3, and 6 element configurations. All of our antennas can be completely customized to your applications. Our antennas can be black anodized, welded, vertically or horizontally polarized, and heavy duty versions are available.



250-70

- Each antenna has a rugged design to withstand harsh environmental conditions.
- The mounting hardware supplied will permit either vertical or horizontal polarization.
- DC ground for lightning protection.
- Optionally have the entire antenna welded for added durability.
- Heavy-duty versions are available. Please contact Comprod Inc. Technical support.

Electrical Specifications	291-70	295-70	290-70	250-70
Frequency Range, MHz	138-174	138-174	138-174	138-174
Nominal Gain, dBd	3.5	6.5	9.5	7
Number of Elements	2	3	6	7
Bandwidth 1.5:1 VSWR, MHz (Ctr. Freq.%)	3.75%	4%	4%	36 @ 2:1
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Horizontal Pol.)	140º	90º	62º	80º
Vertical Beamwidth (Horizontal Pol.)	70º	61º	50º	60º
Front to Back, dB	15	12	17	25
Pattern	Directional	Directional	Directional	Directional
Power Rating, Watts	350	350	350	250
Nominal Impedance, Ohms	50	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male	Type N Male

Mechanical Specifications	291-70	295-70	290-70	250-70
Length, in (mm)	50 (1270)	60 (1524)	108 (2743)	104 (2642)
Width(1/2 Wave Spacing), in (mm)	40 (1016)	43 (1092)	42 (1067)	42 (1067)
Weight, lbs. (kg)	4.8 (2.2)	6.5 (2.9)	12.0 (5.4)	12.0 (5.4)
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)	145 (223)	120 (177)	110 (177)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	105 (169)	100 (161)	85 (137)	90 (145)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	29 (13)	39 (18)	65 (29)	95 (43)
Projected Area, ft² (m²)	1.1 (0.10)	1.4 (0.13)	2.4 (0.22)	2.6 (0.24)
Mounting Information	181-85 Clamp	181-85 Clamp	115-85 Clamp	115-85 Clamp

Order Information	End Mount	End Boom	Center Mount	Welded	Heavy Duty	Black Anodized	(2) Stacked
291-70	291-70	N/A	N/A	291-70W	291-70HD	291-70B	Call
295-70	295-70	N/A	295-70CB	295-70W	295-70HD	295-70B	Call
290-70	290-70	290-70EB	290-70CB	290-70W	290-70HD	290-70B	298-70
250-70	250-70	250-70	N/A	250-70W	250-70HD	250-70B	Call

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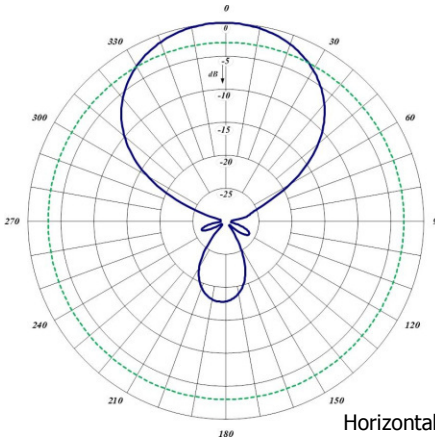
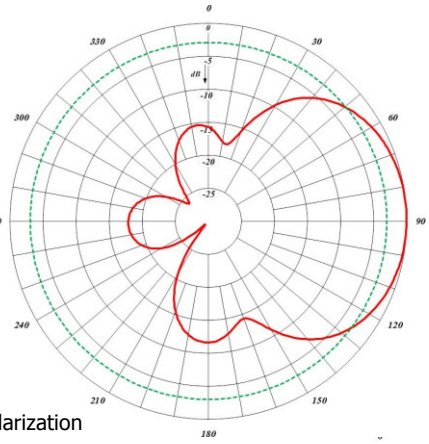
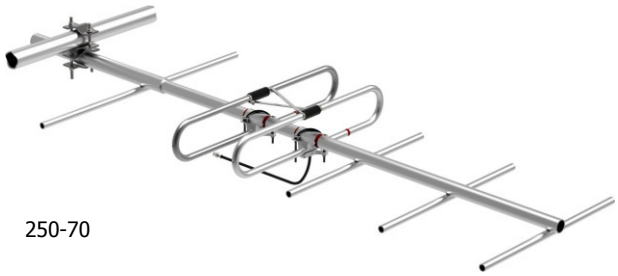
VHF YAGI ANTENNA 138-174 MHz





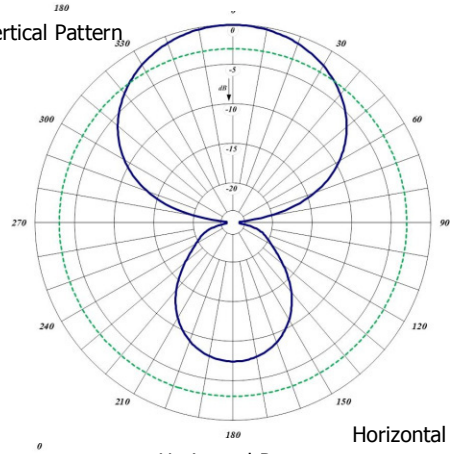


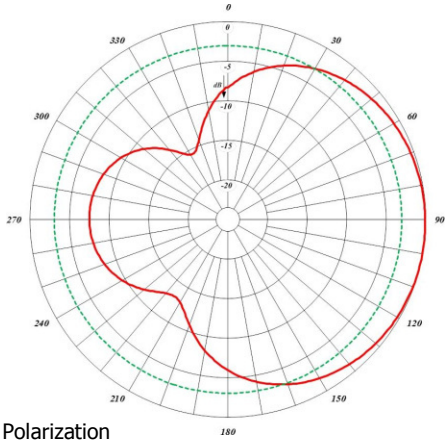
250-70

Horizontal Polarization

Horizontal Pattern Vertical Pattern

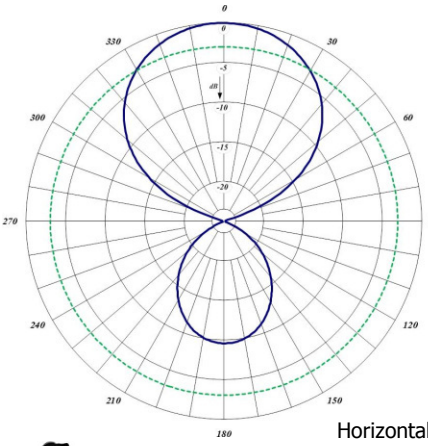
291-70

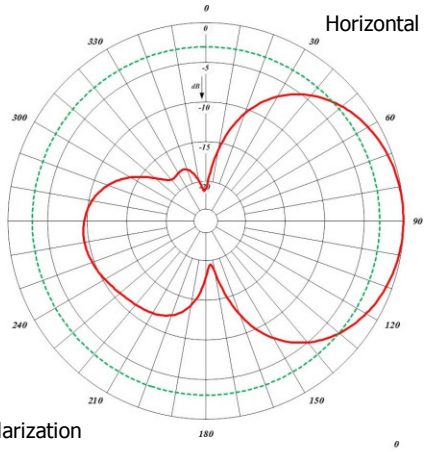




Horizontal Polarization

Horizontal Pattern Vertical Pattern

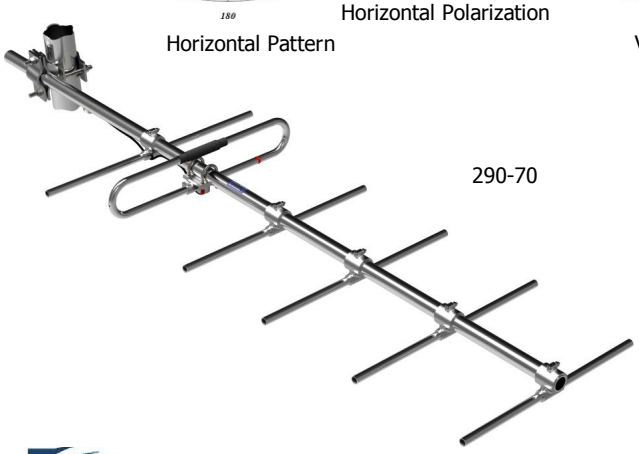




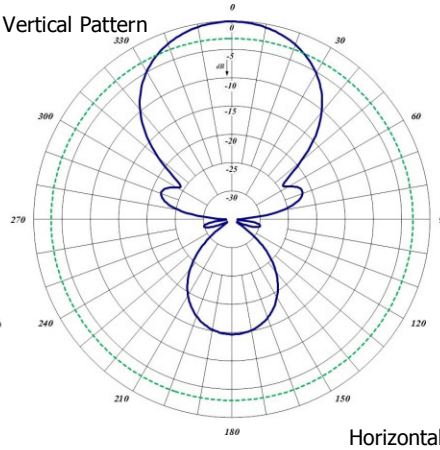
295-70

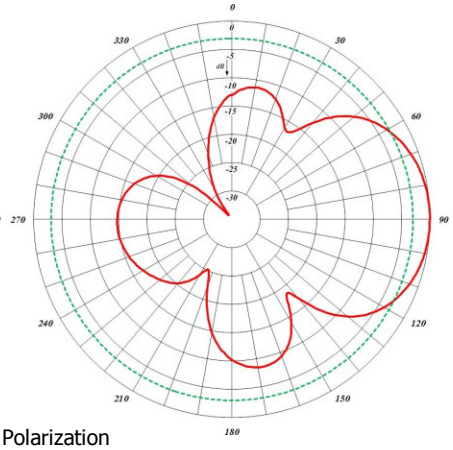
Horizontal Polarization

Horizontal Pattern Vertical Pattern



290-70





Horizontal Polarization

Horizontal Pattern Vertical Pattern

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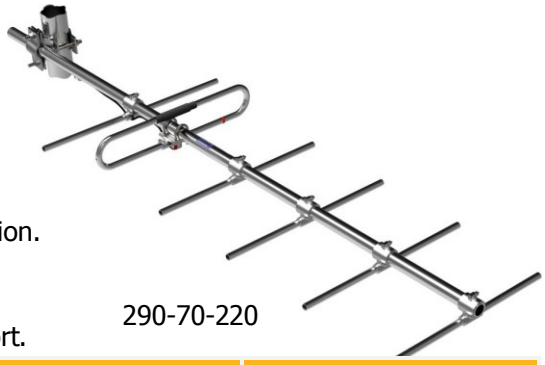
220MHz YAGI ANTENNA 215-225 MHz

290 Series 220MHz Yagi Antennas

The 290 Series 220MHz Yagi Antennas are available in 2, 3, and 6 element configurations. All of our antennas can be completely customized to your particular applications. Our antennas can be black anodized, welded, vertically or horizontally polarized, and heavy duty versions are available.

- Each antenna has a rugged design to withstand harsh environmental conditions.
- The mounting hardware supplied will permit either vertical or horizontal polarization.
- DC ground for lightning protection.
- Option to have the entire antenna welded for added durability.
- Heavy-duty versions are available. Please contact Comprod Inc. Technical support.



290-70-220

Electrical Specifications	291-70-220	295-70-220	290-70-220
Frequency Range, MHz	215-225	215-225	215-225
Nominal Gain, dBd	3.5	6.5	9.5
Number of Elements	2	3	6
Bandwidth 1.5:1 VSWR, MHz (Center Freq.%)	10	10	10
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Horizontal Pol.)	140º	90º	62º
Vertical Beamwidth (Horizontal Pol.)	70º	36º	50º
Front to Back, dB	15	12	17
Pattern	Directional	Directional	Directional
Power Rating, Watts	350	350	350
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Mechanical Specifications	**291-70-220**	**295-70-220**	**290-70-220**
Length, in (mm)	32 (813)	48 (1219)	84 (2134)
Width(1/2 Wave Spacing), in (mm)	29 (737)	28 (711)	27 (686)
Weight, lbs. (kg)	3.7 (1.7)	4.8 (2.2)	9.0 (4.1)
Rated Wind Velocity, No Ice, mph (km/h)	165 (266)	155 (249)	145 (233)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	145 (233)	130 (209)	100 (161)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	19.4 (8.8)	27 (12)	47 (21.3)
Torsional Moment @ 100 mph, ft*lb (kg*m)	25 (3.5)	52 (7.2)	138 (19)
Projected Area, ft² (m²)	0.7 (0.07)	1.0 (0.09)	1.75 (0.16)
Mounting Information	181-85 Clamp	181-85 Clamp	115R-85 Clamp

1Order Information	End Boom	Welded	Heavy Duty	Black Anodized	(2) Stacked
291-70-220	291-70EB-220	291-70W-220	291-70HD-220	291-70HDB-220	N/A
295-70-220	295-70EB-220	295-70W-220	295-70HD-220	295-70HDB-220	N/A
290-70-220	290-70EB-220	290-70W-220	290-70HD-220	290-70HDB-220	298-70-220

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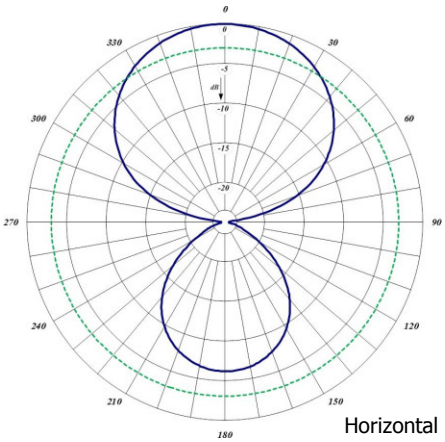
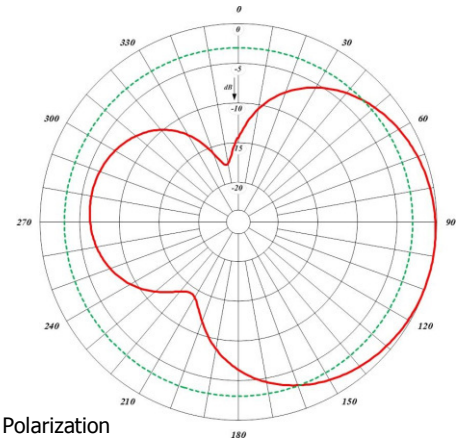
VHF YAGI ANTENNA 215-225 MHz

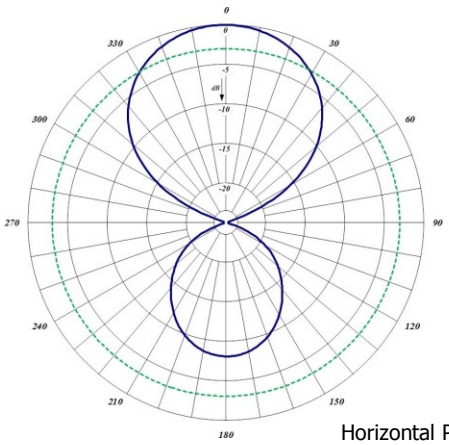
291-70-220

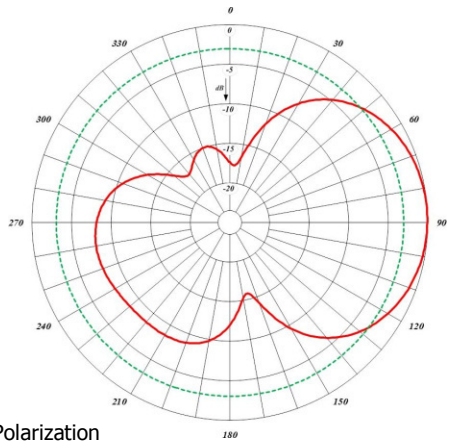




Horizontal Polarization

Horizontal Pattern Vertical Pattern

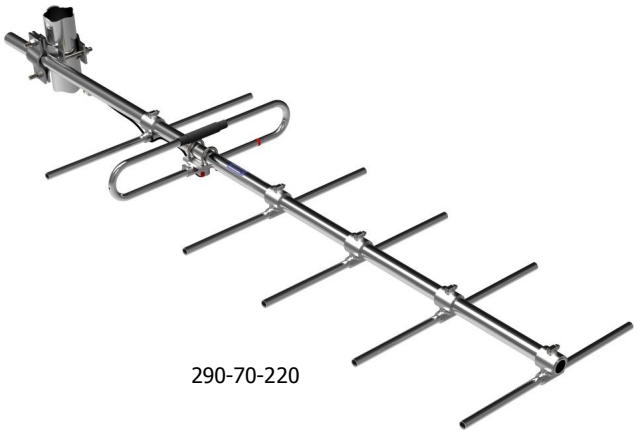




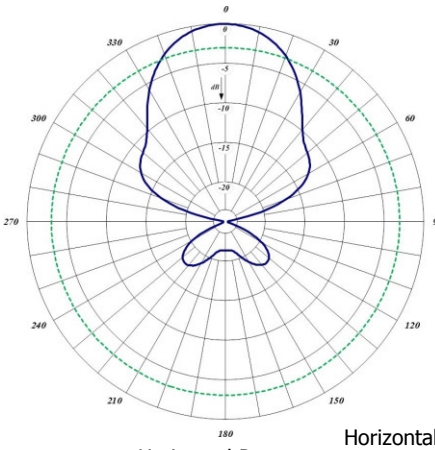
Horizontal Polarization

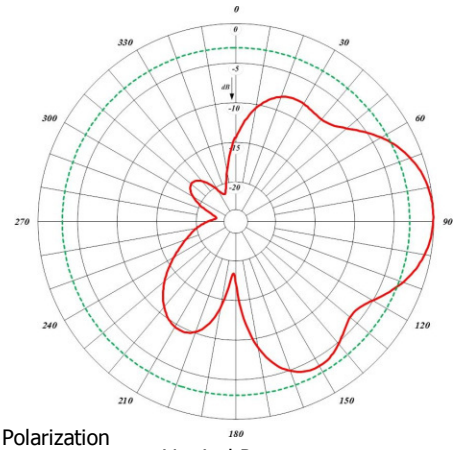
Horizontal Pattern Vertical Pattern

295-70-220



290-70-220





Horizontal Polarization

Horizontal Pattern Vertical Pattern

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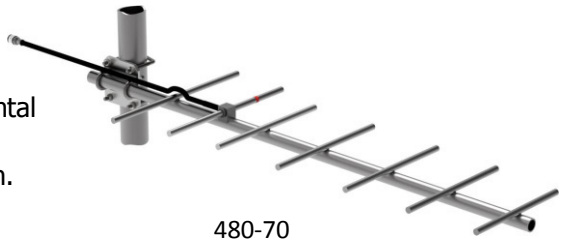
UHF YAGI ANTENNA 406-512 MHz

UHF Yagi Antennas Series

The UHF Yagi Antenna Series is available in 2, 3, 7 element and our 70 MHz wideband configurations. All of our antennas can be completely customized to your particular applications. Our antennas can be black anodized, fully welded, vertically or horizontally polarized, and heavy duty versions are available.

- Each antenna has a rugged, fully welded design to withstand harsh environmental conditions.
- The mounting hardware supplied allows either vertical or horizontal polarization.
- DC ground for lightning protection.
- All UHF Yagi antennas are fully welded.
- Heavy-duty versions are available. Please contact Comprod Inc. Technical support.



480-70

Electrical Specifications	F-3872	433-70	430-70	480-70
Frequency Range, MHz	406-512	406-512	406-512	406-470
Nominal Gain, dBd	3.5	6.5	10.0	10.0
Number of Elements	2	3	7	7
Bandwidth 1.5:1 VSWR, MHz (Center Freq.%)	24	24	24	64
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Vert. Pol.)	138º	83º	62º	62º
Vertical Beamwidth (Vert. Pol.)	72º	59º	48º	50º
Front to Back, dB	10	12	20	17
Pattern	Directional	Directional	Directional	Directional
Power Rating, Watts	350	350	350	350
Nominal Impedance, Ohms	50	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male	Type N Male
Mechanical Specifications	**F-3872**	**433-70**	**430-70**	**480-70**
Length, in (mm)	28 (711)	23 (584)	45 (1143)	45 (1143)
Width(1/2 Wave Spacing), in (mm)	14.5 (368)	14 (355)	14.5 (368)	14.4 (366)
Weight, lbs. (kg)	2.8 (1.3)	2.9 (1.3)	3.9 (1.8)	3.9 (1.8)
Rated Wind Velocity, No Ice, mph (km/h)	160 (257)	160 (257)	150 (241)	150 (241)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	120 (193)	120 (193)	110 (177)	110 (177)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	9 (4.1)	8.7 (4.0)	16 (7.3)	15 (6.8)
Projected Area, ft² (m²)	0.34 (0.03)	0.32 (0.03)	0.61 (0.06)	0.55 (0.05)
Mounting Information	127-85 Clamp	127-85 Clamp	127-85 Clamp	127-85 Clamp

Order Information	406-430	430-450	450-470	406-470	Black Anodized	(2) Stacked	(4) Stacked
F-3872	F-3872*1	F-3872*2	F-3872*3	N/A	F-3872B	N/A	N/A
433-70	433-70*1	433-70*2	433-70*3	N/A	433-70B	N/A	N/A
430-70	430-70*1	430-70*2	430-70*3	N/A	430-70B	431-70	432-70
480-70	480-70	480-70	480-70	480-70	480-70B	481-70	482-70

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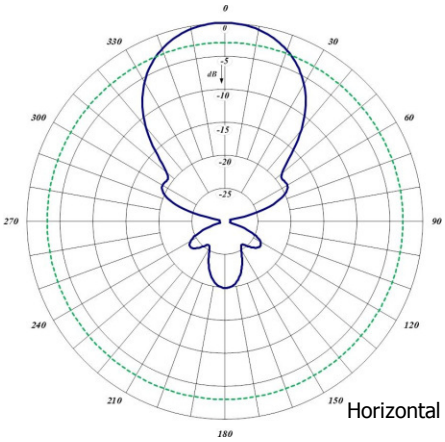
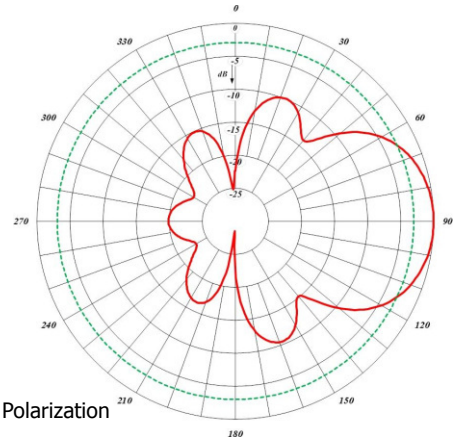
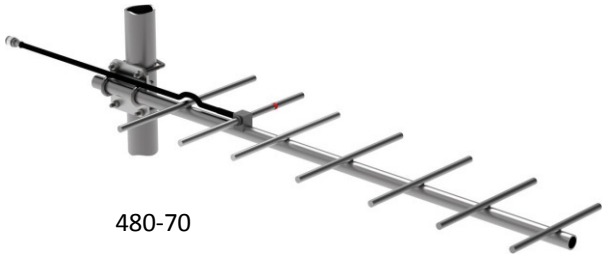
UHF YAGI ANTENNA 406-512 MHz





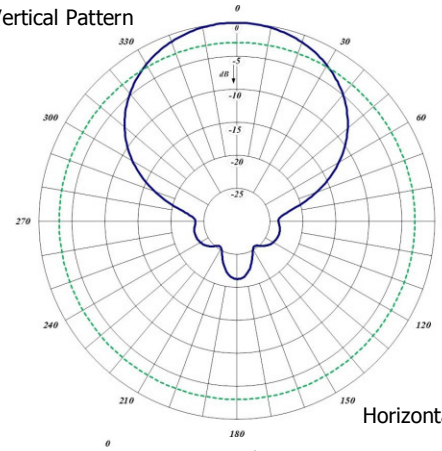
Horizontal Polarization

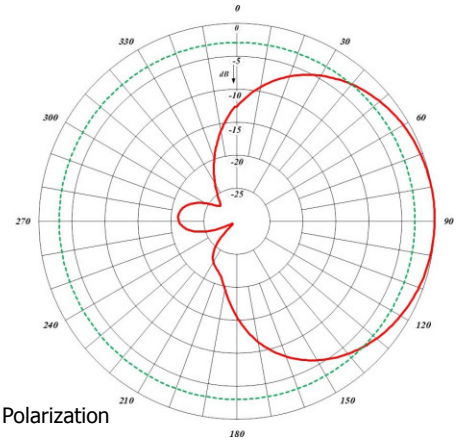
Horizontal Pattern Vertical Pattern



480-70

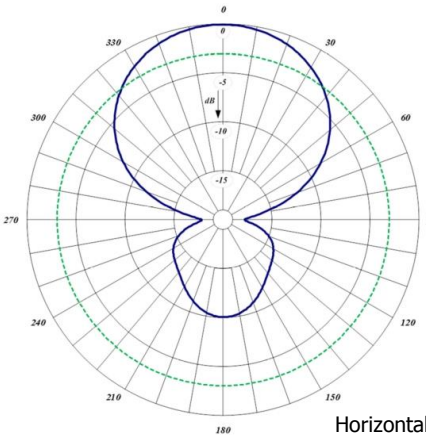
433-70

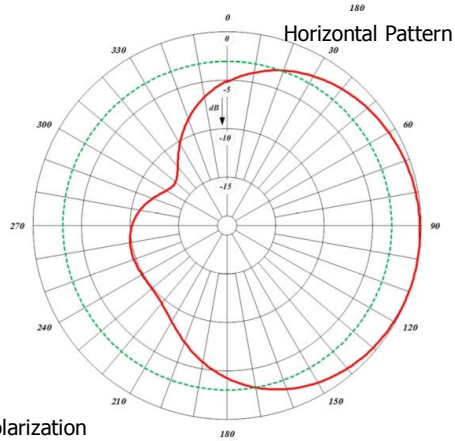




Horizontal Polarization

Horizontal Pattern Vertical Pattern

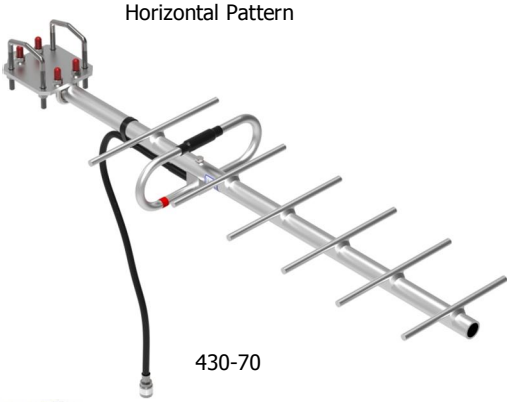




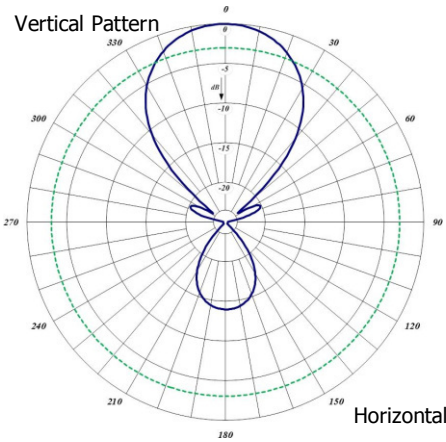
Horizontal Polarization

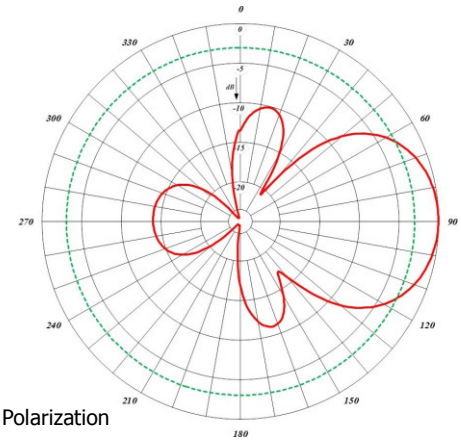
Horizontal Pattern Vertical Pattern

F-3872



430-70





Horizontal Polarization

Horizontal Pattern Vertical Pattern

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
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Fax: 1.800.554.1033

980 Yagi Antennas Series

The 980 Yagi Antenna Series are available in 2, 3, 7, 12 element configurations. All of our antennas can be completely customized to your particular applications. Our antennas can be black anodized, vertically or horizontally polarized.

- Each antenna has a rugged design to withstand harsh environmental conditions.
- The mounting hardware supplied will permit either vertical or horizontal polarization.
- All 980 Series Yagi antennas are fully welded.
- Heavy-duty versions are available. Please Contact a Comprod Inc. Technical support technician for consultation.

983-70

Electrical Specifications	982-70	983-70	980-70	987-70
Frequency Range, MHz	746-960	746-960	746-960	746-960
Nominal Gain, dBd	3.5	6.5	10.0	12.0
Number of Elements	2	3	7	12
Bandwidth 1.5:1 VSWR, MHz (Ctr. Freq.%)	30	85	85	85
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Horizontal Pol.)	128º	99º	56º	41º
Vertical Beamwidth (Horizontal Pol.)	66º	60º	42º	38º
Front to Back, dB	9	16	20	20
Pattern	Directional	Directional	Directional	Directional
Power Rating, Watts	200	200	200	200
Nominal Impedance, Ohms	50	50	50	50
Standard Termination	Type N Male	Type N Male	Type N Male	Type N Male
Mechanical Specifications	**982-70**	**983-70**	**980-70**	**987-70**
Length, in (mm)	11 (280)	13 (330)	27 (686)	41 (1041)
Width(1/2 Wave Spacing), in (mm)	6.5 (165)	8 (203)	8 (203)	8 (203)
Weight, lbs. (kg)	1.7 (0.76)	1.8 (0.82)	2.5 (1.1)	3 (1.4)
Rated Wind Velocity, No Ice, mph (km/h)	160 (257)	160 (257)	150 (241)	140 (225)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	120 (193)	120 (193)	110 (177)	100 (161)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	2.6 (1.2)	2.8 (1.3)	7 (3.2)	11 (5.0)
Projected Area, ft² (m²)	0.10 (0.009)	0.13 (0.012)	0.26 (0.024)	0.41 (0.038)
Mounting Information	1.0-2.38" O.D.	1.0-2.38" O.D.	1.0-2.38" O.D.	1.0-2.38" O.D.
Included Clamp Model	127-85	127-85	127-85	127-85

Order Information	746-806MHz	806-869MHz	824-896MHz	896-960MHz	Black Anodized	(2) Stacked
982-70	* Call With Frequencies *					N/A
983-70	983-70*1	983-70*2	983-70*3	983-70*4	983-70B	N/A
980-70	980-70*1	980-70*2	980-70*3	980-70*4	980-70B	(2)980-70
987-70	987-70*1	987-70*2	987-70*3	987-70*4	987-70B	(2)987-70

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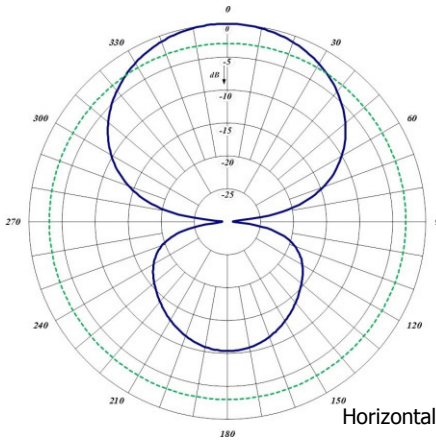
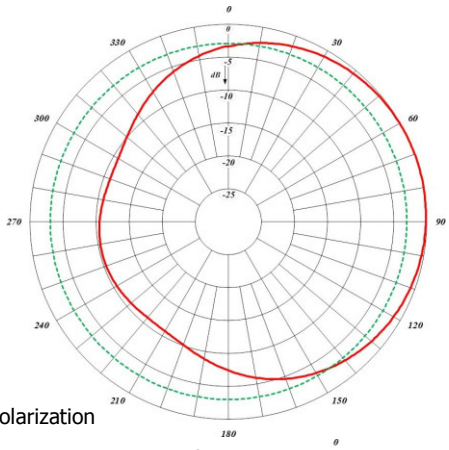
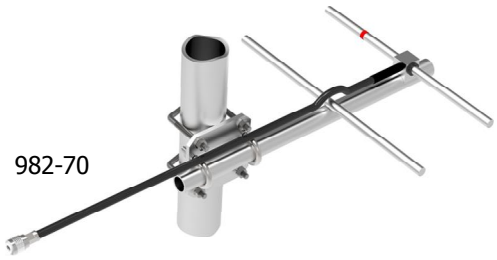
980 YAGI ANTENNA 746-960 MHz





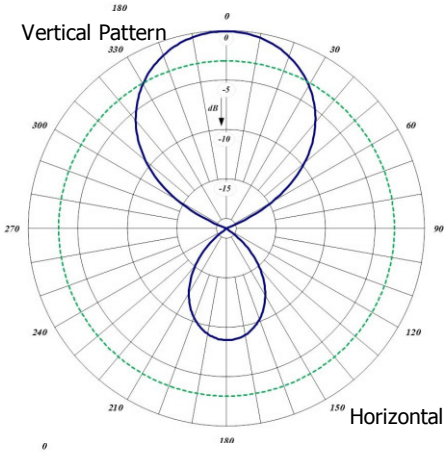
Horizontal Polarization

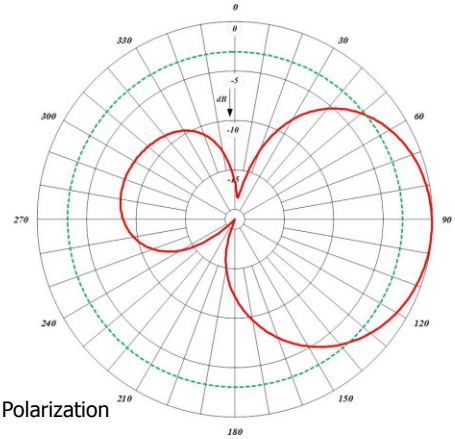
Horizontal Pattern Vertical Pattern



982-70

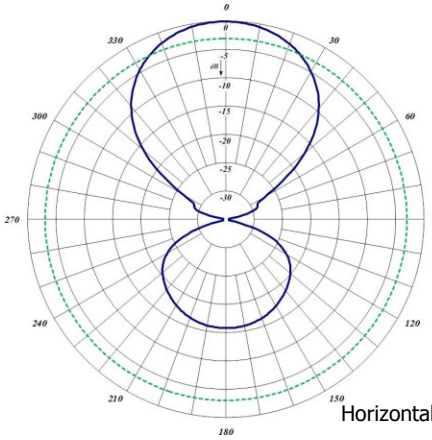
983-70

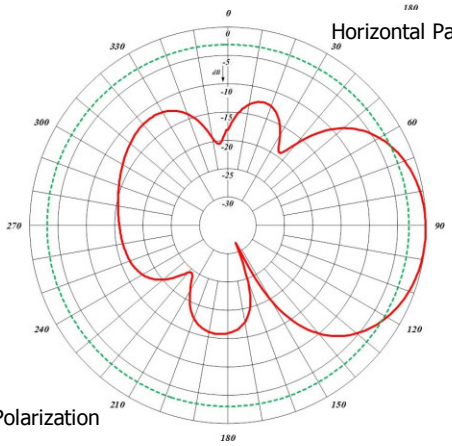




Horizontal Polarization

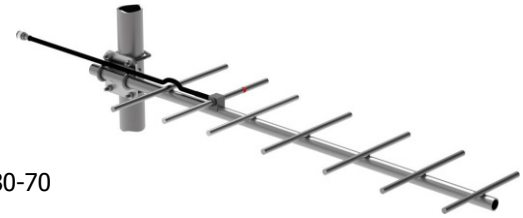
Horizontal Pattern Vertical Pattern





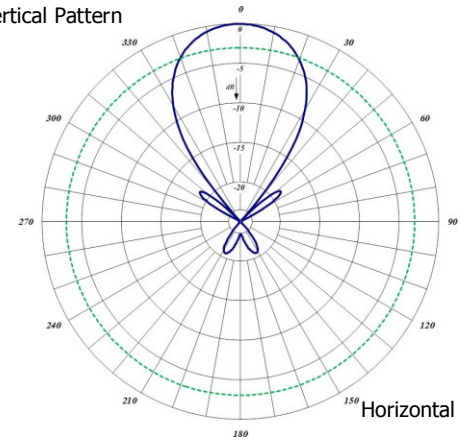
Horizontal Polarization

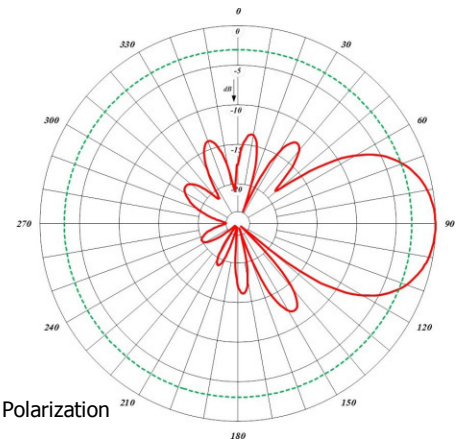
Horizontal Pattern Vertical Pattern



980-70

987-70





Horizontal Polarization

Horizontal Pattern Vertical Pattern

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Fax: 1.800.554.1033

490 SERIES YAGI ANTENNA 806-960 MHz

490 Heavy Duty Yagi Antennas Series

The 490 Heavy Duty Yagi Series is an extremely rugged, 7 element configuration antenna. All of our antennas can be completely customized to your particular applications. Our antennas can be black anodized, vertically or horizontally polarized.

490-70

- Each antenna has an extremely rugged design to withstand harsh environmental conditions.
- The mounting hardware supplied will permit either vertical or horizontal polarization.
- The 490 Series Yagi antennas are fully welded.
- DC ground for lightning protection.

Electrical Specifications	490-70
Frequency Range, MHz	806-960
Nominal Gain, dBd	10.0
Number of Elements	7
Bandwidth: 1.5:1 VSWR, MHz	85
Polarization	Vert. or Horiz.
Horizontal Beamwidth (Horizontal Pol.)	56º
Vertical Beamwidth (Horizontal Pol.)	42º
Front to Back, dB	20
Pattern	Directional
Power Rating, Watts	200
Nominal Impedance, Ohms	50
Standard Termination	Type N Male

Mechanical Specifications	490-70
Length, in (mm)	27 (686)
Width(1/2 Wave Spacing), in (mm)	8 (203)
Weight, lbs. (kg)	2.5 (1.1)
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	150 (241)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	38 (17)
Bending Moment @ top clamp: 100 mph, ft*lb (kg*m)	13 (1.8)
Projected Area, ft² (m²)	0.4 (0.04)
Mounting Information	1.0-2.38" O.D.

Order Information	806-869MHz	824-896MHz	896-960MHz	Black Anodized	(2) Stacked
490-70	490-70*1	490-70*2	490-70*3	490-70B	491-70

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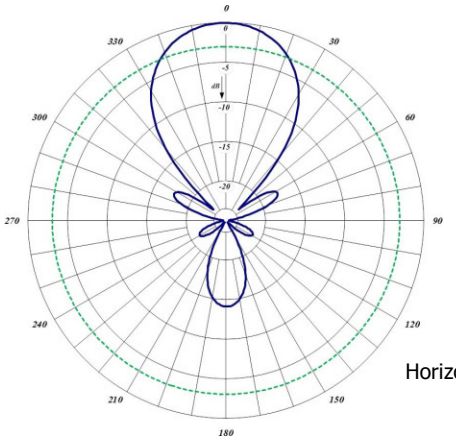
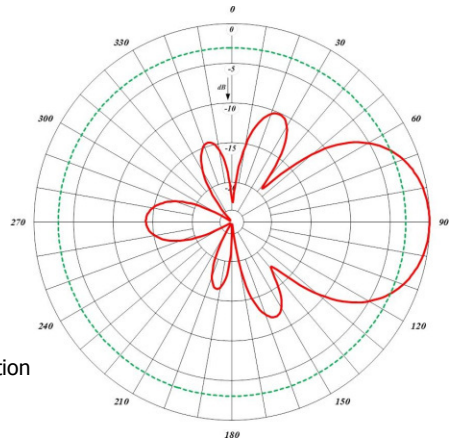
490 SERIES YAGI ANTENNA 806-960 MHz



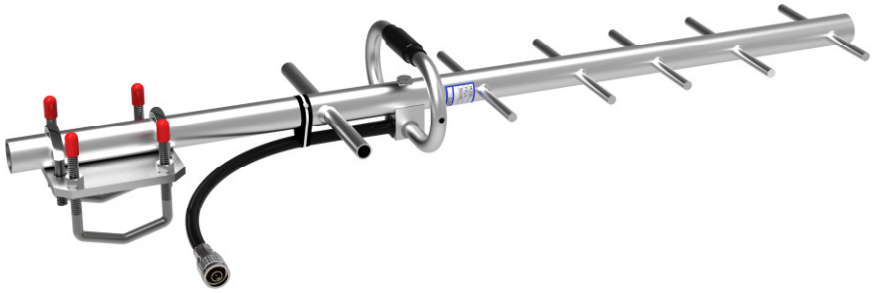
Horizontal Pattern

Horizontal Polarization



Vertical Pattern

490-70

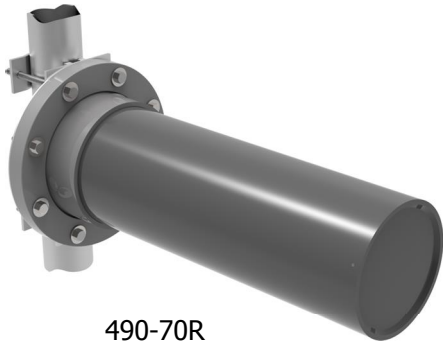


RADOME YAGI ANTENNA 406-960 MHz

Radome Yagi Antennas Series

The Radome Yagi Antenna Series are available in UHF and 700/800/900 MHz configurations. The UHF model is offered with a Fiberglass or PVC Radome. The 700/800/900 MHz model is offered in PVC. All of our antennas can be completely customized to your particular applications.

- Each antenna has a rugged design to withstand extreme environmental conditions.
- The mounting hardware supplied supports either vertical or horizontal polarization.
- DC ground for lightning protection.
- The PVC enclosure is 1/2 inch thick.
- These are our Heavy Duty Versions. Please contact a Comprod Inc. Technical support technician for consultation.



490-70R

Electrical Specifications	425-70	426-70	490-70R
Frequency Range, MHz	406-512	406-512	746-960
Nominal Gain, dBd	10	10	10
Number of Elements	Loop Yagi	Loop Yagi	7
Bandwidth: 1.5:1 VSWR, MHz	20	20	72
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Horizontal Pol.)	62º	62º	56º
Vertical Beamwidth (Horizontal Pol.)	48º	48º	42º
Front to Back, dB	20	20	20
Pattern	Directional	Directional	Directional
Power Rating, Watts	250	250	150
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Mechanical Specifications	**425-70**	**426-70**	**490-70R**
Length, in (mm)	31 (787)	30 (762)	29 (737)
Width(1/2 Wave Spacing), in (mm)	16 (406)	16 (406)	14 (356)
Weight, lbs. (kg)	44 (20)	19 (8.6)	28 (12)
Radome Material	PVC	Fiberglass	PVC
Rated Wind Velocity, No Ice, mph (km/h)	150 (241)	120 (193)	150 (241)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	105 (169)	110 (177)	115 (185)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	69 (31.3)	61 (27.7)	47.4 (21.5)
Projected Area, ft² (m²)	2.6 (0.24)	2.3 (0.21)	1.8 (0.17)
Mounting Information (clamp included) for pipe size O.D. in (mm)	2.9" O.D.	2.4" O.D.	2.9" O.D.

Order Information	(2) Stacked	(4) Stacked	406-430	430-450	450-470
425-70	2*425-70	4*425-70	425-70*1	425-70*2	425-70*3
426-70	2*426-70	4*426-70	426-70*1	426-70*2	426-70*3
490-70R	2*490-70R	4*490-70R	N/A	N/A	N/A

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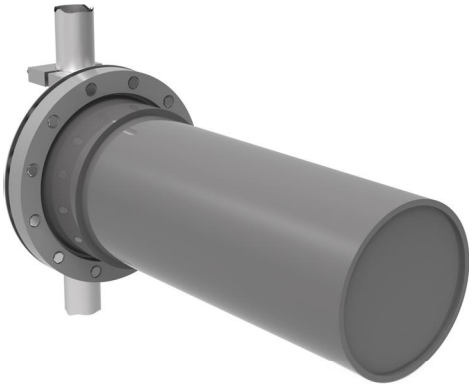
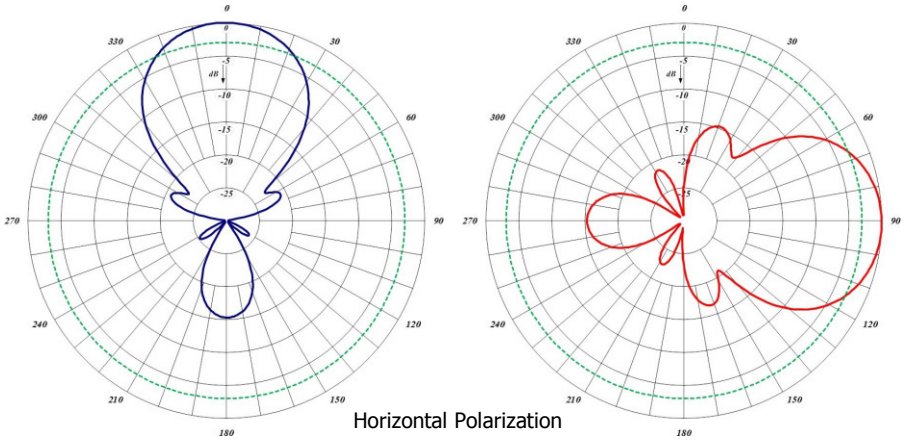
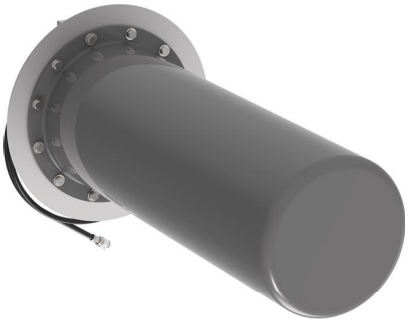
RADOME YAGI ANTENNA 406-960 MHz



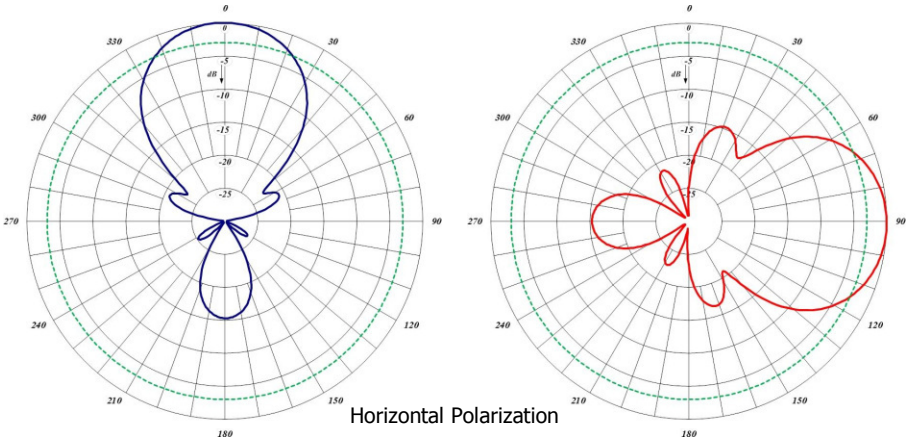
425-70



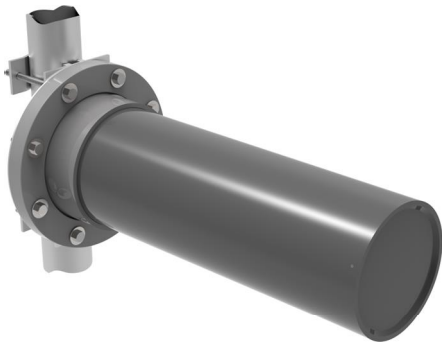
Horizontal Pattern Vertical Pattern



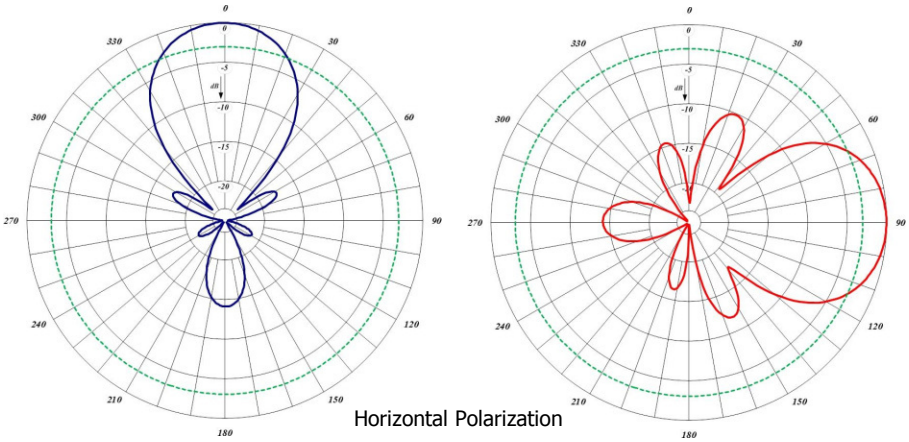
426-70



Horizontal Pattern Vertical Pattern



490-70R



Horizontal Pattern Vertical Pattern

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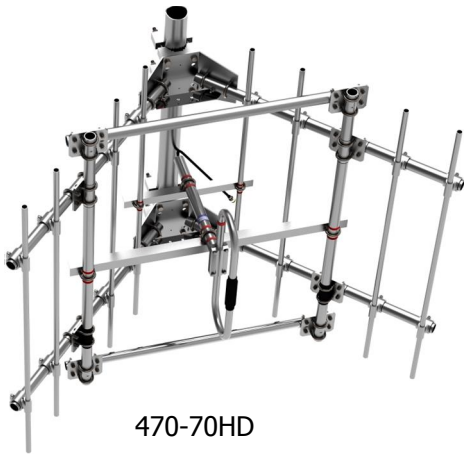
VHF CORNER REFLECTOR 132-174 MHz

VHF Corner Reflector Antenna Series

The Corner Reflector Antennas are available in VHF, UHF, 700/800/900 MHz configurations. These antennas have an extremely good front-to-back ratio. They are broadband and are ideal for point-to-point applications. Performance is constant throughout the band.

- Each antenna has a rugged design to withstand harsh environmental conditions.
- Single dipole mounted in the front of a 90º reflector, providing good directivity and a very high front-to-back ratio.
- These antennas have ultra-low VSWR ratings, and will not exceed 2.0:1 VSWR ratio with 0.5" (13 mm) of radial ice.
- The mounting hardware supplied allows either vertical or horizontal polarization.
- DC ground for lightning protection
- Heavy duty versions are available. Please contact a Comprod Inc. Technician for consultation.



470-70HD

Electrical Specifications	470-70	470-70HD	471-70	471-70HD
Frequency Range, MHz	132-174	132-174	132-174	132-174
Nominal Gain, dBd	7.0	7.0	10.0	10.0
Bandwidth: 1.5:1 VSWR, MHz	15%	15%	15%	15%
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Vert. Pol.)	67º	67º	50º	50º
Vertical Beamwidth (Vert. Pol.)	75º	75º	66º	66º
Front to Back, dB	30	30	30	30
Pattern	Directional	Directional	Directional	Directional
Power Rating, Watts	250	250	250	250
Nominal Impedance, Ohms	50	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male	Type N Male
Mechanical Specifications	**470-70**	**470-70HD**	**471-70**	**471-70HD**
Length, in (mm)	48 (1219)	48 (1219)	72 (1829)	72 (1829)
Width, in (mm)	75 (1905)	75 (1905)	120 (3048)	120 (3048)
Weight, lbs. (kg)	39 (17.7)	57 (25.8)	66 (30)	72 (32.7)
Rated Wind Velocity, No Ice, mph (km/h)	100 (61)	140 (225)	100 (61)	140 (225)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	85 (137)	100 (161)	85 (137)	100 (161)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	144 (65)	236 (107)	320 (145)	398 (181)
Projected Area, ft² (m²)	5.3 (0.5)	8.8 (0.82)	11.9 (1.10)	14.8 (1.38)
Mounting Information: (clamp included) for pipe size O.D. in (mm)	2.9 (73)	2.9 (73)	2.9 (73)	2.9 (73)

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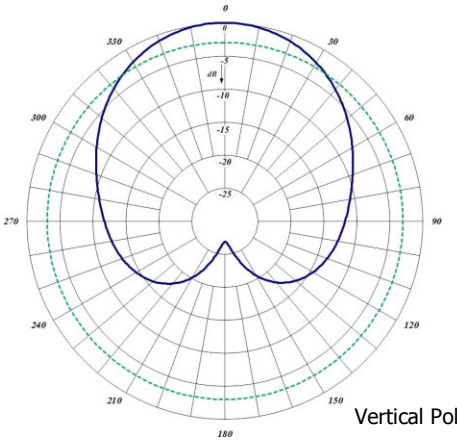
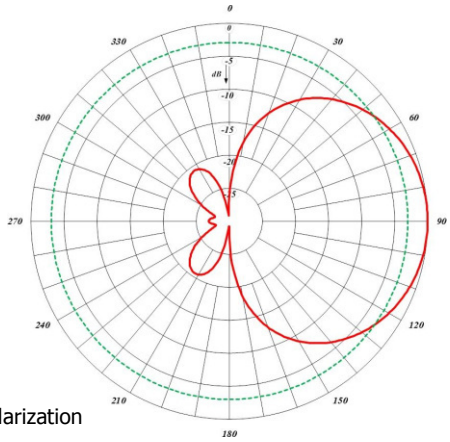
VHF CORNER REFLECTOR 132-174 MHz

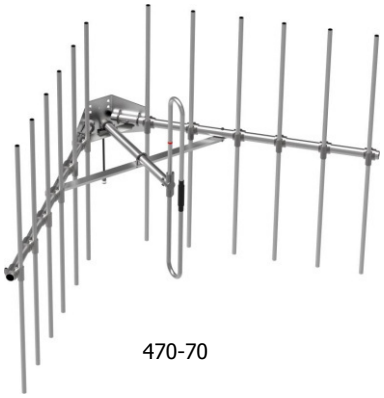


Horizontal Pattern

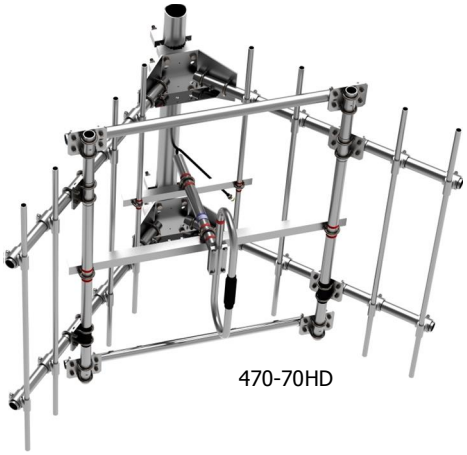


Vertical Pattern

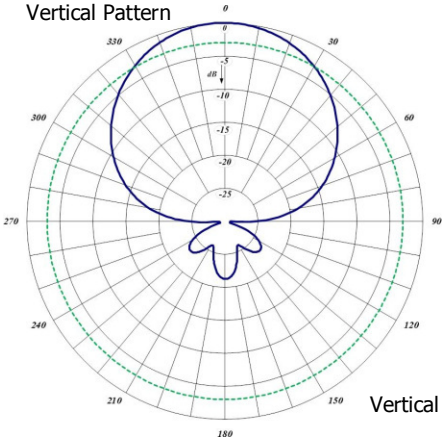
Vertical Polarization



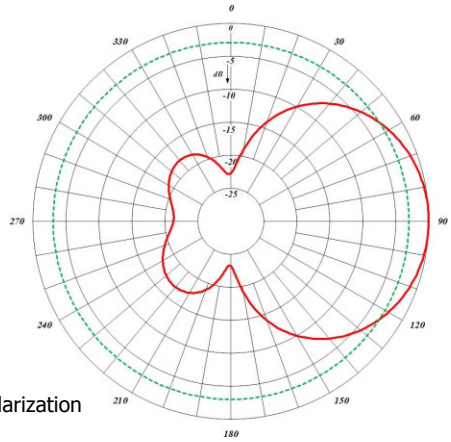
470-70



470-70HD

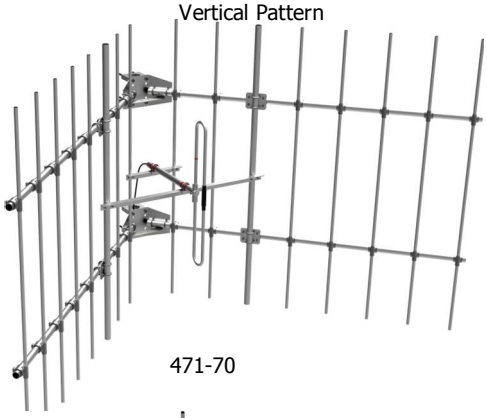


Horizontal Pattern

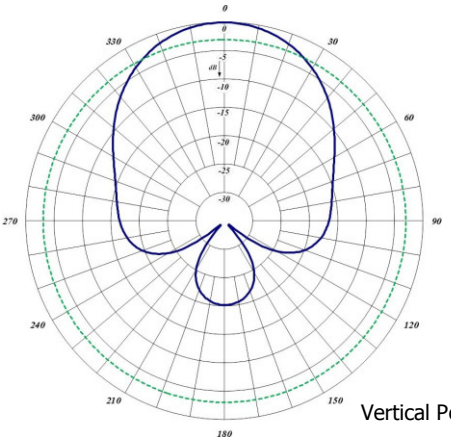


Vertical Pattern

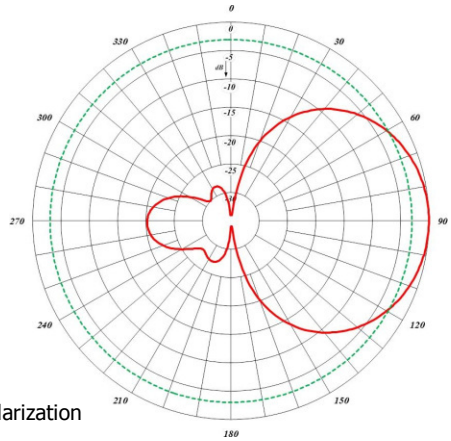
Vertical Polarization



471-70

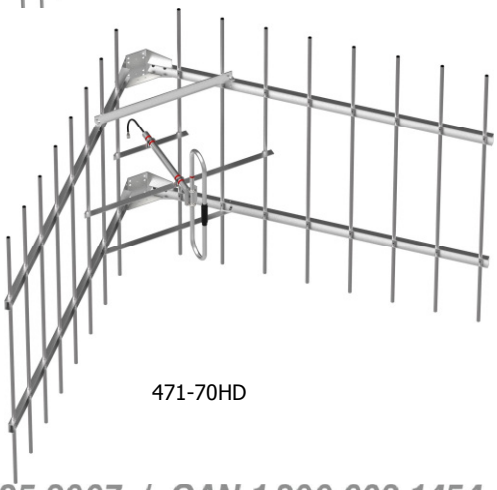


Horizontal Pattern



Vertical Pattern

Vertical Polarization



471-70HD

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
Email: sales@comprodcom.com
Fax: 1.800.554.1033

220 MHz CORNER REFLECTOR 215-225 MHz

220MHz Corner Reflector Antenna Series

The Corner Reflector Antennas are available in VHF, UHF, 700/800/900 MHz configurations. These antennas have an extremely good front-to-back ratio. They are broadband and are ideal for point-to-point applications. Performance is constant throughout the band.

- Each antenna has a rugged design to withstand harsh environmental conditions.
- Single or Dual Dipole mounted in the front of a 90º reflector, providing good directivity and a very high front-to-back ratio.
- These antennas have ultra-low VSWR ratings, and will not exceed 2.0:1 VSWR ratio with 0.5" (13 mm) of radial ice.
- The supplied mounting hardware allows either vertical or horizontal polarization.
- DC ground for lightning protection.
- Heavy Duty versions are available. Please contact a Comprod Inc. Technical support technician for consultation.

470-70-220HD

Electrical Specifications	470-70-220	470-70-220HD	471-70-220
Frequency Range, MHz	215-225	215-225	215-225
Nominal Gain, dBd	7.0	7.0	10.0
Bandwidth: 1.5:1 VSWR, MHz	10	10	10
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Vert. Pol.)	67º	67º	50º
Vertical Beamwidth (Vert. Pol.)	75º	75º	66º
Front to Back, dB	30	30	30
Pattern	Directional	Directional	Directional
Power Rating, Watts	250	250	250
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Electrical Specifications	**470-70-220**	**470-70-220HD**	**471-70-220**
Length, in (mm)	48 (1219)	48 (1219)	72 (1829)
Width, in (mm)	75 (1905)	75 (1905)	120 (3048)
Weight, lbs. (kg)	39 (17.7)	57 (25.8)	55 (30)
Rated Wind Velocity, No Ice, mph (km/h)	100 (161)	140 (225)	100 (161)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	85 (137)	100 (161)	85 (137)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	144 (65)	236 (107)	320 (145)
Projected Area, ft² (m²)	5.3 (0.5)	8.8 (0.82)	11.9 (1.10)
Mounting Information: (clamp included) for pipe size O.D. in (mm)	2.9 (73)	2.9 (73)	2.9 (73)

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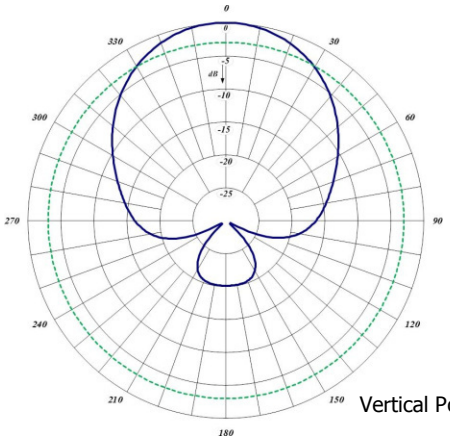
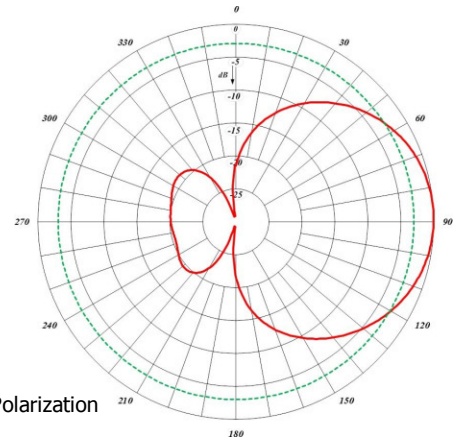
220MHz CORNER REFLECTOR 215-225 MHz



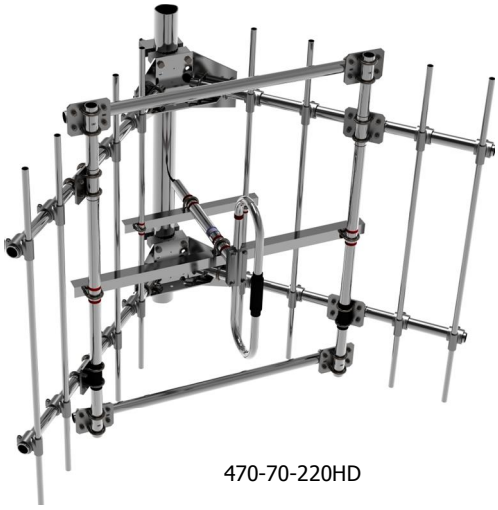
Horizontal Pattern



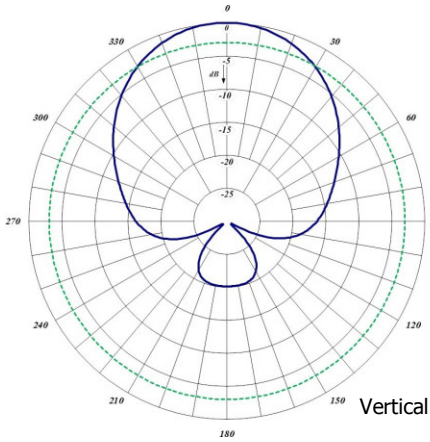
Vertical Pattern

Vertical Polarization

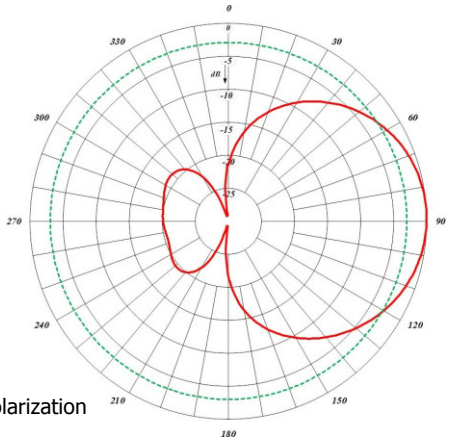
470-70-220



470-70-220HD

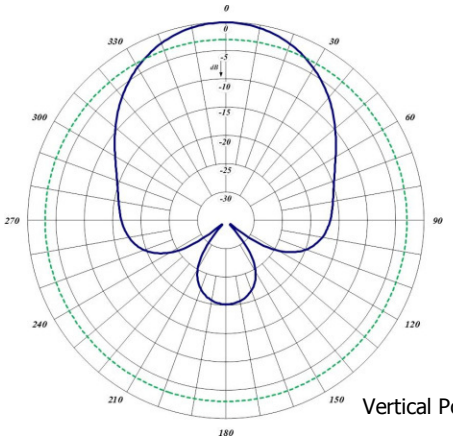


Horizontal Pattern

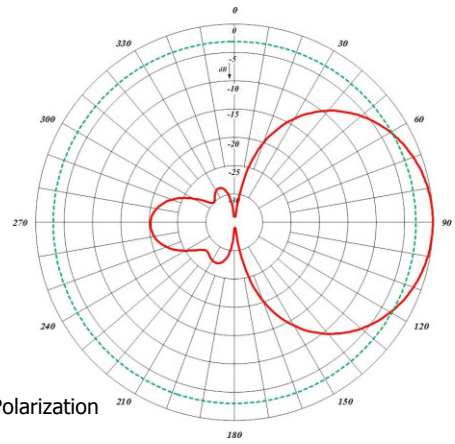


Vertical Pattern

Vertical Polarization

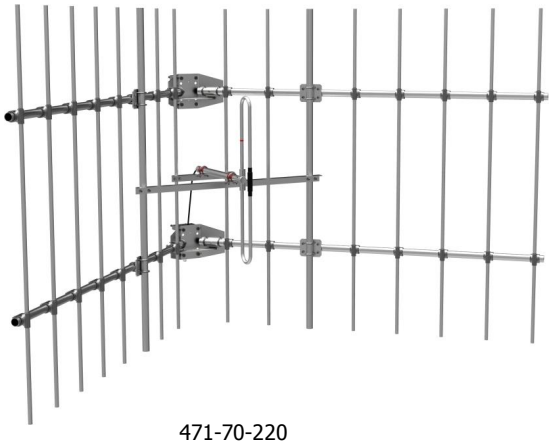


Horizontal Pattern



Vertical Pattern

Vertical Polarization



471-70-220

UHF CORNER REFLECTOR 406-512 MHz

UHF Corner Reflector Antenna Series

The Corner Reflector Antennas are available in VHF, UHF, 700/800/900 MHz configurations. These antennas have an extremely good front-to-back ratio. They are broadband and are ideal for point-to-point applications. Performance is constant throughout the band.

- Each antenna has a rugged design to withstand harsh environmental conditions.
- Single or Dual Dipole mounted in the front of a 90º reflector, providing good directivity and a very high front-to-back ratio.
- The 365-70 is a highly directive parabolic antennas consisting of a back-firing dipole reflector assembly for increased gain and directivity.
- These antennas have ultra-low VSWR ratings, and will not exceed 2.0:1 VSWR ratio with 0.5" (13 mm) of radial ice.
- The mounting hardware supplied will permit either vertical or horizontal polarization.
- DC ground for lightning protection.
- Heavy Duty versions are available. Please contact Comprod Inc. Technical support.

365-70

Electrical Specifications	440-70	440-70HD	442-70	365-70
Frequency Range, MHz	406-512	406-512	406-512	406-470
Nominal Gain, dBd	9.5	9.5	12.0	15.0
Bandwidth: 1.5:1 VSWR, MHz	64	64	64	20
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Vert. Pol.)	60º	60º	40º	32º
Vertical Beamwidth (Vert. Pol.)	45º	45º	34º	18º
Front to Back, dB	25	25	25	24
Pattern	Directional	Directional	Directional	Directional
Power Rating, Watts	100	100	100	250
Nominal Impedance, Ohms	50	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male	Type N Male
Electrical Specifications	**440-70**	**440-70HD**	**442-70**	**365-70**
Length, in (mm)	30 (762)	30 (762)	48 (1219)	82 (2083)
Width, in (mm)	50 (1905)	50 (1905)	50 (1905)	41 (1041)
Weight, lbs. (kg)	22 (10)	36 (16)	42 (19.1)	25 (11.3)
Rated Wind Velocity, No Ice, mph (km/h)	125 (201)	135 (217)	125 (201)	100 (161)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	85 (137)	95 (153)	85 (137)	85 (137)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	97 (44)	210 (934)	185 (84)	233 (109)
Projected Area, ft² (m²)	3.6 (0.34)	3.6 (0.34)	6.9 (0.64)	8.7 (0.8)
Mounting Information: (clamp included) for pipe size O.D. in (mm)	2.9 (74)	2.9 (74)	2.9 (74)	2.9 (74)

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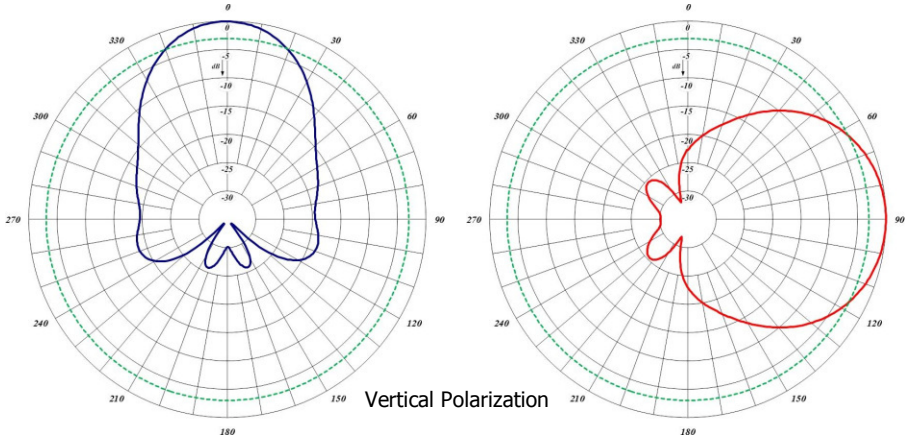
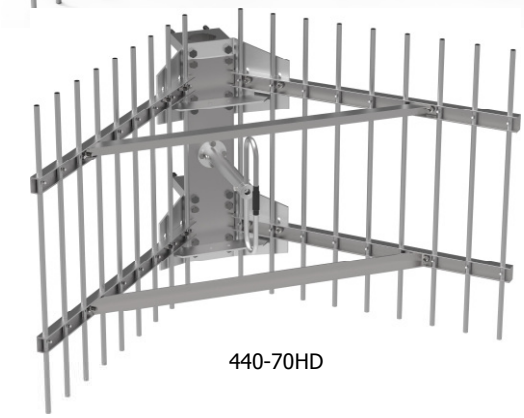
UHF CORNER REFLECTOR 406-512 MHz

440-70

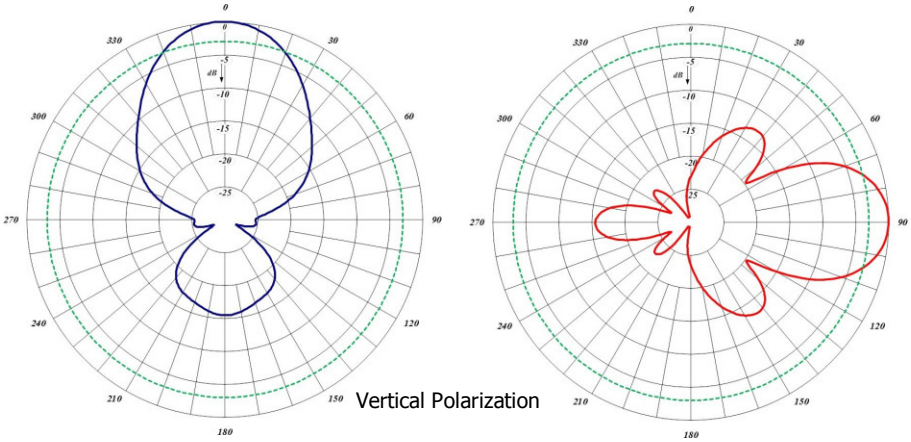


Vertical Polarization

Horizontal Pattern Vertical Pattern



440-70HD

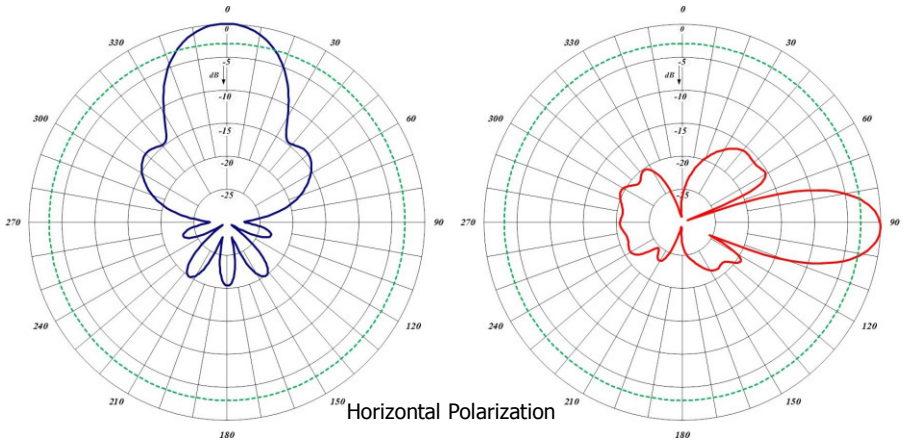


Vertical Polarization

Horizontal Pattern Vertical Pattern

442-70

365-70



Horizontal Polarization

Horizontal Pattern Vertical Pattern

PARABOLIC DIRECTIONAL ANTENNA 764-960 MHz

Parabolic Reflector Series Antennas

The Reflector antenna is a SRSP-507 Category A compliant antenna. These antennas have an extremely good front-to-back ratio. They are broadband and are ideal for point-to-point applications where restrictions on beam width are present. Performance is constant throughout the band.

965-70

- SRSP-507 Category A Compliant.
- Mechanical resonance reducing design.
- Each antenna has a rugged design to withstand harsh environmental conditions.
- The 965-70 is a highly-directive parabolic antenna consisting of a back-firing dipole reflector assembly for increased gain and directivity.
- These antennas have ultra-low VSWR ratings, and will not exceed 1.5:1 VSWR ratio with 0.5" (13 mm) of radial ice.
- The mounting hardware supplied will permit either vertical or horizontal polarization.
- DC ground for lightning protection.
- Black Anodized and Dipole Radome protected versions are available. Please Contact a Comprod Inc. Technical support technician for consultation.
- 965-70B is Black Anodized and 965-70BR is Black Anodized with a Radome

Electrical Specifications	965-70	965-70B	965-70BR
Frequency Range, MHz	764-960	764-960	764-960
Nominal Gain, dBd	16.5	16.5	16.5
Bandwidth: 1.5:1 VSWR, MHz	72	72	72
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Vert. Pol.)	12	12	12
Vertical Beamwidth (Vert. Pol.)	30	30	30
Front to Back, dB	25	25	25
Pattern	Directional	Directional	Directional
Power Rating, Watts	200	200	200
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Electrical Specifications	**965-70**	**965-70B**	**965-70BR**
Length, in (mm)	68 (1727)	68 (1727)	68 (1727)
Width, in (mm)	36 (914)	36 (914)	36 (914)
Weight, lbs. (kg)	49 (22.3)	49 (22.3)	51 (23.2)
Rated Wind Velocity, No Ice, mph (km/h)	110 (177)	110 (177)	110 (177)
Rated Wind Velocity, 0.5" (13mm) ice, mph (km/h)	85 (137)	85 (137)	85 (137)
Lateral Thrust @ 100 mph, wind, lbs. (kg)	1.9 (0.46)	1.9 (0.46)	1.9 (0.46)
Projected Area, ft^2 (m^2)	4.9 (0.46)	4.9 (0.46)	5 (0.47)
Mounting Information: (clamp included)	112-85	112-85	112-85

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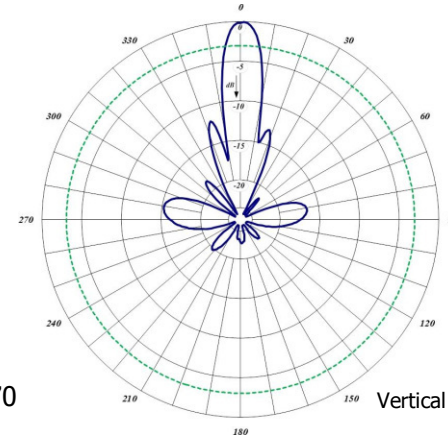
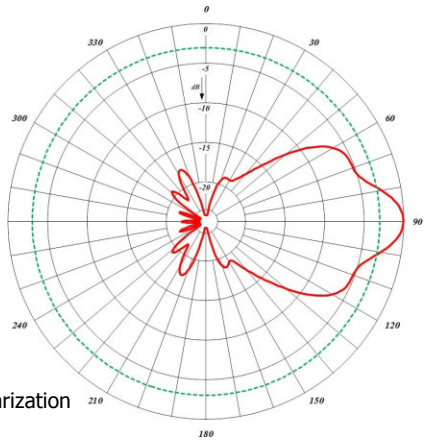
PARABOLIC DIRCTIONAL ANTENNA 764-960 MHz

965-70

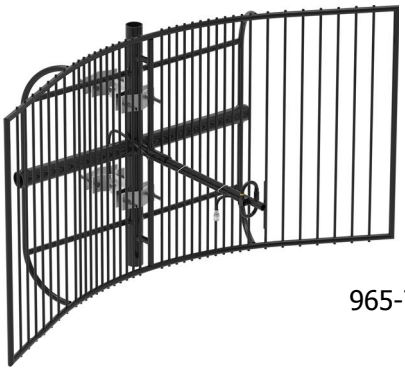


Horizontal Pattern

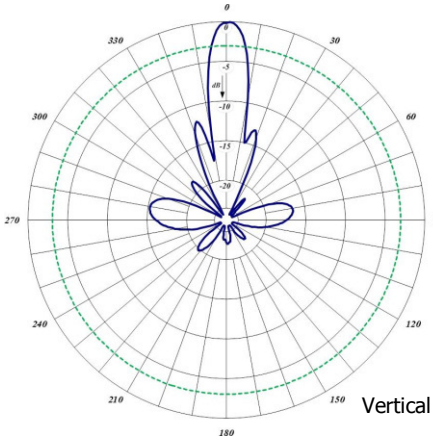
Vertical Polarization



Vertical Pattern

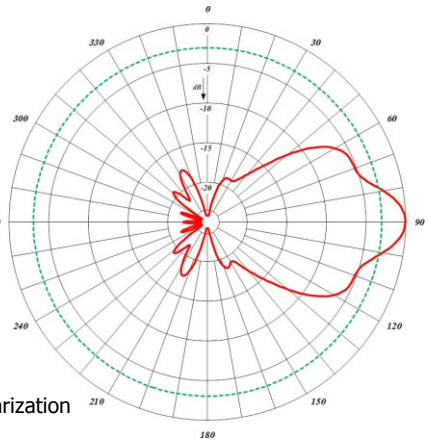


965-70B



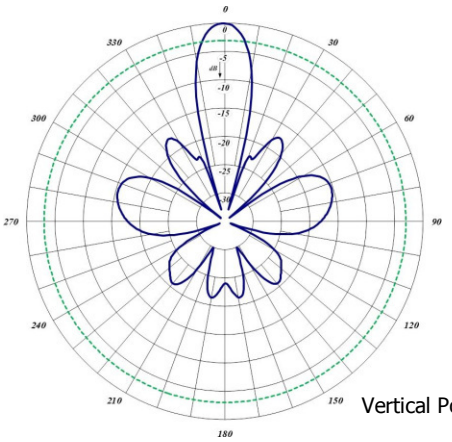
Horizontal Pattern

Vertical Polarization



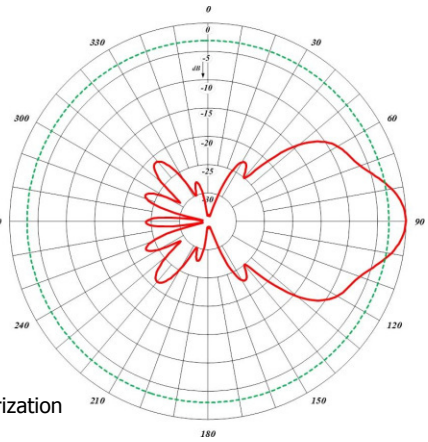
Vertical Pattern

965-70BR



Horizontal Pattern

Vertical Polarization



Vertical Pattern

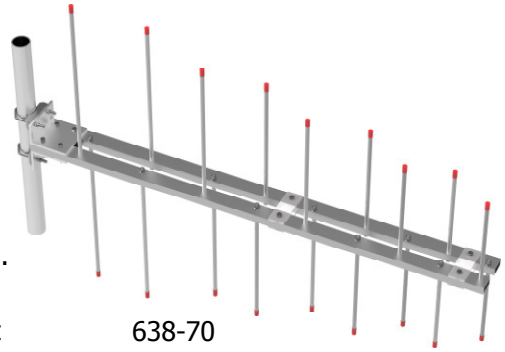
Tel: US 1.877.825.2007 / CAN 1.800.603.1454
Email: sales@comprodcom.com
Fax: 1.800.554.1033

LOG PERIODIC ANTENNA 132-174 MHz

Log Periodic Series Antennas

The Log Periodic Antennas are available in VHF and UHF configurations. These antennas have an extremely good front-to-back ratio. They are wideband and are ideal for base station or in-building applications. These antennas are great for providing underground coverage within garages. Performance is constant throughout the band.

- Each antenna has a rugged design to withstand harsh environmental conditions.
- The mounting hardware supplied will permit either vertical or horizontal polarization.
- DC ground for lightning protection.
- Heavy-duty versions are available. Please contact a Comprod Inc. Technical support technician for consultation.



638-70

Electrical Specifications	635-70	645-70	638-70
Frequency Range, MHz	132-174	132-174	138-174
Nominal Gain, dBd	6.0	6.0	8.0
Bandwidth: 1.5:1 VSWR, MHz	42	42	36
Polarization	Vert. or Horiz.	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Vert. Pol.)	106º	106º	75º
Vertical Beamwidth (Vert. Pol.)	60º	30º	55º
Front to Back, dB	25	25	25
Pattern	Directional	Directional	Directional
Power Rating, Watts	500	500	500
Nominal Impedance, Ohms	50	50	50
Lightning Protection	DC Ground	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male	Type N Male
Electrical Specifications	**635-70**	**645-70**	**638-70**
Length, in (mm)	42 (1067)	42 (1067)	60 (1524)
Width, in (mm)	44 (1118)	44 (1118)	44.5 (1130)
Weight, lbs. (kg)	8 (3.6)	16 (7.2)	16.8 (7.8)
Rated Wind Velocity, No Ice, mph (km/h)	158 (254)	158 (254)	150 (241)
Rated Wind Velocity, 0.5” (13mm) ice, mph (km/h)	108 (173)	108 (173)	108 (173)
Lateral Thrust @ c, wind, lbs. (kg)	31 (14)	31 (14)	47.5 (21.5)
Torsional Moment @ 100 mph, ft*lb (kg*m)	56 (7.8)	N/A	121 (16.7)
Projected Area, ft² (m²)	0.86 (0.08)	0.86 (0.08)	1.26 (0.120)
Mounting Information: (clamp included) for pipe size O.D. in (mm)	1" to 2.5" (64)	1" to 2.5" (64)	1" to 2.5" (64)

Order Information	End Mount	Center Mount
635-70	635-70	N/A
645-70	N/A	645-70
638-70	638-70	N/A

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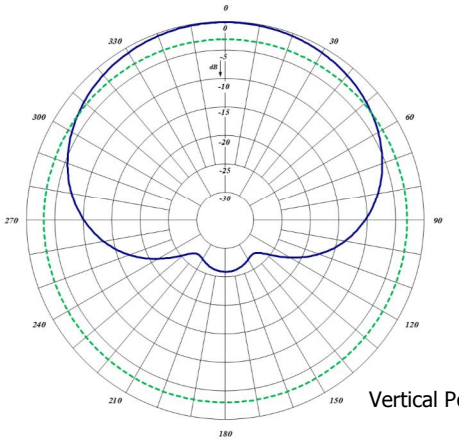
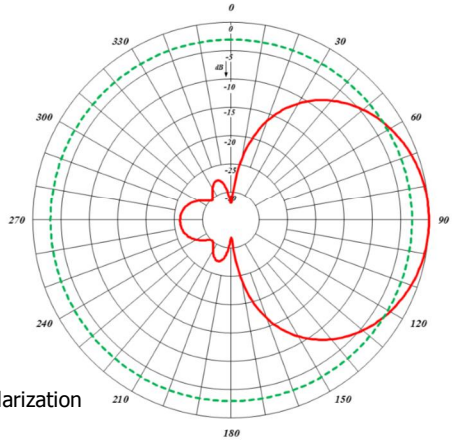
LOG PERIODIC ANTENNA 132-174 MHz

635-70

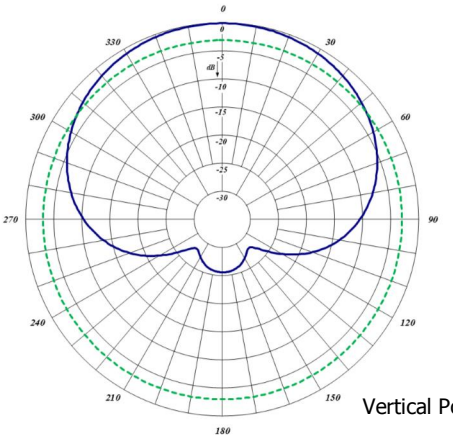


Horizontal Pattern

Vertical Polarization

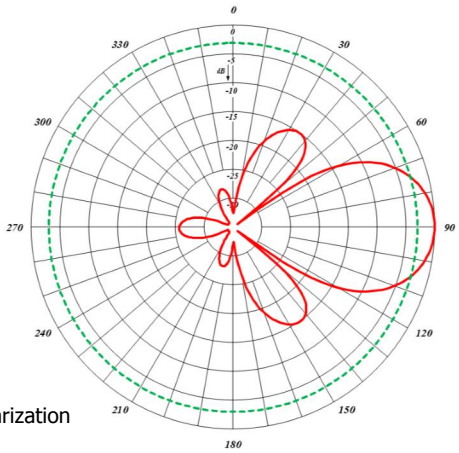


Vertical Pattern

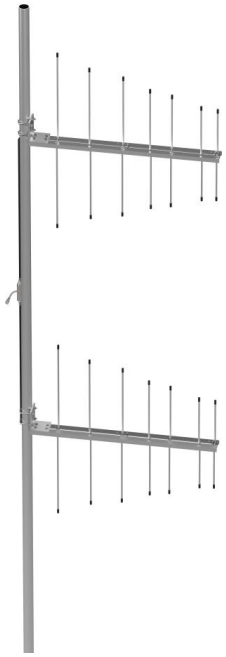


Horizontal Pattern

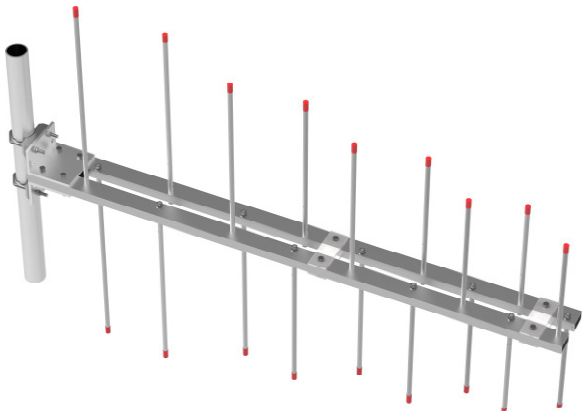
Vertical Polarization



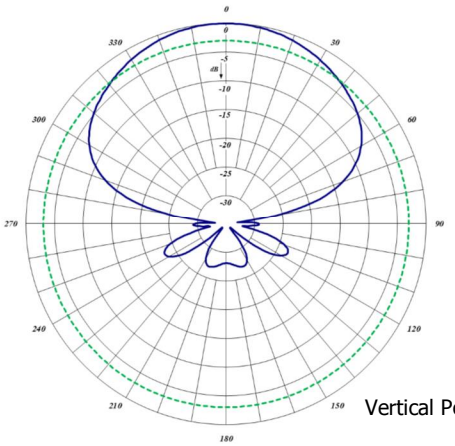
Vertical Pattern



645-70

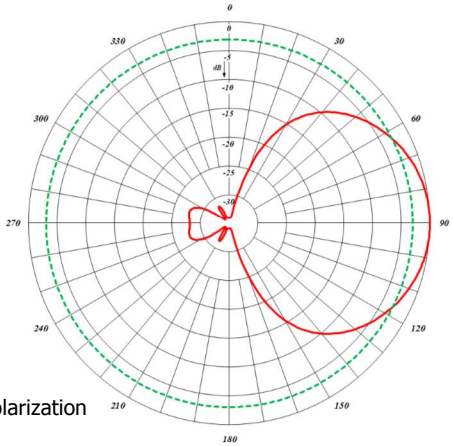


638-70



Horizontal Pattern

Vertical Polarization



Vertical Pattern

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LOG PERIODIC ANTENNA 406-512 MHz

Log Periodic Series Antennas

The Log Periodic Antennas are available in VHF and UHF configurations. These antennas have an extremely good front-to-back ratio. They are wide-band and are ideal for base station or in-building applications. We have had great success with these antennas providing underground coverage within garages. Performance is constant throughout the band.

- Each antenna has a rugged design to withstand harsh environmental conditions.
- The mounting hardware supplied will permit either vertical or horizontal polarization.
- DC ground for lightning protection.
- Heavy-duty versions are available. Please contact a Comprod Inc. Technical support technician for consultation.

415-70

Electrical Specifications	415-70	465-70
Frequency Range, MHz	406-512	406-512
Nominal Gain, dBd	Unity	6.0
Bandwidth: 1.5:1 VSWR, MHz	40	64
Polarization	Vert. or Horiz.	Vert. or Horiz.
Horizontal Beamwidth (Vert. Pol.)	N/A	106º
Vertical Beamwidth (Vert. Pol.)	84º	60º
Front to Back, dB	N/A	20
Pattern	Directional	Directional
Power Rating, Watts	250	250
Nominal Impedance, Ohms	50	50
Lightning Protection	DC Ground	DC Ground
Standard Termination	Type N Male	Type N Male
Mechanical Specifications	**415-70**	**465-70**
Length, in (mm)	18 (457)	15 (381)
Width, in (mm)	14.3 (362)	16 (406)
Weight, lbs. (kg)	2.6 (1.2)	3.3 (1.47)
Rated Wind Velocity, No Ice, mph (km/h)	160 (257)	150 (241)
Rated Wind Velocity, 0.5” (13mm) ice, mph (km/h)	120 (193)	110 (177)
Lateral Thrust @ c, wind, lbs. (kg)	12 (5.4)	14 (6.4)
Torsional Moment @ 100 mph, ft*lb (kg*m)	6.3 (0.88)	6.4 (0.89)
Projected Area, ft² (m²)	0.44 (0.04)	0.50 (0.05)
Mounting Information: Max Pipe Size (mm)	1" to 2.5" (64)	1" to 2.5" (64)

Order Information	406-430MHz	435-470MHz	406-470MHz	450-512MHz
415-70	415-70*1	415-70*2	N/A	415-70*3
465-70	N/A	N/A	465-70*1	465-70*2

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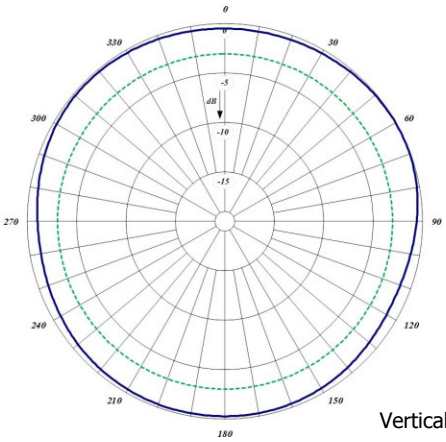
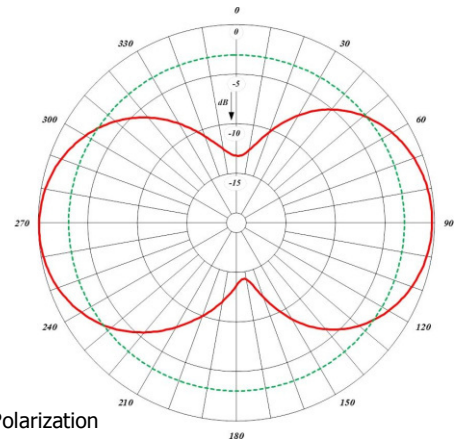
LOG PERIODIC ANTENNA 406-512 MHz



Horizontal Pattern

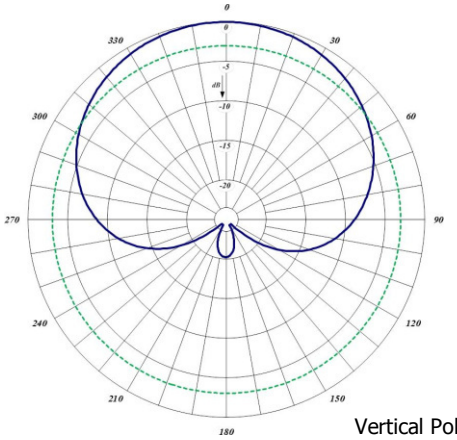


Vertical Polarization

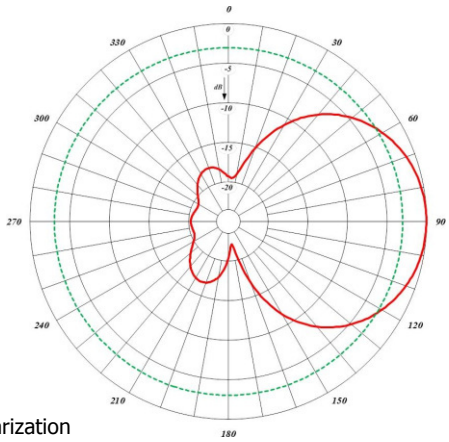
Vertical Pattern

415-70

465-70



Horizontal Pattern



Vertical Polarization

Vertical Pattern

DATA ANTENNA 902-928 MHz

Data Antenna Series

The Data Antenna Series are high quality, high performance, utility grade antennas. We have many different versions of these antennas available.

We have developed antennas for point-to-point data transmissions using PCB surrounding hydro meters. We have modified mobile antennas, in order to produce low-cost and effective base station antennas that maximize performance.

590-75BSMO

- Custom designed.
- Meets your specific needs.
- Designed for any application as required by the customer.
- Heavy-duty versions are available. Please contact a Comprod Inc. Technical support technician for consultation.

Electrical Specifications	590-75BSMO
Frequency Range, MHz	902-928
Nominal Gain, dBd	2.0
Polarization	Vertical
Pattern	Omnidirectional
Power Rating, Watts	200
Nominal Impedance, Ohms	50
Standard Termination	Type N Female*

Mechanical Specifications	590-75BSMO
Length, in (mm)	min 14" @ lowest freq.
Diameter, in (mm)	N/A
Weight, lbs (kg)	N/A
Radiator	Stainless Steel
Base	ABS, Ultrasonic Brass Insert
Contact	Spring Loaded, Gold Plated
Mounting	BSMOLC w/N-Female

* Other Terminations are available.

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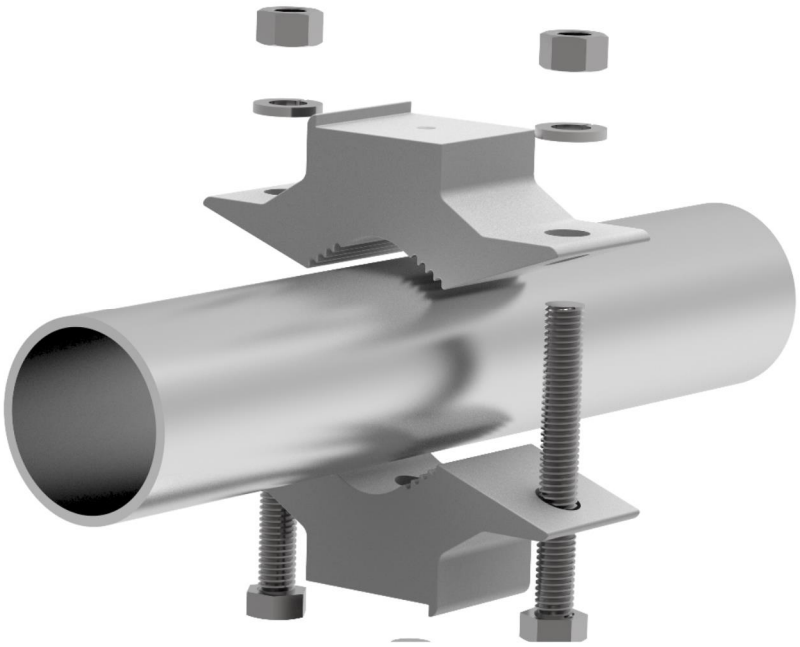
Clamps



Our industry-proven clamps will provide strong and reliable mounting for antennas to pipes, masts and flat surfaces. Most of our clamps are fabricated using hot-dipped galvanized high grade steel. They incorporate oversized U-bolts and fastening hardware. We also offer stainless steel versions as an alternative for use in extremely corrosive environments.

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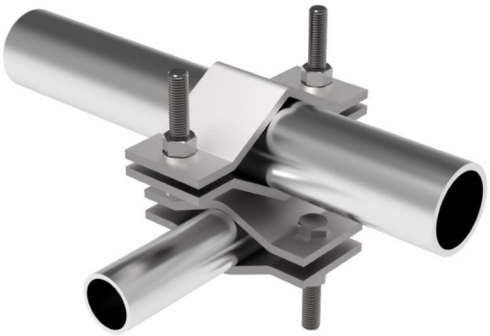
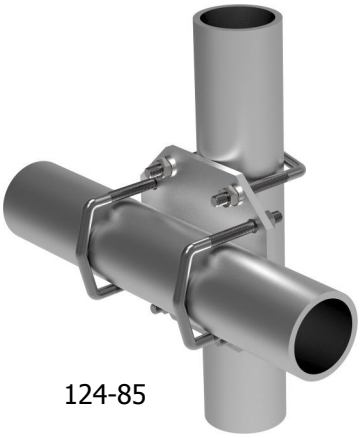
90° PIPE-TO-PIPE

Model	1st Pipe	2nd Pipe	Clamp Material	Screw Material
110-85	1.5" to 3.5" dia.	2.25" to 5" dia.	Steel HDG	Steel HDG
110R-85	1.5" dia.	2.25" to 5" dia.	Steel HDG	Steel HDG
115-85	1.5" to 3.5" dia.	1.5" to 3.5" dia.	Steel HDG	Steel HDG
115R-85	1.5" dia.	1.5" to 3.5" dia.	Steel HDG	Steel HDG
124-85	1" to 2.5" dia.	1" to 2.4" dia.	Aluminum	Steel HDG
127-85	1" dia.	1" to 2.4" dia.	Aluminum	Steel HDG
132-85	1.9" dia.	1" dia.	Aluminum Cast	Stainless Steel
134-85	1.5" dia.	0.75" dia.	Aluminum Cast	Steel HDG
171-85	1.9" dia.	1.9" dia.	Aluminum Cast	Steel HDG
181-85	1.5" dia.	1" to 2.4" dia.	Aluminum	Steel HDG
185-85	1.9" dia.	1.5" dia.	Aluminum Cast	Steel HDG

HDG=Hot Dip Galvanized

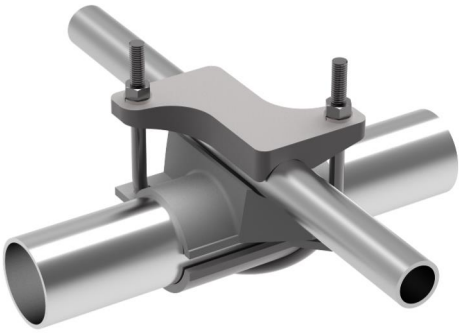


110-85
110R-85
115-85
115R-85



124-85

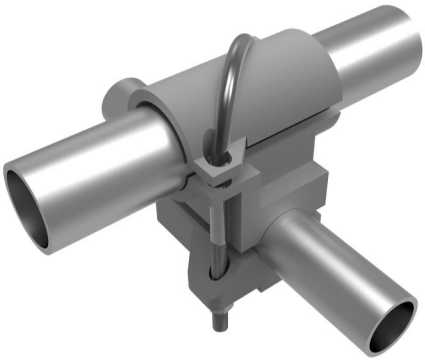
127-85



132-85
171-85

134-85

181-85



185-85

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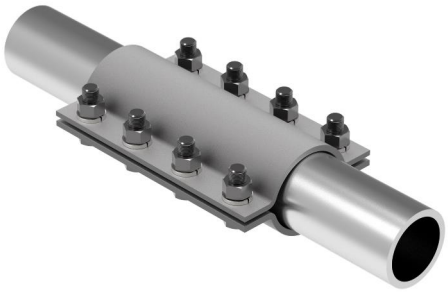
PARALLEL PIPE-TO-PIPE

Model	1st Pipe	2nd Pipe	Clamp Material	Screw Material
107-85	1.5″ to 3.5″ dia.	1.5″ to 3.5″ dia.	Steel HDG	Steel HDG
108-85	2.5″ to 5″ dia.	2.5″ to 5″ dia.	Steel HDG	Steel HDG
112-85	1.5″ to 3.5″ dia.	1.5″ to 3.5″ dia.	Steel HDG	Steel HDG
112L-85	2.25″ to 5″ dia.	2.25″ to 5″ dia.	Steel HDG	Steel HDG
112M-85	1.5″ to 3.5″ dia.	2.25″ to 5″ dia.	Steel HDG	Steel HDG
121-85	2.375″ dia.	2.375″ dia.	Steel HDG	Steel HDG
126-85	1.5″ dia.	1.5″ to 2″ dia.	Aluminum	Steel HDG
167-85	1.5″ dia.	0.75″ to 2.375″ dia.	Steel HDG	Steel HDG
167B-85	0.75″ dia.	0.75″ to 2.375″ dia.	Steel HDG	Steel HDG

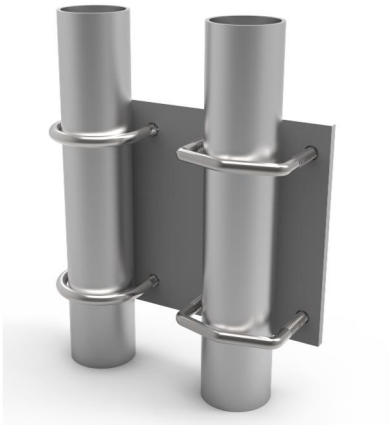
HDG=Hot Dip Galvanized

107-85

112-85 112L-85 112M-85



121-85



126-85

167-85 167B-85

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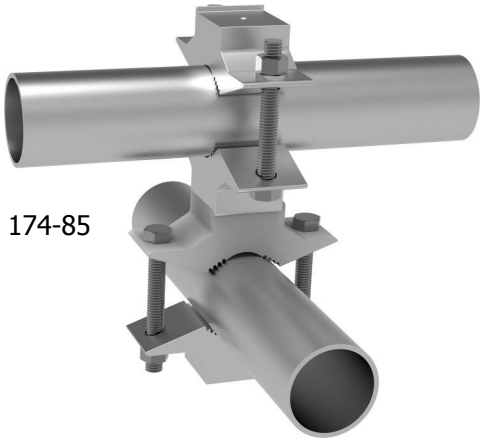
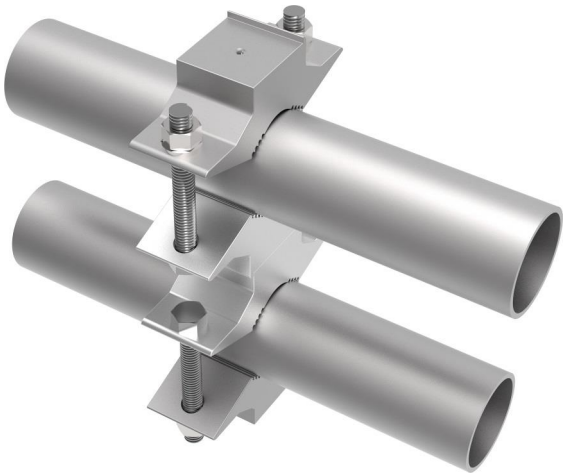
PARALLEL OR 90° PIPE-TO-PIPE

Model	1st Pipe	2nd Pipe	Clamp Material	Screw Material
174-85	0.88" to 2.88" dia.	0.88" to 2.88" dia.	Aluminum	Steel HDG
188-85	1" to 2.4" dia.	1" to 2.4" dia.	Steel HDG	Steel HDG
189-85	1" to 2.4" dia.	1" to 2.4" dia.	Aluminum	Steel HDG

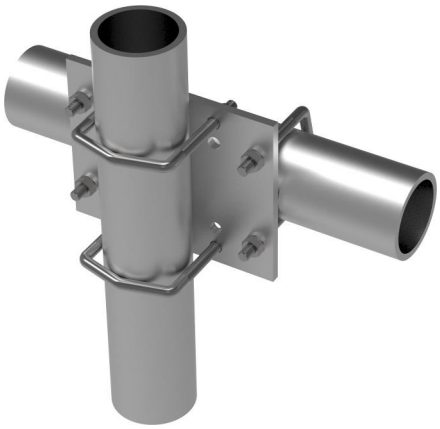
HDG=Hot Dip Galvanized

174-85

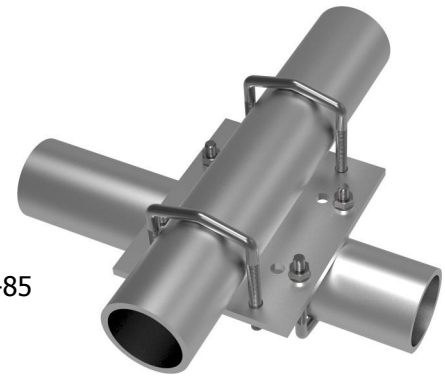




188-85



189-85



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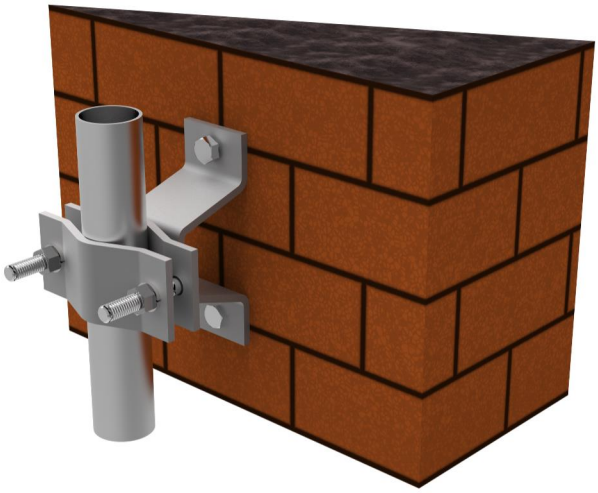
PIPE-TO-FLAT SURFACE (or wood pole)

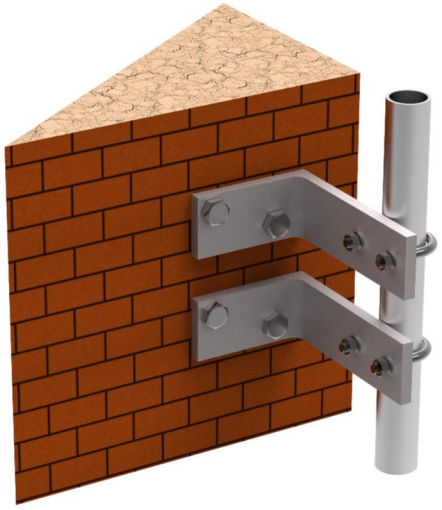
Model	Pipe O.D.	Clamp Material	Screw Material
115P-85	1.5" to 3.5" dia.	Steel HDG	Steel HDG
115W-85	1.5" to 3.5" dia.	Steel HDG	Steel HDG
130-85	0.5" to 1.5" dia.	Aluminum	Steel HDG
186-85	1.5" to 3.5" dia.	Steel HDG	Steel HDG

HDG=Hot Dip Galvanized

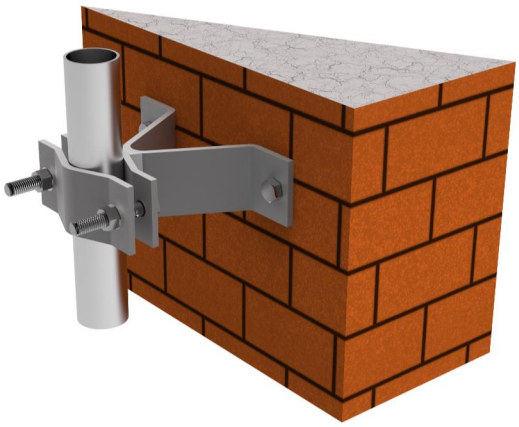
115P-85



115W-85



130-85



186-85

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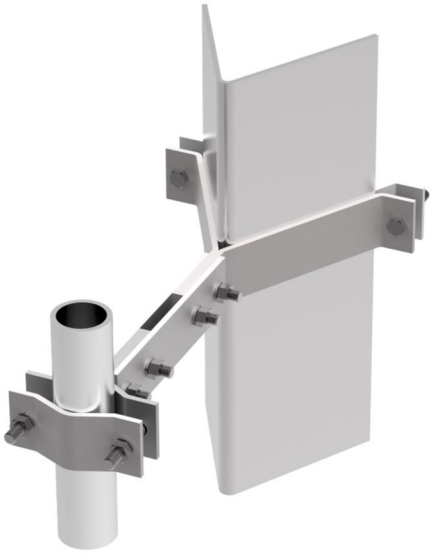
PARALLEL PIPE-TO-ANGLE

Model	1st Pipe	Angle	Clamp Material	Screw Material
113-85	1.5" to 3.5" dia.	8" x 8" max. 60º	Steel HDG	Steel HDG
113L-85	2.25" to 5" dia.	8" x 8" max. 60º	Steel HDG	Steel HDG
116-85	1.5" to 3.5" dia.	8" x 8" max. 90º	Steel HDG	Steel HDG
116L-85	2.25" to 5" dia.	8" x 8" max. 90º	Steel HDG	Steel HDG
133-85	1.5" to 3.5" dia.	5" x 5" max. 60º	Steel HDG	Steel HDG
133L-85	2.25" to 5" dia.	5" x 5" max. 60º	Steel HDG	Steel HDG
136-85	1.5" to 3.5" dia.	5" x 5" max. 90º	Steel HDG	Steel HDG
136L-85	2.25" to 5" dia.	5" x 5" max. 90º	Steel HDG	Steel HDG
163-85	1.5" to 3.5" dia.	3" x 3" max. 60º	Steel HDG	Steel HDG
163L-85	2.25" to 5" dia.	3" x 3" max. 60º	Steel HDG	Steel HDG
166-85	1.5" to 3.5" dia.	3" x 3" max. 90º	Steel HDG	Steel HDG
166L-85	2.25" to 5" dia.	3" x 3" max. 90º	Steel HDG	Steel HDG

HDG=Hot Dip Galvanized

116-85; 116L-85; 136-85;

136L-85; 166-85; 166L-85



113-85; 113L-85; 133-85;

133L-85;163-85; 163L-85

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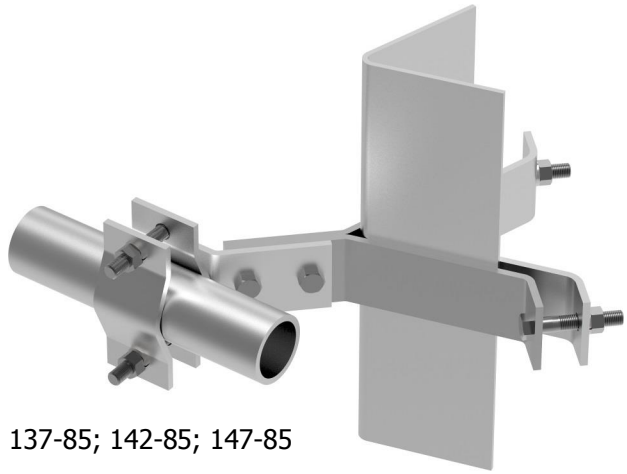
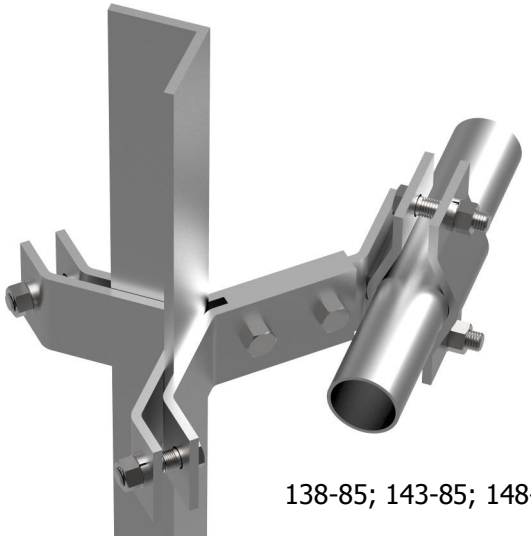
90° PIPE-TO-ANGLE

Model	1st Pipe	Angle	Clamp Material	Screw Material
137-85	1.5" to 3.5" dia.	5" x 5" max. 60º	Steel HDG	Steel HDG
138-85	1.5" to 3.5" dia.	5" x 5" max. 90º	Steel HDG	Steel HDG
142-85	1.5" to 3.5" dia.	8" x 8" max. 60º	Steel HDG	Steel HDG
143-85	1.5" to 3.5" dia.	8" x 8" max. 90º	Steel HDG	Steel HDG
147-85	1.5" to 3.5" dia.	3" x 3" max. 60º	Steel HDG	Steel HDG
148-85	1.5" to 3.5" dia.	3" x 3" max. 90º	Steel HDG	Steel HDG

HDG=Hot Dip Galvanized



137-85; 142-85; 147-85



138-85; 143-85; 148-85

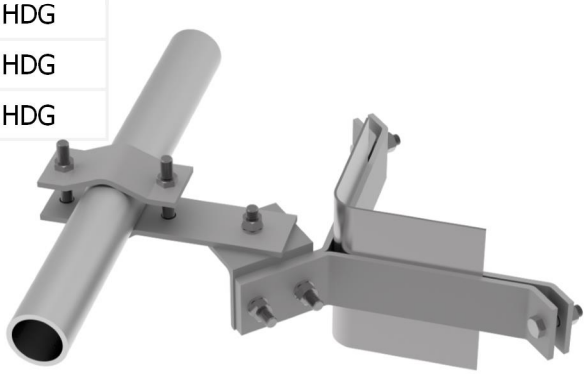
183-85	Pipe	Angle	Clamp Material	Screw Material
Pipe-to-Angle	1.5" to 3.5" dia.	3.5" x 3.5" max. 60º	Steel HDG	Steel HDG
Pipe-to-Angle	1.5" to 3.5" dia.	2.75" x 2.75" max. 90º	Steel HDG	Steel HDG
Pipe-to-Pipe	1.5" to 3.5" dia.	1.5" to 3.5" dia.	Steel HDG	Steel HDG

183-85 one clamp three possible arrangements:

OMNIDIRECTIONAL PIPE-TO-ANGLE

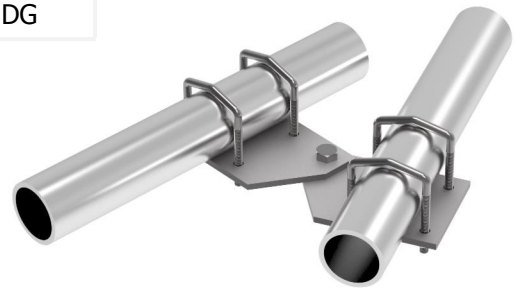
Model	Pipe	Angle	Clamp Material	Screw Material
175-85	1.5" to 3.5" dia.	3" x 3" max. 60º	Steel HDG	Steel HDG
176-85	1.5" to 3.5" dia.	5" x 5" max. 60º	Steel HDG	Steel HDG
177-85	1.5" to 3.5" dia.	8" x 8" max. 60º	Steel HDG	Steel HDG
178-85	1.5" to 3.5" dia.	3" x 3" max. 90º	Steel HDG	Steel HDG
179-85	1.5" to 3.5" dia.	5" x 5" max. 90º	Steel HDG	Steel HDG
180-85	1.5" to 3.5" dia.	8" x 8" max. 90º	Steel HDG	Steel HDG

HDG=Hot Dip Galvanized



OMNIDIRECTIONAL PIPE-TO-PIPE

Model	1st Pipe	2nd Pipe	Clamp Material	Screw Material
122-85	0.75″ to 2.38 dia.	0.75″ to 2.38 dia.	Aluminum	Steel HDG



PIPE-TO-FLAT SURFACE

Model	Pipe	Clamp Material	Screw Material
172-85	2.88" dia.	Aluminum	Steel HDG
173-85	2.38" dia.	Aluminum	Steel HDG

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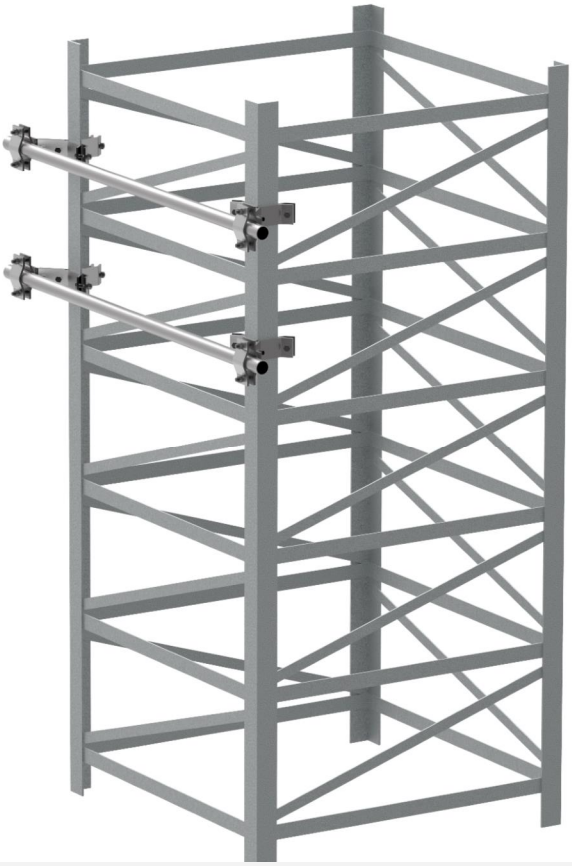
SIDE-MOUNTING ASSEMBLY

Model	Tower Leg	Holder Section	Tower	Clamp Material	Screw Material
153-85	5" x 5" max. 60º	1.5" to 3.5"	60º and 5"	Steel & Aluminum	Steel HDG
155-85	8" x 8" max. 60º	1.5" to 3.5"	60º and 8"	Steel & Aluminum	Steel HDG
157-85	3" x 3" max. 60º	1.5" to 3.5"	60º and 3"	Steel & Aluminum	Steel HDG

EACH KIT INCLUDES	
153-85	4 Clamps Model 137-85
	2 Al. pipe 2" #40 x 10 feet
155-85	4 Clamps Model 142-85
	2 Al. pipe 2" #40 x 10 feet
157-85	4 Clamps Model 147-85
	2 Al. pipe 2" #40 x 10 feet

HDG=Hot Dip Galvanized



EACH KIT INCLUDES	
154-85	4 Clamps Model 137-85
	2 Al. pipe 2" #40 x 10 feet
156-85	4 Clamps Model 143-85
	2 Al. pipe 2" #40 x 10 feet
158-85	4 Clamps Model 148-85
	2 Al. pipe 2" #40 x 10 feet

Model	Tower Leg	Holder Section	Tower	Clamp Material	Screw Material
154-85	5" x 5" max. 90º	1.5" to 3.5"	90º and 5"	Steel & Aluminum	Steel HDG
156-85	8" x 8" max. 90º	1.5" to 3.5"	90º and 8"	Steel & Aluminum	Steel HDG
158-85	3" x 3" max. 90º	1.5" to 3.5"	90º and 3"	Steel & Aluminum	Steel HDG

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SIDE-MOUNTING ASSEMBLY

Model	Tower Leg	Holder Section	Tower	Clamp Material	Screw Material
150-85	0.875" to 3"	Al. pipe 1.9" O.D. x 120"	1.5"- 40	Steel & Aluminum	Steel HDG
151-85	0.875" to 3"	Al. pipe 1.9" O.D. x 60"	1.5"- 40	Steel & Aluminum	Steel HDG
152-85	0.875" to 3"	Al. pipe 2.375" O.D. x 120"	2.0"- 40	Steel & Aluminum	Steel HDG

EACH KIT INCLUDES	
150-85	4 Clamps Model 124-85
	2 Support pipes 1.5" #40 x 10 feet
151-85	4 Clamps Model 124-85
	2 Support pipes 1.5" #40 x 5 feet
152-85	4 Clamps Model 124-85
	2 Support pipes 2" #40 x 10 feet

HDG=Hot Dip Galvanized

YAGI HOLDER KIT

Model	Tower Leg	Holder Section	Clamp Material	Screw Material
123-85	1.5" to 3.5"	Al. angle 1.5" x 1.5" x 0.1875"	Steel & Aluminum	Steel HDG

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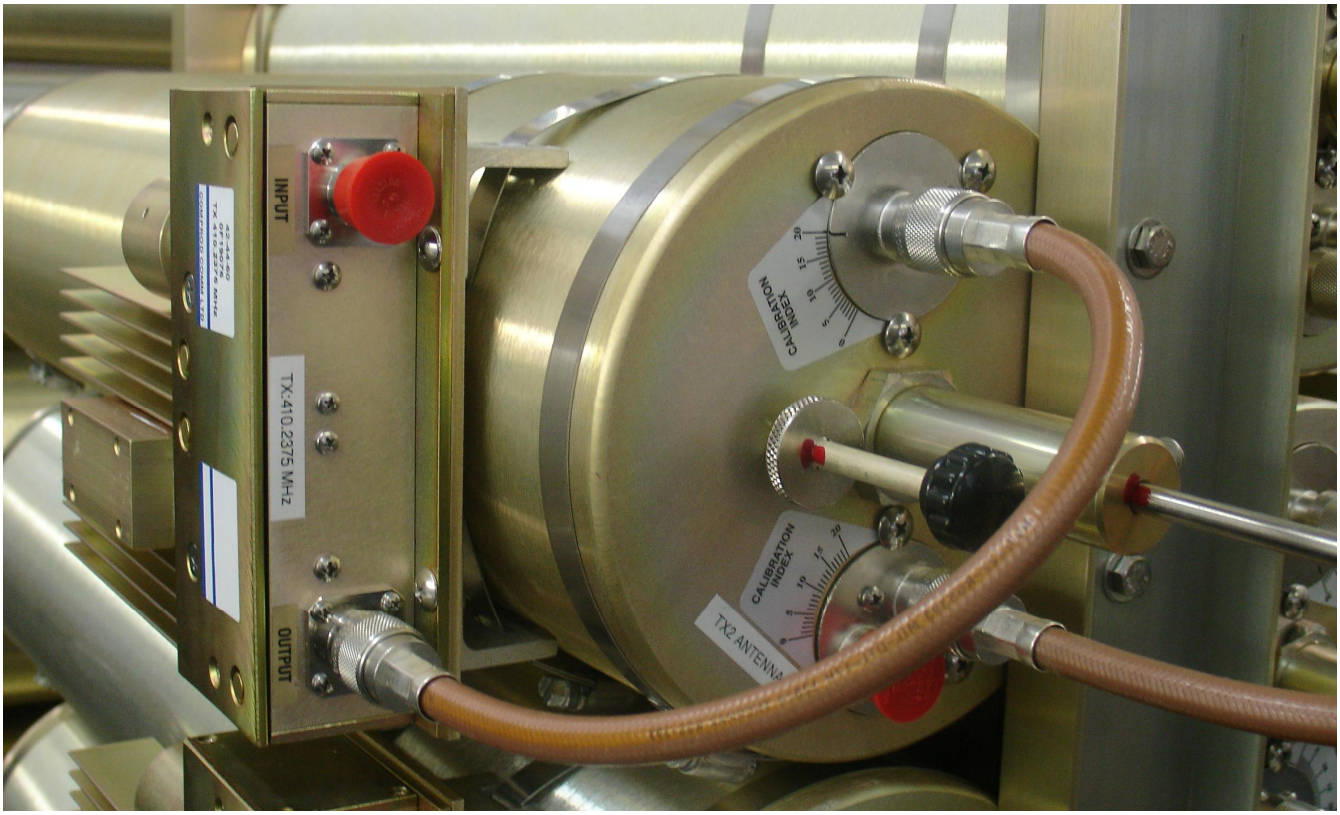
Filters and Components



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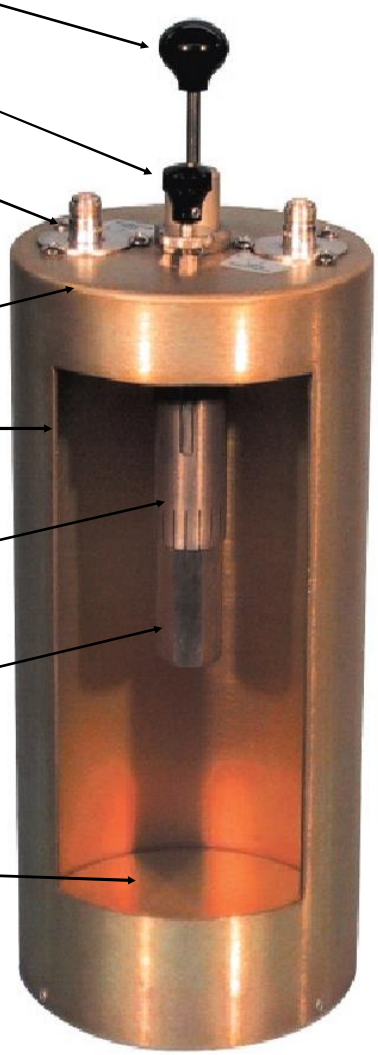
Cavity Construction: Mechanical Components



Types of Loops

Bandpass

Loop

Pass/Reject

Loop

Notch

Loop

X-Pass

Loop

CAVITY FILTER DESIGN

Comprod Inc. has one of the most rugged, high quality cavity filter designs in the industry with our proven, temperature-compensated cavities. The flexibility of having four versions of filters, (Bandpass, Notch, Pass-Reject, and X-Pass), available in 2", 4", 6.625" and 10" cavities, allows for any system to be designed for maximum performance and efficiency. All of the following filters can be achieved by changing the loops, while maintaining the same cavity, when using the 6.625" and 10" cavities.

1. Bandpass Cavity Filter – Passes one narrow band of frequencies and attenuates all others with increasing attenuation above and below the pass frequency. The adjustable selectivity characteristics using rotatable loops allows for a trade-off between insertion loss (0.5 to 3.0 dB) and selectivity. This filter is ideal when the interfering frequencies are not known with any degree of accuracy or when high amounts of broadband filtering are required.

2. Notch Filter – Passes a relatively wide band of required frequencies, while rejecting a very narrow band of undesired frequencies. Notch depth is variable from 15 to 25 dB. Both the pass and notch frequencies must be known. The Notch Filter is recommended when filtering multiple channel transmitters and receivers. This filter is ideal for very close separations (70-200 kHz) in VHF and (200-400 kHz) in UHF.

3. Pass-Reject Filter – Passes a relatively narrow band of required frequencies and rejects a specific undesired frequency. This filter has the greatest notch depth when compared to other types of filters. Notch depth is adjustable, but is dependant on the passband insertion loss (0.3 dB or 0.6 dB typical) and frequency separation. This type of filter is the most efficient for moderately close to wide separations of 200 kHz and greater in VHF and 400 kHz and greater in UHF.

4. X-Pass – A special type of filter for expandable multicoupler/combiner applications. Characteristics are identical to a bandpass filter, but have a third port for coupling to other channels. This filter is ideal for close frequency spacing with extremely low losses, acting similar to a hybrid combiner/multicoupler. The design is extremely flexible and expandable from 1 to 21 cavities per rack with additional channel capabilities.

All of Comprod Inc. 6.625" and 10" filters have two hand-movable tuning rods (a coarse and a fine) for faster tuning. Silver-plated adjustable coupling loops and a calibration index label help to facilitate setting the cavity insertion loss as required for each application.

The combination of a heavy-gauge aluminum outer conductor, thick heliarc-welded cavity top plates, heavy silver-plating on micro-finished tuning assemblies, and Invar-based temperature compensation material results in constant performance levels and long term reliability. Cavity and isolator connectors are type N female, with silver-plated brass bodies and gold-plated center contacts. Thru-line cable assemblies are made with high quality connectors and RG-393B/U Teflon or RG-214/U cable, to provide excellent intermodulation rejection at high system power levels. Gold-plated cable connector center contacts are soldered to the cable, and the dual shield is securely crimped to the connector barrel using pneumatic fixtures and precision dies. All of these attributes contribute to making a superior quality product.

For additional information on Comprod Inc. X-Pass, Combiners, Multicouplers, Duplexers, Pass-Reject, Bandpass, or Notch filters, contact our Technical Support team at sales@comprodcom.com.

FILTER NOMENCLATURE

PP—FF—XX—YY

PP = Product Category/Family

FF = Frequency Band / Frequency Range

XX = Cavity Size/No. Channels/Load Size/Termination

YY = Mounting Style

PP—Product Category / Product Family Codes			
11	Mounting Kits	56	2nd Harmonic Filter
13	Cable Kits/Accessories	57	Combline Filters
19	X-Racks	58	Pre-Amp
		59	Pre-Selector
21	Low Power Single Junction Isolator	60	Multicoupler (XMF Version – Reject/Pass)
22	Low Power Dual Junction Isolator	61	Bandpass Filter
41	High Power Single Junction Isolator	62	Pass-Reject Filter
42	High Power Dual Junction Isolator	63	Notch Filter
45	RF Loads		
46	Signal Sampler	66	Pass-Reject Duplexer
47	Power Divider		
48	Hybrid Decouplers VHF/UHF/800/900MHz	68	X-Pass Filter
49	Hybrid Coupler (Single Band)	69	Paging Filter
51	Band pass Conversion Loops	HTC	Hybrid Transmit Combiner
52	Pass-Reject Conversion Loops	XBC	X-Band Coupler (Cross Band Couplers)
53	Notch Conversion Loops	XRM	Expandable Receiver Multicoupler
54	X-Pass Conversion Loops	XTC	Expandable Transmit Combiner System
55	Variable Attenuator 3-15 dB	XTR	Expandable Transmit Receiver System

Model	Filter Type	Other	118-136 MHz	138-174 MHz	406-512 MHz	746-960 MHz	Cavity/ Mounting	Power Watts	Connector
61-FF-7X Series	Bandpass	30-88	●	●	●	●	6.625	150	N Female
62-FF-7X Series	Pass-Reject	30-88	●	●	●	●	6.625	150	N Female
63-FF-7X Series	Notch	30-88	●	●	●	●	6.625	150	N Female
60-13-7X Series	XMF Multicoupler			●			6.625	90-400	N Female
60-40-7X Series	XMF Multicoupler				●		6.625	80-300	N Female
66-FF-74	Duplexer			●	●		6.625	350	N Female
66-FF-2P	Duplexer			●			2 x 2	100	BNC / N F
66-FF-44	Duplexer			●	●	●	4 x 4	350	N Female
66-FF-46	Duplexer			●	●	●	4 x 4	350	N Female
5X4-90	Mobile Duplexer			144-174	406-470		1 x 1	50	BNC / N F
5X6-90	Mobile Duplexer			144-174	406-470		1 x 1	50	BNC / N F
68-XX-7X Series	X-Pass	30-88	●	●	●	●	6.625	150	N Female
XTC-06-7X Series	X-Pass	66-88					6.625	150	N Female
XTC-06-0X Series	X-Pass	66-88					10	150	N Female
XTC-11-7X Series	X-Pass		108-136				6.625	150	N Female
XTC-11-0X Series	X-Pass		108-136				10	150	N Female
XTC-13-7X Series	X-Pass			132-174			6.625	150	N Female
XTC-13-0X Series	X-Pass			132-174			10	150	N Female
XTC-22-7X Series	X-Pass	215-300					6.625	150	N Female
XTC-22-0X Series	X-Pass	215-300					10	150	N Female
XTC-38-7X Series	X-Pass				380-512		6.625	150	N Female
XTC-38-0X Series	X-Pass				380-512		10	150	N Female
XTC-74-7X Series	X-Pass					●	6.625	150	N Female
XTC-74-0X Series	X-Pass					●	10	150	N Female
80-FF-8X Series	X-Pass Combiner				●	●	19" Rack Mt	60/100	N Female
XRM-13-PP Series	RX Multicoupler	138-225		●			Rack/Cavity	RX	BNC / N F
XRM-38-PP Series	RX Multicoupler				300-512		Rack/Cavity	RX	BNC / N F
XRM-80-PP Series	RX Multicoupler					806-896	Rack/Cavity	RX	BNC / N F
XRM-90-PP Series	RX Multicoupler					896-960	Rack/Cavity	RX	BNC / N F
90-FF-PP Series	RX Multicoupler				●	●	19" Rack Mt	RX	N Female
TTA-FF-00 Series	TTA Amplifier			●	●	●	N/A	RX	N Female
21-FF-PP Series	Single Isolators			●	●	●	N/A	100	N Female
22-FF-PP Series	Dual Isolators			●	●	●	N/A	100	N Female
41-FF-PP Series	Single Isolators			●	●	●	N/A	150-250	N Female
42-FF-PP Series	Dual Isolators			●	●	●	N/A	150-250	N Female
45-05-PP Series	RF Loads	5-1000	●	●	●	●	N/A	5-250	N Male
HTC-13 Combiner	Hybrid Combiner			●			19" Rack Mt	100	N Female
HTC-40 Combiner	Hybrid Combiner				●		19" Rack Mt	100	N Female
HTC-80 Combiner	Hybrid Combiner					806-960	19" Rack Mt	100	N Female
49-FF-YY-XX Series	Hybrid Coupler			●	●	●	N/A	N/A	N Female
Ceramic Combiner	Star Junction Com					●	19" Rack Mt	125	N Female
Ceramic Combiner	X-Pass Combiner					●	19" Rack Mt	125	N Female
XBC-FF-PP Series	Crossband Coupler	25-175	●	●	●	●	N/A	RX-250	N Female
57-FF-XX Series	Comblines				●	●	N/A	RX	N Female
Racks, Hardware	Filter Racks						Racks	N/A	N/A

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BAND PASS CAVITY 30-1000 MHz

61-XX-7X Series

Comprod Inc. Band Pass filters are designed for minimizing interference from adjacent channels and outside systems. They are available in single, double, triple or more units. Selectivity can be determined by the insertion loss of the cavity or by adding additional cavity units as needed. Each cavity is temperature compensated for operation between -40ºC to +60ºC. Each cavity has a gold Alodine finish, silver-plated loops and silver-plated tuning rods. Every cavity is equipped with coarse and fine tuning rods for quick and easy field or lab re-tuning.

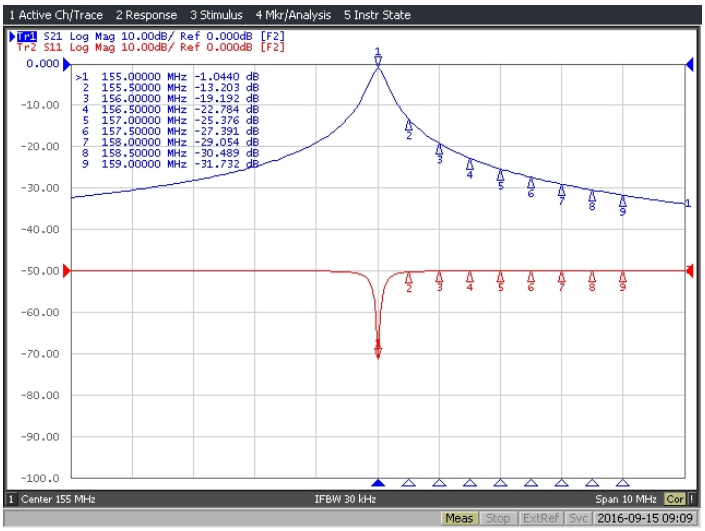
- Temperature Compensation
- Ensures Frequency Stability
- High Attenuation
- Minimizes desense and interference from adjacent systems
- Adjustable Loops
- Each cavity has a calibration index to reference insertion loss

Electrical Specifications	61-03-71	61-06-71	61-11-71	61-13-71	61-40-71	61-74-71
Frequency Range, MHz	30-50	66-88	118-136	136-174	406-512	746-960
Frequency Spacing Min.	Please Refer To Typical Curves					
Cavity Diameter, in	6.625	6.625	6.625	6.625	6.625	6.625
Continuous Power Input, Watts (Dependent on insertion Loss)	150	150	150	150	150	150
Connectors	N Female	N Female	N Female	N Female	N Female	N Female
Insertion Loss. dB	0.6-1.5					
Reject Attenuation	Please Refer To Typical Curves					
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	61-03-71	61-06-71	61-11-71	61-13-71	61-40-71	61-74-71
Maximum length, in	132	77	31.5	26	11.5	13
Weight, lbs	n/a	n/a	18	15	10	10

Order Information	Single	Dual	Triple
4" Cavity	61-XX-41	61-XX-42	61-XX-43
6.625" Cavity	61-XX-71	61-XX-72	61-XX-73
10" Cavity	61-XX-01	61-XX-02	61-XX-03

61-13-71



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PASS-REJECT CAVITY 30-1000 MHz

62-XX-7X Series

Comprod Inc. Pass-Reject filters are designed to pass a frequency band and reject a narrow band of frequencies. They provide more attenuation than our standard bandpass type cavities. These cavities can reject frequencies on either the high or low side of the pass frequency. Each cavity is temperature compensated for operation between -40ºC to +60ºC. Each cavity has a gold Alodine finish, silver-plated loops and silver-plated tuning rods. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning.

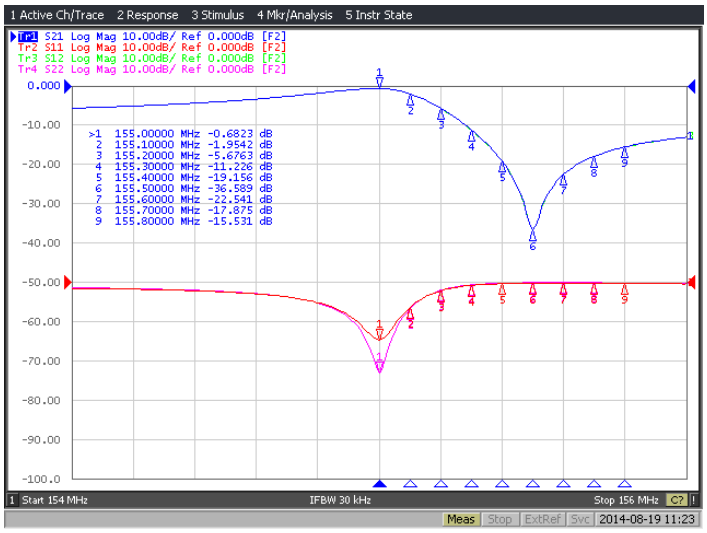
- Temperature Compensation
- Ensures Frequency Stability
- High Attenuation
- Minimizes desense and interference
- Adjustable Loops
- Each cavity has a calibration index to reference insertion loss

Electrical Specifications	62-03-71	62-06-71	62-11-71	62-13-71	62-40-71	62-74-71
Frequency Range, MHz	30-50	66-88	118-136	136-174	406-512	746-960
Frequency Spacing Min.	Please Refer To Typical Curves					
Cavity Diameter, in	6.625	6.625	6.625	6.625	6.625	6.625
Continuous Power Input, Watts (Dependent on insertion Loss)	300	300	300	300	300	300
Connectors	N Female	N Female	N Female	N Female	N Female	N Female
Insertion Loss, dB	0.6-1.5					
Reject Attenuation	Please Refer To Typical Curves					
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	62-03-71	62-06-71	62-11-71	62-13-71	62-40-71	62-74-71
Maximum length, in	132	77	31.5	26	11.5	13
Weight, lbs	n/a	n/a	18	15	10	10

Order Information	Single	Dual	Triple
4" Cavity	62-XX-41	62-XX-42	62-XX-43
6.625" Cavity	62-XX-71	62-XX-72	62-XX-73
10" Cavity	62-XX-01	62-XX-02	62-XX-03

62-13-71



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NOTCH CAVITY 30-1000 MHz

63-XX-7X Series

Comprod Inc. Notch filters are designed to reject one narrow band of frequencies, while letting all others pass in the operating band. They provide additional isolation by eliminating close adjacent frequencies. The notch cavities can be cascaded or added to one another in order to sharpen the attenuation of the rejection curve. These cavities can be used individually or in multiples. Each cavity is temperature compensated for operation between -40ºC to +60ºC. Each cavity has a gold Alodine finish, silver-plated loops and silver-plated tuning rods. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning.

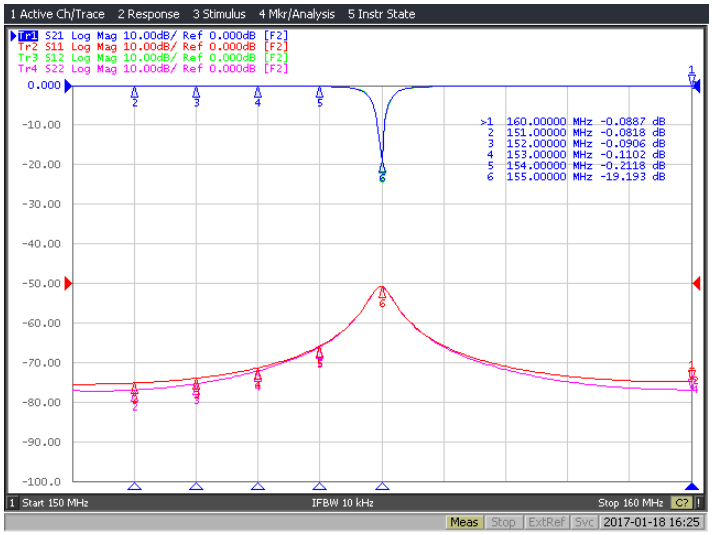
- Temperature Compensation
- Ensures Frequency Stability
- High Attenuation
- Minimizes desense and interference from adjacent systems
- Adjustable Loops
- Each cavity has a calibration index

Electrical Specifications	63-03-71	63-06-71	63-11-71	63-13-71	63-40-71	63-74-71
Frequency Range, MHz	30-50	66-88	108-136	136-174	406-512	746-960
Frequency Spacing Min.	Please Refer To Typical Curves					
Cavity Diameter, in	6.625	6.625	6.625	6.625	6.625	6.625
Continuous Power Input, Watts (Dependent on insertion Loss)	150	150	150	150	150	150
Connectors	N Female	N Female	N Female	N Female	N Female	N Female
Insertion Loss, dB	0.6-1.5					
Reject Attenuation	Please Refer To Typical Curves					
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	63-03-71	63-06-71	63-11-71	63-13-71	63-40-71	63-74-71
Maximum length, in	132	77	31.5	26	11.5	13
Weight, lbs	n/a	n/a	18	15	10	10

Order Information	Single	Dual	Triple
4" Cavity	63-XX-41	63-XX-42	63-XX-43
6.625" Cavity	63-XX-71	63-XX-72	63-XX-73
10" Cavity	63-XX-01	63-XX-02	63-XX-03

63-13-71



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XMF MULTICOUPLERS

VHF, UHF, & 700/800/900 MHz, Expandable, Bandpass, Multicoupler Filters

The XMF (Expandable, Bandpass, Multicoupler, Filter) system is a unique transmit/receive multi-coupler. Each channel consists of one, two, or three bandpass filters in combination with an exclusive notch filter design. This enables system expansion without modification to the existing system channels as long as applicable selectivity standards for minimum channel spacing are met.

This unique notch-filter approach provides a junction between channels, allowing channel frequencies to pass freely to or from antennas, while diverting all other channel frequencies to the pass-through antenna line terminal. This characteristic is field-tunable over specified bands of operation without any alterations in the configuration.

Channels may be interconnected with any convenient cable length. There is also no frequency order of interconnection required. The only requirement is that the minimum spacing for VHF is 0.8 MHz and for UHF is 2 MHz.

The XMF channels are supplied with mounting hardware for wall or rack mounting. The individual cavities are mounted with stainless steel strap clamps, and two horizontal mounting bars. In either case, it may be located at a convenient location for rack or wall applications. Horizontally-spaced mounting holes are the standard 19" EIA rack spacing for on the wall and rack mounting.

For additional information on Comprod Inc. X-Pass, Multicouplers, Duplexers, Pass-Reject, Bandpass, or Notch filters, contact our Technical Support team at team at sales@comprodcom.com.

XMF BAND PASS MULTICOUPLER VHF 138-174MHz

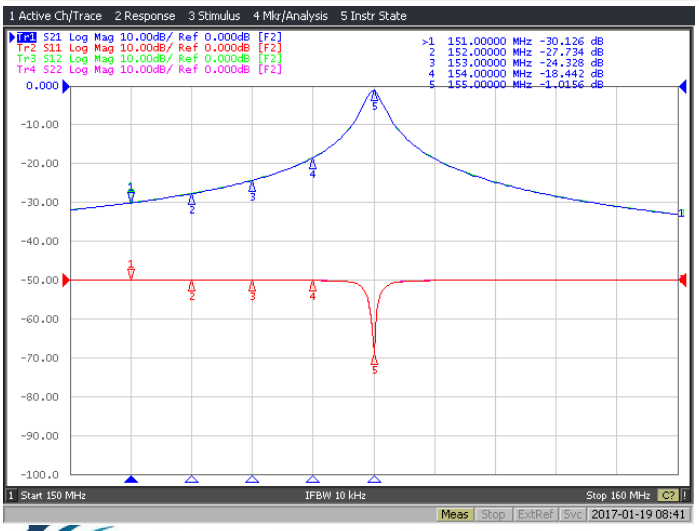
60-13-XP Series

Comprod Inc. Bandpass VHF Multicoupler filters are designed for minimizing interference from adjacent channels and outside systems. They are available in single, dual, triple or additional units. Selectivity can be determined by the insertion loss of the cavity or by adding cavity units as required. Each cavity is temperature compensated for operation between -40ºC to +60ºC. Each cavity has a gold Alodine finish, silver-plated loops, and silver-plated tuning rods. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning.

- Temperature Compensation - Ensures Frequency Stability
- High Attenuation
- Minimizes desense and interference from adjacent systems
- Adjustable Loops - Each cavity has a calibration index

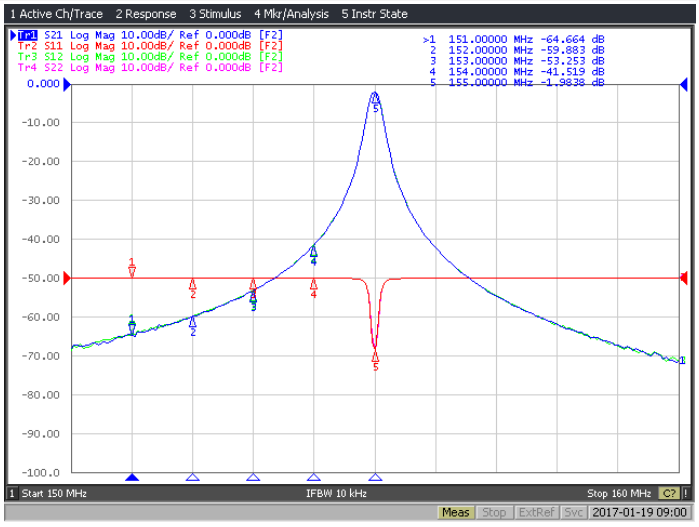
Electrical Specifications	60-13-71	60-13-72	60-13-73
Frequency Range, MHz	138-174	138-174	138-174
Frequency Spacing Min. MHZ	0.8	0.8	0.8
Cavity Diameter, in	6.625	6.625	6.625
Continuous Power Input, Watts (Dependent on Insertion Loss)	90-400	90-400	90-400
Connectors	N Female	N Female	N Female
Insertion Loss, dB	0.6-1.5	1.2-3.2	1.8-5.0
Channel Isolation	See Typical Curves		
VSWR	1.5:1	1.5:1	1.5:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	60-13-71	60-13-72	60-13-73
Maximum length, in (H x W X D)	34 x 19 x 7	34 x 19 x 16.5	34 x 19 x 16.5
Weight, lbs (kg)	30 (13.6)	36.3 (16.5)	44 (20)



60-13-71

60-13-72



XMF BAND PASS MULTICOUPLER UHF 406-512MHz

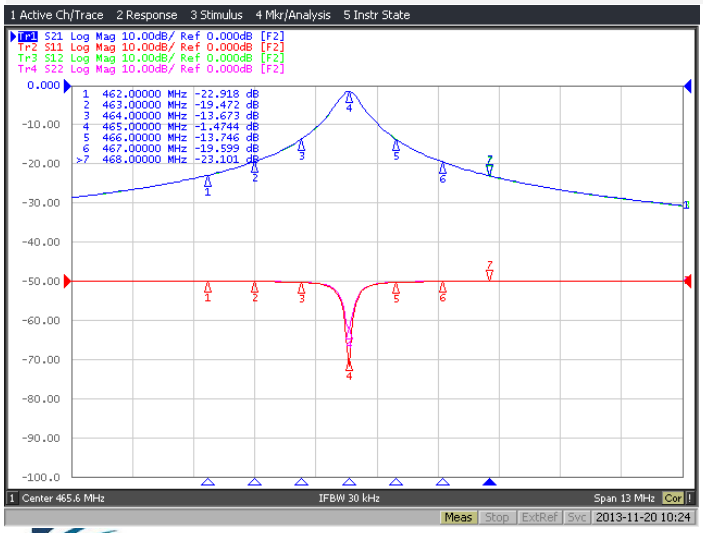
60-40-XP Series

Comprod Inc. Bandpass, UHF, Multicoupler, filters are designed for minimizing interference from adjacent channels and outside systems. They are available in single, dual, triple or additional units. Selectivity can be determined by the insertion loss of the cavity or by adding cavity units as needed. Each cavity is temperature compensated for operation between -40ºC to +60ºC. Each cavity has a gold Alodine finish, silver-plated loops, and silver-plated tuning rods. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning applications.

- Temperature Compensation - Ensures Frequency Stability
- High Attenuation
- Minimizes desense and interference from adjacent systems
- Adjustable Loops - Each cavity has a calibration index

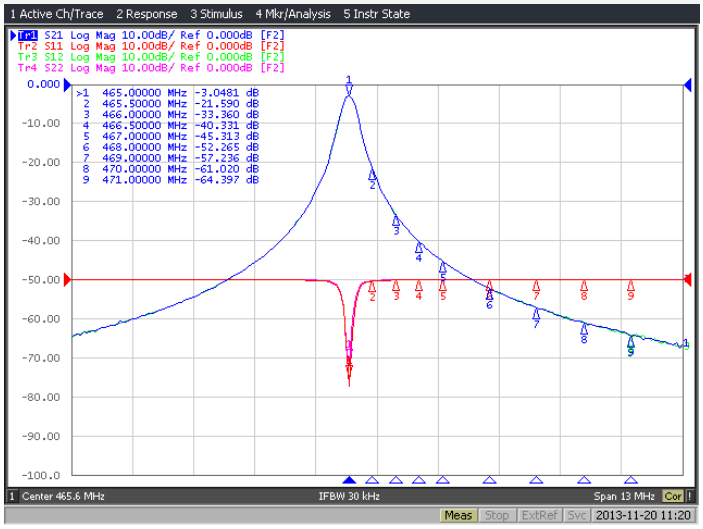
Electrical Specifications	60-40-71	60-40-72	60-40-73
Frequency Range, MHz	406-512	406-512	406-512
Frequency Spacing Min. MHZ	0.8	0.8	0.8
Cavity Diameter, in	6.625	6.625	6.625
Continuous Power Input , Watts (Dependant on Insertion Loss,)	80-300	80-300	80-300
Connectors	N Female	N Female	N Female
Insertion Loss, dB	0.6-1.5	1.2-3.0	1.8-5.0
Channel Isolation	See Curves		
VSWR	1.5:1	1.5:1	1.5:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	60-40-71	60-40-72	60-40-73
Maximum length, in (H x W X D)	16 x 19 x 7	16 x 19 x 16.5	16 x 19 x 16.5
Weight, lbs (kg)	18 (8.6)	26 (11.8)	32 (15.2)



60-40-71

60-40-72



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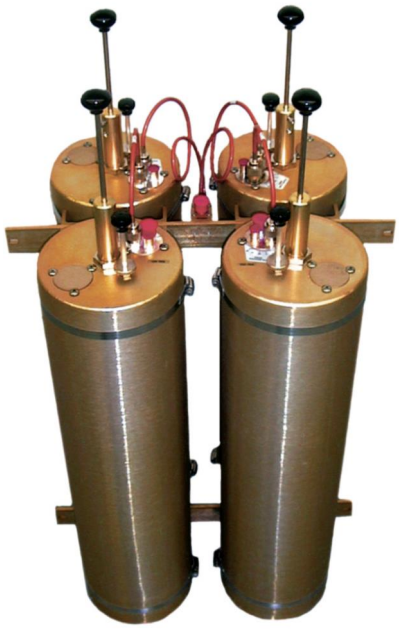
PSEUDO BAND PASS DUPLEXER

66-FF-74 and 66-FF-76

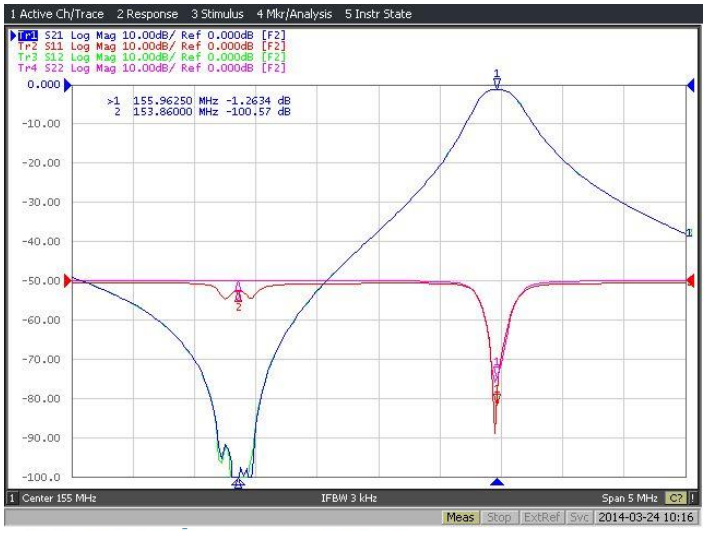


Comprod Inc. Pseudo Bandpass Duplexer filters are designed for quick and easy installations. These filters are designed for the combination of two frequencies requiring extra isolation or can be used as efficient pre-selectors. They are available in either 4 or 6 cavity configurations if higher levels of isolation are required. Selectivity can be determined by the field adjustable capacitors. Each cavity is temperature compensated for operation between -40ºC to +60ºC. Each cavity has a gold Alodine finish, silver-plated loops, and silver-plated tuning rods. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning.

- Temperature Compensation
- Ensures Frequency Stability
- High Attenuation
- Minimizes desense and interference from adjacent systems
- Adjustable Loops
- Each cavity has a calibration index

Electrical Specifications	66-13-74	66-13-76	66-40-74
Frequency Range, MHz	138-174	138-174	406-512
Frequency Spacing Min.	0.5	0.3	1.5
Cavity Diameter, in	6.625	6.625	6.625
Continuous Power Input, Watts	400	400	350
Connectors	N Female	N Female	N Female
Insertion Loss, dB (maximum)	1.5	2.2	1.5
Channel Isolation, @ Min. Separation dB	85	95	90
VSWR	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	66-13-74	66-13-76	66-40-74
Maximum length, in (H x W X D)	34 x 19 x 16.5	34 x 19 x 33	18.5 x 19 x 16.5
Weight, lbs (kg)	44 (20)	90 (40)	32 (15.2)



66-13-74

2-INCH CAVITY DUPLEXERS

66-FF-2P Series 2" Cavity Duplexers

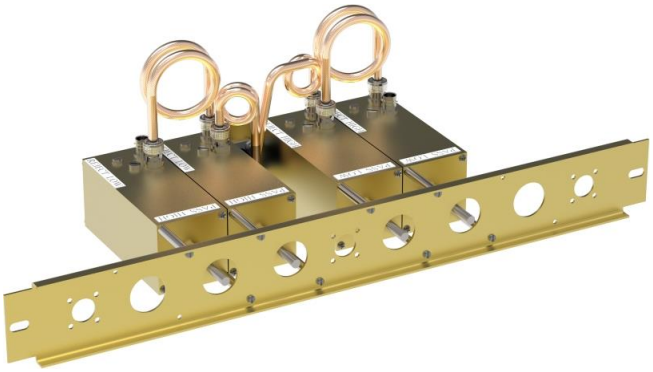
Comprod Inc. 2" base station duplexers are ideal for compact high isolation installations. These filters are designed for the combination of two frequencies that require extra isolation or they can be used as efficient pre -selectors. Available in either 4 or 6 cavity configurations if higher levels of isolation are required. Selectivity can be determined by the field adjustable capacitors. Each cavity is temperature compensated for operation between -40ºC to +60 ºC. Each cavity has a gold Alodine finish, silver-plated loops, and silver-plated tuning rods.

- Temperature Compensation
- Ensures Frequency Stability
- High Attenuation
- Minimizes desense and interference from adjacent systems

Electrical Specifications	66-13-24	66-14-24	66-13-26	66-14-26
Frequency Range, MHz	132-150	144-174	132-150	144-174
Frequency Spacing Min.	4.5	4.5	3.0	3.0
Cavity Number	4	4	6	6
Cavity Diameter, in	2.0	2.0	2.0	2.0
Continuous Power Inputs, Watts	100	100	100	100
Connectors (Equipment/Antenna)	BNC/N	BNC/N	BNC/N	BNC/N
Insertion Loss, dB (maximum)	1.5	1.5	1.5	1.5
Channel Isolation, dB	70	70	80/90	80/90
VSWR	1.3:1		1.3:1	
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	66-13-24	66-14-24	66-13-26	66-14-26
Maximum length, in (H x W X D)	5.25 x 19 x 7.25		5.25 x 19 x 7.25	
Mounting	19" Rack Mount			

These duplexers are available in other frequencies and configurations. Please call our technical support for additional models..



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4-INCH CAVITY DUPLEXERS

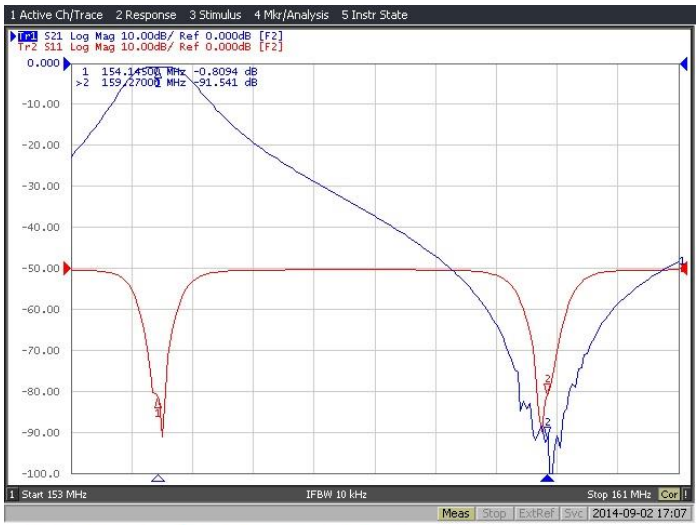
66-FF-44 Series (4) 4" Cavity Duplexers

These Comprod Inc. 4" base station duplexers are ideal for high power, close frequency separation installations. These filters are designed for combining two frequencies or they can be used as efficient pre-selectors. If higher levels of isolation are required, please consider using 6 cavity configurations. Selectivity can be determined by the field adjustable capacitors. Each cavity is temperature compensated for operation between -40ºC to +60ºC. Each cavity has a gold Alodine finish, silver-plated loops, and silver-plated tuning rods.

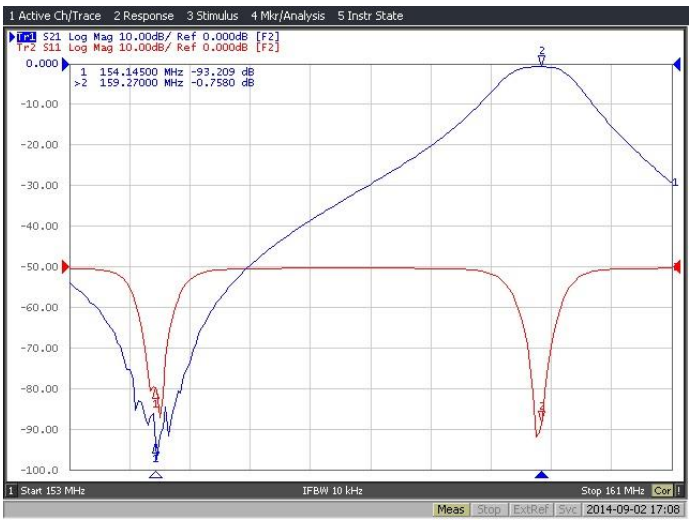
- Temperature Compensation - Ensures Frequency Stability
- High Attenuation - Minimizes desense and interference from adjacent systems

Electrical Specifications	66-13-44	66-40-44	66-80-44
Frequency Range, MHz	138-174	406-512	746-960
Frequency Spacing Min. MHZ	0.5	5	9
Cavities, Diameter, in	(4) - 4" Square	(4) - 4" Square	(4) - 4" Square
Continuous Power Input, Watts	350	350	150
Connectors	N Female	N Female	N Female
Insertion Loss, dB (maximum)	1.5 dB	0.8 dB	0.8 dB
Channel Isolation	70 dB	75 dB	90 dB
VSWR	1.2:1	1.2:1	1.2:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60
Mechanical Specifications	**66-13-44**	**66-40-44**	**66-80-44**
Maximum length, in (H x W X D)	31 x 19 x 4	4 x 19 x 15	4 x 19 x 12
Weight, lbs (kg)	30 (13.6)	18 (8.2)	16 (7.3)
Mounting	19" Rack Mount	19" Rack Mount	19" Rack Mount

Order Information	Frequency	Wall Mount	4 Cavities
66-13-4X	138-174MHz	66-13-44WM	66-13-44
66-40-4X	406-470MHz	66-40-44WM	66-40-44
66-74-4X	746-806MHz	66-74-44WM	66-74-44
66-80-4X	806-896MHz	66-80-44WM	66-80-44
66-90-4X	896-960MHz	66-90-44WM	66-90-44



66-13-44



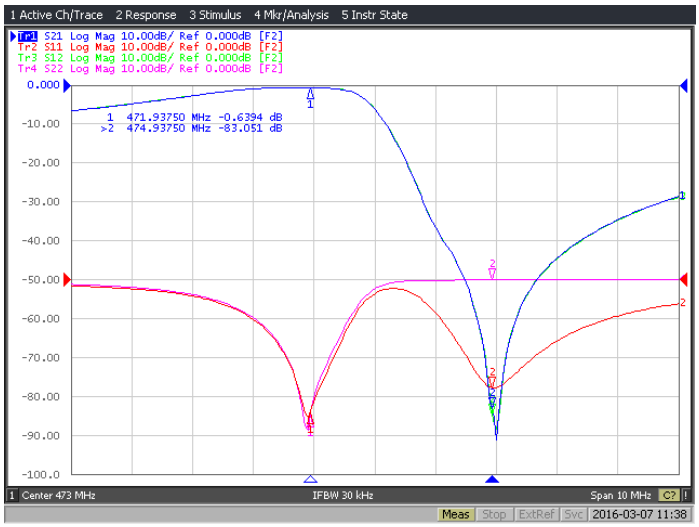
4-INCH CAVITY DUPLEXERS

66-FF-46 Series (6) 4" Cavity Duplexers

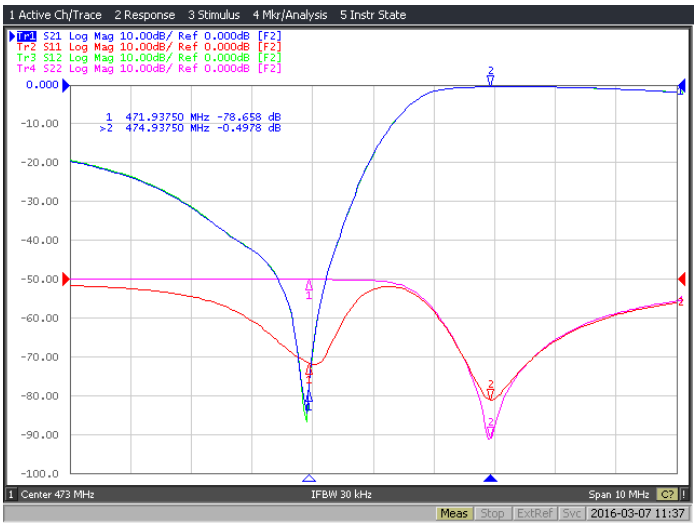
These Comprod Inc. 6 cavity 4" base station duplexers are ideal for high power close frequency separation installations. These filters are designed for the combination of 2 frequencies that require extra isolation or they can be used as an efficient pre-selector. If higher levels of isolation are required, please consider using the 8 cavity configuration. Selectivity can be determined by the field adjustable loops. Each cavity is temperature compensated for operation between -40ºC to +60ºC. Each cavity has a gold Alodine finish, silver-plated loops, and silver-plated tuning rods.

- Temperature Compensation - Ensures Frequency Stability
- High Attenuation - Minimizes desense and interference from adjacent systems

Electrical Specifications	66-13-46	66-40-46	66-80-46
Frequency Range, MHz	138-174	406-512	746-960
Frequency Spacing Min. MHZ	0.5	5.0	3.6
Cavities, Diameter, in	(6) - 4" Square	(6) - 4" Square	(6) - 4" Square
Continuous Power Input, Watts	350	350	350
Connectors	N Female	N Female	N Female
Insertion Loss, dB (maximum)	2.1	1.2	1.2
Channel Isolation @ Min. Sep. dB	85	100	85
VSWR	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60
Mechanical Specifications	**66-13-46**	**66-40-46**	**66-80-46**
Maximum length, in (H x W X D)	31 x 19 x 8	8 x 19 x 15	8 x 19 x 12
Weight, lbs (kg)	45 (20.25)	27 (12.15)	24 (10.8)
Mounting	19" Rack Mount	19" Rack Mount	19" Rack Mount
Order Information	**Frequency**	**Wall Mount**	**6 Cavities**
66-13-46	138-174MHz	66-13-46WM	66-13-46
66-40-46	406-512MHz	66-40-46WM	66-40-46
66-80-46	746-960MHz	66-80-46WM	66-80-46

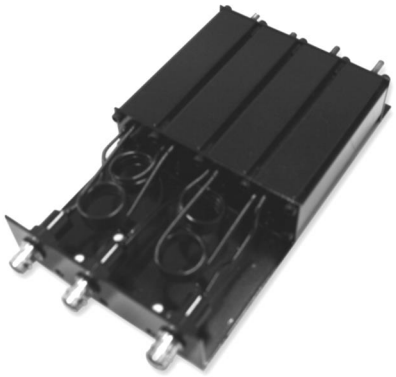


66-40-44



4 CAVITY MOBILE DUPLEXERS — VHF & UHF

4 Cavity Standard Version



The Comprod Inc. line of mobile duplexers features compact size, low loss and temperature compensation over the range of -40ºC to +60ºC. The use of extruded aluminum cavities and solid- shield copper-jacketed inter-cabling ensures excellent mechanical and electrical stability.

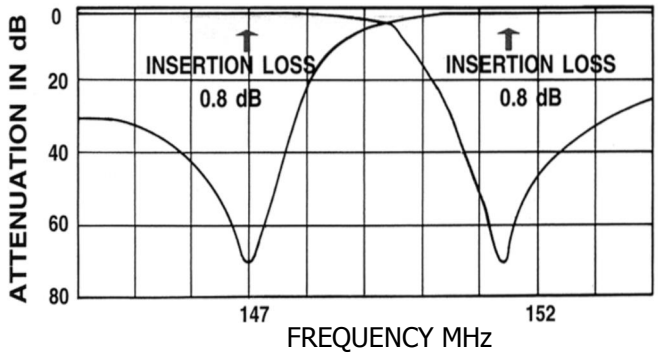
All units are adjustable in the field by qualified personnel and rated at 50 Watts maximum with a maximum VSWR of 1.5: 1 over the entire tuning range.

BNC connectors are standard. Variations on connectors and mountings are available by special order. For N female connectors, add suffix N to model number (Ex. 534-90N).

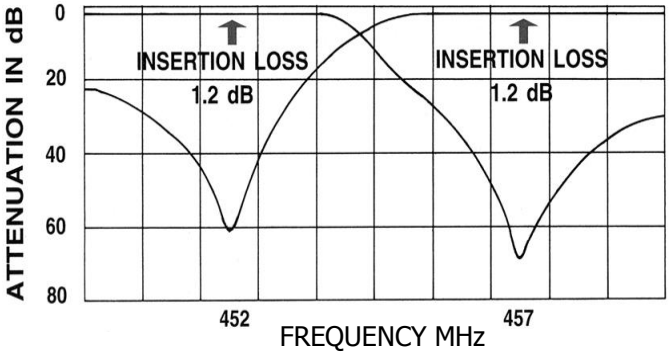
Electrical Specifications	534-90	504-90	
Frequency Range, MHz	144-155/150-165/160-174	406-435/430-470	
Frequency Spacing Min. MHz	4.5	5.0	10.0
Continuous Power Rating, Watts	50	50	50
Insertion Loss, dB: TX to Antenna	0.8	1.2	0.8
Insertion Loss, dB: RX to Antenna	0.8	1.2	0.8
Isolation, dB: TX noise suppression at RX frequency	60	50	60
Isolation, dB: TX isolation at TX frequency	60	50	60
Maximum VSWR	1.5:1	1.5:1	
Impedance, Ohms	50	50	
Connector Type, Female	BNC	BNC	
Temperature ºC	-40 to +60	-40 to +60	

Mechanical Specifications	534-90	504-90
Dimensions H x W x D, in. (mm)	1-1/4 x 4-1/8 x 7-5/8 (31.8 x 105 x 194)	1-1/4 x 4-1/8 x 8-3/4 (31.8 x 105 x 222)
Weight, lbs (kg)	1.5 (0.7)	2 (0.9)

534-90
Typical Response Curve at 4.5 MHz Spacing



504-90
Typical Response Curve at 5 MHz Spacing



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6 CAVITY MOBILE DUPLEXER — VHF & UHF

6 Cavity Standard Version

The Comprod Inc. line of mobile duplexers features compact size, low loss and temperature compensation over the range of -40ºC to +60ºC. The use of extruded aluminum cavities and solid-shield copper-jacketed inter-cabling ensures excellent mechanical and electrical stability.

All units are adjustable in the field by qualified personnel and rated at 50 watts continuous duty with a maximum VSWR of 1.5: 1 over the entire tuning range.

BNC connectors are standard. Variations on connectors and mountings are available by special order. For N female connectors, add suffix N to model number (Ex. 536-90N)

Electrical Specifications	536-90	506-90	
Frequency Range, MHz	144-155/150-165/160-174	406-435/430-470	
Frequency Spacing Min. MHZ	4.5	5	10
Continuous Power Rating, Watts	50	50	50
Insertion Loss, dB: TX to Antenna	1.2	1.4	1.2
Insertion Loss, dB: RX to Antenna	1.2	1.4	1.2
Isolation, dB: TX noise suppression at RX frequency	80	75	80
Isolation, dB: TX isolation at TX frequency	80	75	80
Maximum VSWR	1.5:1	1.5:1	
Impedance, Ohms	50	50	
Connector Type, Female	BNC	BNC	
Temperature ºC	-40 to +60	-40 to +60	

Mechanical Specifications	536-90	506-90
Dimensions H x W x D, in.	1-1/4 X 6-3/16 X 7-5/8	1-1/4 X 6-3/16 X 7-5/8
(mm)	(31.8 X 157 X 222)	(31.8 X 157 X 222)
Weight, lbs (kg)	2.0 (0.9)	3.5 (1.7)

506-90 Typical Response Curves at 5 MHz Spacing

X-PASS

Expandable Multicoupler/Combiner Filters

The X-Pass system is a proven innovative family of filter design technology. Possessing the properties of a combiner, but having the expandability of a multicoupler, our X-Pass filters are one of the most versatile and re-usable filtering systems available on the market.

The X-Pass Transmitter Combiner Receiver Multicoupler has superior expandability compared with the fixed star junction configuration. The X-Pass system can be expanded one channel at a time for up to 21 channels with factory tuned, easy to install expansion channel assemblies. Expansion can be completed easily, without modifying the existing system, as easy as adding one or more channels on top of the existing system (daisy chain).

The X-Pass system is a broadband design allowing the system to span entire frequency ranges by using the properties of the X-Pass combiner for close frequency spacing and the X-Pass multicoupler properties for normally spaced channels. The X-Pass system can span the full 138-174 MHz, 406-512 MHz or 806-960 MHz frequency bands. When using the 6.625" cavities, the TX-TX separation in VHF can be as close as 75 kHz of frequency separation, or 50 kHz of separation when using 10" cavities.

The X-Pass system has the advantage of being extremely flexible to configure. With the ability to combine Bandpass, Pass-Reject, or Notch loops for 6.625" and 10" cavity filters, once-difficult complex operating requirements can be resolved with a customized design. This allows the X-Pass system to have unlimited combinations that can be integrated using multi-cavity configurations while retaining the expandability of the combiner properties for close frequency-spaced channels using 6.625" and 10" cavities. The system can also be a combination of a combiner for close frequency-spaced channels while encompassing the expandability of a standard multicoupler that can be integrated with standard Bandpass, Notch, and Pass-Reject filter combinations. All X-Pass systems come fully assembled, tested and ready for Plug-and-Play installations.

The X-Pass system has one extra beneficial aspect - the optional X-Pass Rack. With this unique rack design, certain systems can take up to 50 % less space than other systems that are in a 19" rack. By being able to mount all of the cavities horizontally, the installer has the ability to expand one channel on top of another in no particular order, and not having the physical obstacles of mounting a star-junction type configuration in a rack. The X-Pass system can save valuable installation space, and make efficient use of the rack space for future expansion projects.

For additional information on Comprod Inc. X-Pass, Multicouplers, Duplexers, Pass-Reject, Bandpass, or Notch filters, contact our Technical Support team: Sales@comprodcom.com

X-PASS CAVITY 30-1000 MHz

68-XX-7X Series

Comprod Inc. X-Pass filters are designed for flexible, close frequency systems. Each cavity has both a Reject and a Pass band curve. These individual cavities are used to add channels to existing systems. Available in single units, they can be combined with Bandpass, Notch, and Pass-Reject cavities for added protection and isolation. Selectivity can be determined by the insertion loss of the cavity or by adding Bandpass cavity units to this expansion channel as required. Each cavity is temperature compensated for operation between -40ºC to +60ºC. Each cavity has a gold Alodine finish, silver-plated loops, and silver-plated tuning rods. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning.

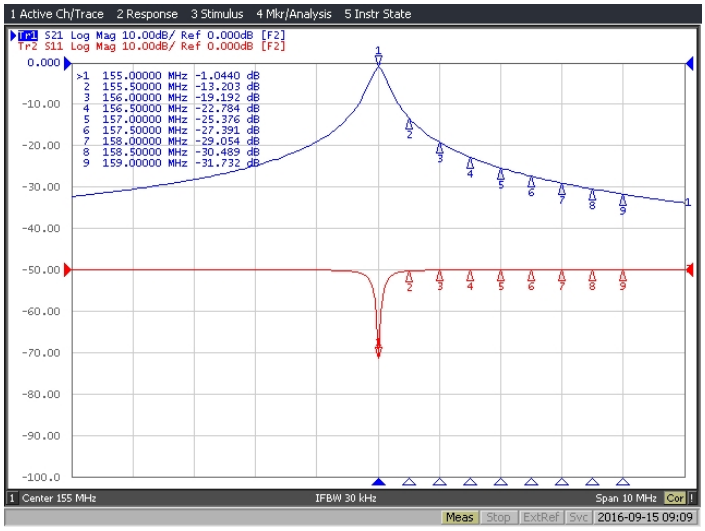
- Temperature Compensation
- Ensures Frequency Stability
- High Attenuation
- Minimizes desense and interference from adjacent systems
- Adjustable Loops
- Each cavity has a calibration index

Electrical Specifications	68-03-71	68-06-71	68-11-71	68-13-71	68-40-71	68-74-71
Frequency Range, MHz	30-40	66-88	118-136	136-174	406-512	746-960
Frequency Spacing Min.	Please Refer To Typical Curves					
Cavity Diameter, in	6.625	6.625	6.625	6.625	6.625	6.625
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N Female	N Female	N Female	N Female	N Female	N Female
Insertion Loss, dB	0.6-1.5					
Reject Attenuation	Please Refer To Typical Curves					
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	68-03-71	68-06-71	68-11-71	68-13-71	68-40-71	68-74-71
Maximum length, in	132	77	31.5	26	11.5	13
Weight, lbs	n/a	n/a	18	15	10	10

Order Information	Single
4" Cavity	68-XX-41
6.625" Cavity	68-XX-71
10" Cavity	68-XX-01

68-13-71



COMPROD
Simplifying RF Solutions
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EXPANDABLE TRANSMIT COMBINER 66-88 MHz

XTC-Expandable Transmit Combiner Series—7" Cavity

Our Expandable Transmit Combiners can combine from 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 75 kHz TX-TX spacing or 50 kHz spacing while using 10" cavities. Each cavity is constructed using a gold Alodine finish, silver-plated loops, silver-plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40ºC to +60ºC. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning.

- Flexible and expandable design, From 1-21 channel capacity
- Expandable: 1 or more additional channels at a time, Re-configurable equipment
- 66-88 MHz, 22 MHz of operating bandwidth
- Temperature compensation, Ensures frequency stability
- High attenuation, Minimizes desense and interference
- Ultra-low insertion losses, Low coupling and bridging losses
- Continuous high-power handling capability, 150 watts – 24/7

Electrical Specifications	XTC-06-72	XTC-06-74	XTC-06-76	XTC-06-78	XTC-06-7-10	XTC-06-7-12
Frequency Range, MHz	66-88	66-88	66-88	66-88	66-88	66-88
Bandwidth, MHz	22	22	22	22	22	22
Number of Channels	2	4	6	8	10	12
Cavity Diameter, in	6.625	6.625	6.625	6.625	6.625	6.625
Min. Channel Sep., kHz	50	50	50	50	50	50
Isolation Min., TX-TX, dB	70	70	70	70	70	70
Isolation Min., Ant-TX, dB	60	60	60	60	60	60
Max. Insertion Loss Per Chan., dB	4.7	5.5	6	6.3	6.8	7.3
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N Female	N Female	N Female	N Female	N Female	N Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60
Mechanical Specifications	**XTC-06-72**	**XTC-06-74**	**XTC-06-76**	**XTC-06-78**	**XTC-06-7-10**	**XTC-06-7-12**
Height, in (H x W X D) (mm)	86.5 x 24 x 40.25 (2197 x 610 x 1022) (In X Rack)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	DEPENDS ON SET-UP AND RACK DESIGN					

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-06-41	XTC-06-42	XTC-06-43	XTC-06-45	XTC-06-48
6.625" Cavity	XTC-06-71	XTC-06-72	XTC-06-73	XTC-06-75	XTC-06-78
10" Cavity	XTC-06-01	XTC-06-02	XTC-06-03	XTC-06-05	XTC-06-08

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EXPANDABLE TRANSMIT COMBINER 66-88 MHz

XTC-Expandable Transmit Combiner Series-10" Cavity

Our Expandable Transmit Combiners can combine from 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 75 kHz TX-TX spacing or 50 kHz spacing when using 10" cavities. Each cavity is constructed using a gold Alodine finish, silver-plated loops, silver-plated connectors and an internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40ºC to +60ºC. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning.

- Flexible and expandable design, From 1-21 channel capacity
- Expandable: 1 or more additional channels at a time, Re-configurable equipment
- 66-88 MHz, 22 MHz of operating bandwidth
- Temperature compensation, Ensures frequency stability
- High attenuation, Minimizes desense and interference
- Ultra-low insertion losses, Low coupling and bridging losses
- Continuous high-power handling capability, 150 watts – 24/7

Electrical Specifications	XTC-06-02	XTC-06-04	XTC-06-06	XTC-06-08	XTC-06-0-10
Frequency Range, MHz	66-88	66-88	66-88	66-88	66-88
Bandwidth, MHz	22	22	22	22	22
Number of Channels	2	4	6	8	10
Cavity Diameter, in	10	10	10	10	10
Min. Channel Sep., kHz	50	50	50	50	50
Isolation Min., TX-TX, dB	70	70	70	70	70
Isolation Min., Ant-TX, dB	60	60	60	60	60
Max. Insertion Loss Per Chan., dB	3.8	4.9	5.2	5.4	5.6
Continuous Power Input, Watts	150	150	150	150	150
Connectors	N Female	N Female	N Female	N Female	N Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60
Mechanical Specifications	**XTC-06-02**	**XTC-06-04**	**XTC-06-06**	**XTC-06-08**	**XTC-06-0-10**
Height, in (H x W X D) (mm)	86.5 x 24 x 40.25 (2197 x 610 x 1022) (In X Rack)				
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes
Weight	DEPENDS ON SET-UP AND RACK DESIGN				

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-06-41	XTC-06-42	XTC-06-43	XTC-06-45	XTC-06-48
6.625" Cavity	XTC-06-71	XTC-06-72	XTC-06-73	XTC-06-75	XTC-06-78
10" Cavity	XTC-06-01	XTC-06-02	XTC-06-03	XTC-06-05	XTC-06-08

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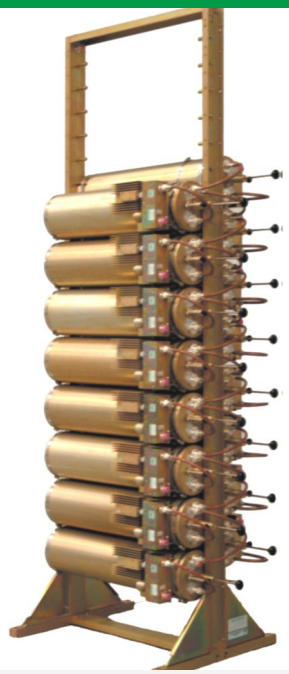
EXPANDABLE TRANSMIT COMBINER 108-136MHz

XTC-Expandable Transmit Combiner Series—7" Cavity



Our Expandable Transmit Combiners can combine from 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 75 kHz TX-TX spacing or 50 kHz spacing while using 10" cavities. Each cavity is constructed using a gold Alodine finish, silver-plated loops, silver-plated connectors and an internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40ºC to +60ºC. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning.

- Flexible and expandable design, From 1-21 channel capacity
- Expandable: 1 or more additional channels at a time, Re-configurable equipment
- 108-136 MHz, 28 MHz of operating bandwidth
- Temperature compensation, Ensures frequency stability
- High attenuation, Minimizes desense and interference
- Ultra-low insertion losses, Low coupling and bridging losses
- Continuous high-power handling capability, 150 watts – 24/7

Electrical Specifications	XTC-11-72	XTC-11-74	XTC-11-76	XTC-11-78	XTC-11-7-10	XTC-11-7-12
Frequency Range, MHz	108-136	108-136	108-136	108-136	108-136	108-136
Bandwidth, MHz	28	28	28	28	28	28
Number of Channels	2	4	6	8	10	12
Cavity Diameter, in	6.625	6.625	6.625	6.625	6.625	6.625
Min. Channel Sep., kHz	75	75	75	75	75	75
Isolation Min., TX-TX, dB	70	70	70	70	70	70
Isolation Min., Ant-TX, dB	60	60	60	60	60	60
Max. Insertion Loss Per Chan., dB	3.6	4.5	4.8	5.2	5.4	5.6
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N Female	N Female	N Female	N Female	N Female	N Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60
Mechanical Specifications	**XTC-11-72**	**XTC-11-74**	**XTC-11-76**	**XTC-11-78**	**XTC-11-7-10**	**XTC-11-7-12**
Height, in (H x W X D) (mm)	86.5 x 24 x 40.25 (2197 x 610 x 1022) (In X Rack)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	DEPENDS ON SET-UP AND RACK DESIGN					

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-11-41	XTC-11-42	XTC-11-43	XTC-11-45	XTC-11-48
6.625" Cavity	XTC-11-71	XTC-11-72	XTC-11-73	XTC-11-75	XTC-11-78
10" Cavity	XTC-11-01	XTC-11-02	XTC-11-03	XTC-11-05	XTC-11-08

EXPANDABLE TRANSMIT COMBINER 108-136MHz

XTC-Expandable Transmit Combiner Series—10" Cavity

Our Expandable Transmit combiners can combine from 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 75 kHz TX-TX spacing or 50 kHz spacing while using 10" cavities. Each cavity is constructed using a gold Alodine finish, silver-plated loops, silver-plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40ºC to +60ºC. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning.

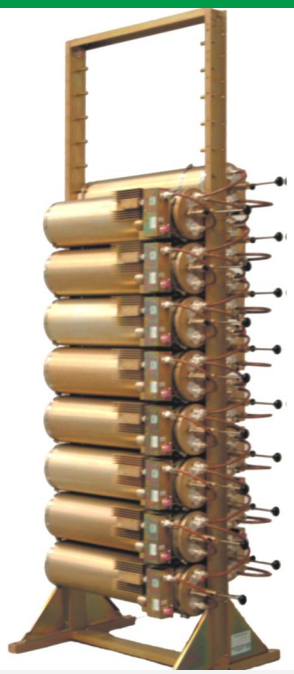
- Flexible and expandable design, From 1-21 channel capacity
- Expandable: 1 or more additional channels at a time, Re-configurable equipment
- 108-136 MHz, 28 MHz of operating bandwidth
- Temperature compensation, Ensures frequency stability
- High attenuation, Minimizes desense and interference
- Ultra-low insertion losses, Low coupling and bridging losses
- Continuous high-power handling capability, 150 watts – 24/7

Electrical Specifications	XTC-11-02	XTC-11-04	XTC-11-06	XTC-11-08	XTC-11-0-10	XTC-11-0-12
Frequency Range, MHz	108-136	108-136	108-136	108-136	108-136	108-136
Bandwidth, MHz	28	28	28	28	28	28
Number of Channels	2	4	6	8	10	12
Cavity Diameter, in	10	10	10	10	10	10
Min. Channel Sep., kHz	50	50	50	50	50	50
Isolation Min., TX-TX, dB	70	70	70	70	70	70
Isolation Min., Ant-TX, dB	60	60	60	60	60	60
Max. Insertion Loss Per Chan., dB	4.1	4.8	5.1	5.4	5.6	5.7
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N Female	N Female	N Female	N Female	N Female	N Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60
Mechanical Specifications	**XTC-11-02**	**XTC-11-04**	**XTC-11-06**	**XTC-11-08**	**XTC-11-0-10**	**XTC-11-0-12**
Height, in (H x W X D) (mm)	86.5 x 24 x 40.25 (2197 x 610 x 1022) (In X Rack)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	DEPENDS ON SET-UP AND RACK DESIGN					

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-11-41	XTC-11-42	XTC-11-43	XTC-11-45	XTC-11-48
6.625" Cavity	XTC-11-71	XTC-11-72	XTC-11-73	XTC-11-75	XTC-11-78
10" Cavity	XTC-11-01	XTC-11-02	XTC-11-03	XTC-11-05	XTC-11-08

EXPANDABLE TRANSMIT COMBINER 132-174MHz

XTC-Expandable Transmit Combiner Series—7" Cavity



Our Expandable Transmit Combiners can combine from 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 75 kHz TX-TX spacing or 50 kHz spacing while using 10" cavities. Each cavity is constructed using a gold Alodine finish, silver-plated loops, silver-plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40ºC to +60ºC. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning.

- Flexible and expandable design, From 1-21 channel capacity
- Expandable 1 or more additional channels at a time, Re-configurable equipment
- 132-174 MHz, 42 MHz of operating bandwidth
- Temperature compensation, Ensures frequency stability
- High Attenuation, Minimizes desense and interference
- Ultra-low insertion losses, Low coupling and bridging losses
- Continuous high power handling capability, 150 watts – 24/7

Electrical Specifications	XTC-13-72	XTC-13-74	XTC-13-76	XTC-13-78	XTC-13-7-10	XTC-13-7-12
Frequency Range, MHz	132-174	132-174	132-174	132-174	132-174	132-174
Bandwidth, MHz	42	42	42	42	42	42
Number of Channels	2	4	6	8	10	12
Cavity Diameter, in	6.625	6.625	6.625	6.625	6.625	6.625
Min. Channel Sep., kHz	75	75	75	75	75	75
Isolation Min., TX-TX, dB	70	70	70	70	70	70
Isolation Min., Ant-TX, dB	60	60	60	60	60	60
Max. Insertion Loss Per Chan., dB	4.3	5.4	5.8	6.2	6.5	6.7
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N Female	N Female	N Female	N Female	N Female	N Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60
Mechanical Specifications	**XTC-13-72**	**XTC-13-74**	**XTC-13-76**	**XTC-13-78**	**XTC-13-7-10**	**XTC-13-7-12**
Height, in (H x W X D) (mm)	86.5 x 24 x 40.25 (2197 x 610 x 1022) (In X Rack)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	DEPENDS ON SET-UP AND RACK DESIGN					

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-13-41	XTC-13-42	XTC-13-43	XTC-13-45	XTC-13-48
6.625" Cavity	XTC-13-71	XTC-13-72	XTC-13-73	XTC-13-75	XTC-13-78
10" Cavity	XTC-13-01	XTC-13-02	XTC-13-03	XTC-13-05	XTC-13-08

EXPANDABLE TRANSMIT COMBINER 132-174MHz

XTC-Expandable Transmit Combiner Series—10" Cavity

Our Expandable Transmit Combiners can combine from 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 75 kHz TX-TX spacing or 50 kHz spacing while using 10" cavities. Each cavity is constructed using a gold Alodine finish, silver-plated loops, silver-plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40ºC to +60ºC. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning.

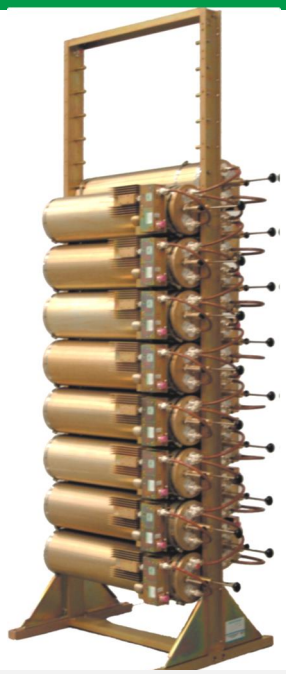
- Flexible and expandable design, From 1-21 channel capacity
- Expandable 1 or more additional channels at a time, Re-configurable equipment
- 132-174 MHz, 42 MHz of operating bandwidth
- Temperature compensation, Ensures frequency stability
- High Attenuation, Minimizes desense and interference
- Ultra-low insertion losses, Low coupling and bridging losses
- Continuous high power handling capability, 150 watts – 24/7

Electrical Specifications	XTC-13-02	XTC-13-04	XTC-13-06	XTC-13-08	XTC-13-0-10	XTC-13-0-12
Frequency Range, MHz	132-174	132-174	132-174	132-174	132-174	132-174
Bandwidth, MHz	42	42	42	42	42	42
Number of Channels	2	4	6	8	10	12
Cavity Diameter, in	10	10	10	10	10	10
Min. Channel Sep., kHz	50	50	50	50	50	50
Isolation Min., TX-TX, dB	70	70	70	70	70	70
Isolation Min., Ant-TX, dB	60	60	60	60	60	60
Max. Insertion Loss Per Chan., dB	4.1	5.0	5.4	5.7	5.9	6.1
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N Female	N Female	N Female	N Female	N Female	N Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60
Mechanical Specifications	**XTC-13-02**	**XTC-13-04**	**XTC-13-06**	**XTC-13-08**	**XTC-13-0-10**	**XTC-13-0-12**
Height, in (H x W X D) (mm)	86.5 x 24 x 40.25 (2197 x 610 x 1022) (In X Rack)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	DEPENDS ON SET-UP AND RACK DESIGN					

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-13-41	XTC-13-42	XTC-13-43	XTC-13-45	XTC-13-48
6.625" Cavity	XTC-13-71	XTC-13-72	XTC-13-73	XTC-13-75	XTC-13-78
10" Cavity	XTC-13-01	XTC-13-02	XTC-13-03	XTC-13-05	XTC-13-08

EXPANDABLE TRANSMIT COMBINER 215-300MHz

XTC-Expandable Transmit Combiner Series—7" Cavity



Our Expandable Transmit Combiners can combine from 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625″ cavity, the XTC can easily support 100 kHz TX-TX spacing or 75 kHz spacing while using 10″ cavities. Each cavity is constructed using a gold Alodine finish, silver-plated loops, silver-plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40ºC to +60ºC. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning.

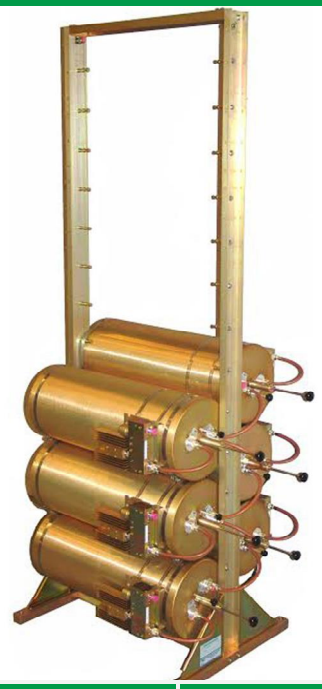
- Flexible and expandable design, From 1-21 channel capacity
- Expandable 1 or more additional channels at a time, Re-configurable equipment
- 215-300MHz, 85 MHz of operating bandwidth
- Temperature compensation, Ensures frequency stability
- High Attenuation, Minimizes desense and interference
- Ultra-low insertion losses, Low coupling and bridging losses
- Continuous high power handling capability, 150 watts – 24/7

Electrical Specifications	XTC-22-72	XTC-22-74	XTC-22-76	XTC-22-78	XTC-22-7-10	XTC-22-7-12
Frequency Range, MHz	215-300	215-300	215-300	215-300	215-300	215-300
Bandwidth, MHz	85	85	85	85	85	85
Number of Channels	2	4	6	8	10	12
Cavity Diameter, in	6.625	6.625	6.625	6.625	6.625	6.625
Min. Channel Sep., kHz	100	100	100	100	100	100
Isolation Min., TX-TX, dB	70	70	70	70	70	70
Isolation Min., Ant-TX, dB	60	60	60	60	60	60
Max. Insertion Loss Per Chan., dB	4.1	4.5	5.1	5.4	5.6	5.8
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N Female	N Female	N Female	N Female	N Female	N Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60
Mechanical Specifications	**XTC-22-72**	**XTC-22-74**	**XTC-22-76**	**XTC-22-78**	**XTC-22-7-10**	**XTC-22-7-12**
Height, in (H x W X D) (mm)	86.5 x 24 x 26.4 (2197 x 610 x 671) (In X Rack)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	DEPENDS ON SET-UP AND RACK DESIGN					

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-22-41	XTC-22-42	XTC-22-43	XTC-22-45	XTC-22-48
6.625" Cavity	XTC-22-71	XTC-22-72	XTC-22-73	XTC-22-75	XTC-22-78
10" Cavity	XTC-22-01	XTC-22-02	XTC-22-03	XTC-22-05	XTC-22-08

EXPANDABLE TRANSMIT COMBINER 215-300MHz

XTC-Expandable Transmit Combiner Series-10" Cavity



Our Expandable Transmit Combiners can combine from 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 100 kHz TX-TX spacing or 75 kHz spacing while using 10" cavities. Each cavity is constructed using a gold Alodine finish, silver-plated loops, silver-plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40ºC to +60ºC. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning.

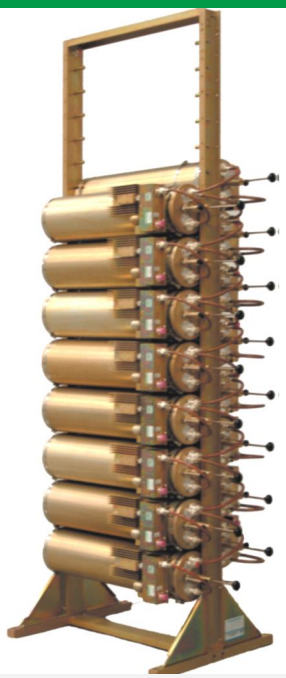
- Flexible and expandable design, From 1-21 channel capacity
- Expandable 1 or more additional channels at a time, Re-configurable equipment
- 215-300MHz, 85 MHz of operating bandwidth
- Temperature compensation, Ensures frequency stability
- High Attenuation, Minimizes desense and interference
- Ultra-low insertion losses, Low coupling and bridging losses
- Continuous high power handling capability, 150 watts – 24/7

Electrical Specifications	XTC-22-02	XTC-22-04	XTC-22-06	XTC-22-08	XTC-22-0-10	XTC-22-0-12
Frequency Range, MHz	215-300	215-300	215-300	215-300	215-300	215-300
Bandwidth, MHz	85	85	85	85	85	85
Number of Channels	2	4	6	8	10	12
Cavity Diameter, in	10	10	10	10	10	10
Min. Channel Sep., kHz	75	75	75	75	75	75
Isolation Min., TX-TX, dB	70	70	70	70	70	70
Isolation Min., Ant-TX, dB	60	60	60	60	60	60
Max. Insertion Loss Per Chan., dB	4.2	5.1	5.5	5.8	6	6.2
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N Female	N Female	N Female	N Female	N Female	N Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60
Mechanical Specifications	**XTC-22-02**	**XTC-22-04**	**XTC-22-06**	**XTC-22-08**	**XTC-22-0-10**	**XTC-22-0-12**
Height, in (H x W X D) (mm)	79.5 x 24 x 28.4 (2019 x 610 x 721) (In X Rack)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	DEPENDS ON SET-UP AND RACK DESIGN					

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-22-41	XTC-22-42	XTC-22-43	XTC-22-45	XTC-22-48
6.625" Cavity	XTC-22-71	XTC-22-72	XTC-22-73	XTC-22-75	XTC-22-78
10" Cavity	XTC-22-01	XTC-22-02	XTC-22-03	XTC-22-05	XTC-22-08

EXPANDABLE TRANSMIT COMBINER 380-512MHz

XTC-Expandable Transmit Combiner Series—7" Cavity



Our Expandable Transmit Combiners can combine from 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 125 kHz TX-TX spacing or 75 kHz spacing while using 10" cavities. Each cavity is constructed using a gold Alodine finish, silver-plated loops, silver-plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40ºC to +60ºC. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning.

- Flexible and expandable design, From 1-21 channel capacity
- Expandable 1 or more additional channels at a time, Re-configurable equipment
- 380-512MHz, 132MHz of operating bandwidth
- Temperature compensation, Ensures frequency stability
- High Attenuation, Minimizes desense and interference
- Ultra-low insertion losses, Low coupling and bridging losses
- Continuous high power handling capability, 150 watts – 24/7

Electrical Specifications	XTC-38-72	XTC-38-74	XTC-38-76	XTC-38-78	XTC-38-7-10	XTC-38-7-12
Frequency Range, MHz	380-512	380-512	380-512	380-512	380-512	380-512
Bandwidth, MHz	132	132	132	132	132	132
Number of Channels	2	4	6	8	10	12
Cavity Diameter, in	6.625	6.625	6.625	6.625	6.625	6.625
Min. Channel Sep., kHz	125	125	125	125	125	125
Isolation Min., TX-TX, dB	80	80	80	80	80	80
Isolation Min., Ant-TX, dB	70	70	70	70	70	70
Max. Insertion Loss Per Chan., dB	4.1	5.2	5.7	6.0	6.2	6.4
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N Female	N Female	N Female	N Female	N Female	N Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60
Mechanical Specifications	**XTC-38-72**	**XTC-38-74**	**XTC-38-76**	**XTC-38-78**	**XTC-38-7-10**	**XTC-38-7-12**
Height, in (H x W X D) (mm)	86.5 x 24 x 36 (2197 x 610 x 914) (In X Rack)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	DEPENDS ON SET-UP AND RACK DESIGN					

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-38-41	XTC-38-42	XTC-38-43	XTC-38-45	XTC-38-48
6.625" Cavity	XTC-38-71	XTC-38-72	XTC-38-73	XTC-38-75	XTC-38-78
10" Cavity	XTC-38-01	XTC-38-02	XTC-38-03	XTC-38-05	XTC-38-08

EXPANDABLE TRANSMIT COMBINER 380-512MHz

XTC-Expandable Transmit Combiner Series—10" Cavity

Our Expandable Transmit Combiners can combine from 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 125 kHz TX-TX spacing or 75 kHz spacing while using 10" cavities. Each cavity is constructed using a gold Alodine finish, silver-plated loops, silver-plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40ºC to +60ºC. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning.

- Flexible and expandable design, From 1-21 channel capacity
- Expandable 1 or more additional channels at a time, Re-configurable equipment
- 380-512MHz, 132MHz of operating bandwidth
- Temperature compensation, Ensures frequency stability
- High Attenuation, Minimizes desense and interference
- Ultra-low insertion losses, Low coupling and bridging losses
- Continuous high power handling capability, 150 watts – 24/7

Electrical Specifications	XTC-38-02	XTC-38-04	XTC-38-06	XTC-38-08	XTC-38-0-10	XTC-38-0-12
Frequency Range, MHz	380-512	380-512	380-512	380-512	380-512	380-512
Bandwidth, MHz	132	132	132	132	132	132
Number of Channels	2	4	6	8	10	12
Cavity Diameter, in	10	10	10	10	10	10
Min. Channel Sep., kHz	75	75	75	75	75	75
Isolation Min., TX-TX, dB	80	80	80	80	80	80
Isolation Min., Ant-TX, dB	70	70	70	70	70	70
Max. Insertion Loss Per Chan., dB	4.3	5.4	6.0	6.6	6.9	7.1
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N Female	N Female	N Female	N Female	N Female	N Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60
Mechanical Specifications	**XTC-38-02**	**XTC-38-04**	**XTC-38-06**	**XTC-38-78**	**XTC-38-7-10**	**XTC-38-0-12**
Height, in (H x W X D) (mm)	79.5 x 24 x 36 (2019 x 610 x 914) (In X Rack)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	DEPENDS ON SET-UP AND RACK DESIGN					

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-38-41	XTC-38-42	XTC-38-43	XTC-38-45	XTC-38-48
6.625" Cavity	XTC-38-71	XTC-38-72	XTC-38-73	XTC-38-75	XTC-38-78
10" Cavity	XTC-38-01	XTC-38-02	XTC-38-03	XTC-38-05	XTC-38-08

EXPANDABLE TRANSMIT COMBINER 746-1000MHz

XTC-Expandable Transmit Combiner Series—7" Cavity

Our Expandable Transmit Combiners can combine from 1 to 21 channels. The XTC series of filters incorporates expandability, close frequency spacing and some of the lowest insertion losses in the industry. Using a 6.625" cavity, the XTC can easily support 250 kHz TX-TX spacing. Each cavity is constructed using a gold Alodine finish, silver-plated loops, silver-plated connectors and internal tuning plunger. Additionally, cavities are temperature compensated for operation between -40ºC to +60ºC. Every cavity is equipped with both coarse and fine tuning rods for quick and easy field or lab re-tuning.

- Flexible and expandable design, From 1-21 channel capacity
- Expandable 1 or more additional channels at a time, Re-configurable equipment
- 746-1000MHz, 254MHz of operating bandwidth
- Temperature compensation, Ensures frequency stability
- High Attenuation, Minimizes desense and interference
- Ultra-low insertion losses, Low coupling and bridging losses
- Continuous high power handling capability, 150 watts – 24/7

Electrical Specifications	XTC-74-72	XTC-74-74	XTC-74-76	XTC-74-78	XTC-74-7-10	XTC-74-7-12
Frequency Range, MHz	746-1000	746-1000	746-1000	746-1000	746-1000	746-1000
Bandwidth, MHz	254	254	254	254	254	254
Number of Channels	2	4	6	8	10	12
Cavity Diameter, in	6.625	6.625	6.625	6.625	6.625	6.625
Min. Channel Sep., kHz	250	250	250	250	250	250
Isolation Min., TX-TX, dB	80	80	80	80	80	80
Isolation Min., Ant-TX, dB	70	70	70	70	70	70
Max. Insertion Loss Per Chan.	3.1	4.1	4.4	4.9	5.2	5.5
Continuous Power Input, Watts	150	150	150	150	150	150
Connectors	N Female	N Female	N Female	N Female	N Female	N Female
VSWR	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60
Mechanical Specifications	**XTC-74-72**	**XTC-74-74**	**XTC-74-76**	**XTC-74-78**	**XTC-74-7-10**	**XTC-74-7-12**
Height, in (H x W X D) (mm)	86.5 x 24 x 20.7 (2197 x 610 x 526) (In X Rack)					
Mounts in 19" Standard Rack	Yes	Yes	Yes	Yes	Yes	Yes
Weight	DEPENDS ON SET-UP AND RACK DESIGN					

Order Information	Single Channel	2 - Channel	3 - Channel	5 - Channel	8 - Channel
4" Cavity	XTC-74-41	XTC-74-42	XTC-74-43	XTC-74-45	XTC-74-48
6.625" Cavity	XTC-74-71	XTC-74-72	XTC-74-73	XTC-74-75	XTC-74-78
10" Cavity	XTC-74-01	XTC-74-02	XTC-74-03	XTC-74-05	XTC-74-08

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
Email: sales@comprodcom.com
Fax: 1.800.554.1033

EXPANDABLE TX COMBINER 80 SERIES — UHF, 746-960 MHz

X-PASS EXPANDABLE TX COMBINER 80 SERIES

The 80 Series 8" Cavity Transmit Combiner features X-Pass, plug-and-play technology and is fully expandable and reconfigurable. These combiners are designed to offer engineers and technicians many options when designing or upgrading a site.

Electrical Specifications	80-FF-8XILPI
Frequency Range, MHz	Call for Information
Frequency Separation, kHz	200 min
Number of Channels	1 to 6+
Isolation, dB	
TX to TX @ 200k Sep.	(S)40 (D)70
ANT to TX @ 600k Sep.	(S)30 (D)60
Insertion Loss	See Insertion Loss Chart
TX input Return Loss, dB	1.25:1 min
Power / Channel, Watts	Low=60 / High=100
Mechanical Specifications	
Construction / Finish	Aluminum/Gold/Black
Input Connector	N-Female
Mounting	EIA standard 19"
Temperature Range, °C	-30 to +60
Dimensions	
Cavity Diameter, in (mm)	8 (203)
Width, in (mm)	19 (483)
Depth, in (mm)	UHF 16.5 (419) 700-900MHz 21 (534)
Height, in (mm)	8.7 (221)
Number of Channels (Single cavity per channel)	Rack Units | Weight lbs. (kg)
1	5 11 (05)
2	5 22 (10)
3	10 33 (15)
4	10 44 (20)
5	15 55 (25)
6	15 66 (30)

UHF 100 WATT TYPICAL INSERTION LOSS, dB

	Frequency Separation (kHz)		
Number of Channels	200	400	600 and +
2	4	3	2.8
3	4.3	3.2	2.85
4	4.6	3.3	2.95
5	4.8	3.4	3
6	5.1	3.5	3.15

UHF 60 WATT TYPICAL INSERTION LOSS, dB

(TX to TX Separations under 400kHz, please use a 100 Watt unit - that spacing requires an external load)

	Frequency Separation (kHz)		
Number of Channels	200	400	600 and +
2	Use 100W	3	2.8
3		3.2	2.85
4		3.3	2.95
5		3.4	3
6		3.5	3.15

700-900MHz 100 WATT TYPICAL INSERTION

	Frequency Separation (kHz)		
Number of Channels	200	500	800 and +
2	3.5	2.5	2.2
3	4.2	3	2.4
4	4.5	3.4	2.5
5	4.8	3.6	2.6
6	5.3	3.7	2.8

Ordering Format

8N	-	FF	-	8X	ILX	ILB	P	I

Example: Model # 81-45-84BAHD

TX Combiner, 1 cavity per channel, UHF 450-470MHz, 4 Channel, Each X-pass cavity set @ 1.5 dB, No BP Cavity, 100 Watt system, Dual Isolators

8N	1,2	Number of Cavities per TX
FF	First 2 digits of Freq.	38-94=380-940 MHz
8X	1-6	Number of Channels
ILX	A=1 B=1.5 C=2	X Pass Insertion Loss
ILB	A=N B=.5 C=1 D=1.5	Band Pass Insertion Loss
P	L/H	Power level
I	S/D	Single or Double Isolator Stages

COMPROD
Simplifying RF Solutions
www.comprodcom.com

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Email: sales@comprodcom.com
Fax: 1.800.554.1033

XTR

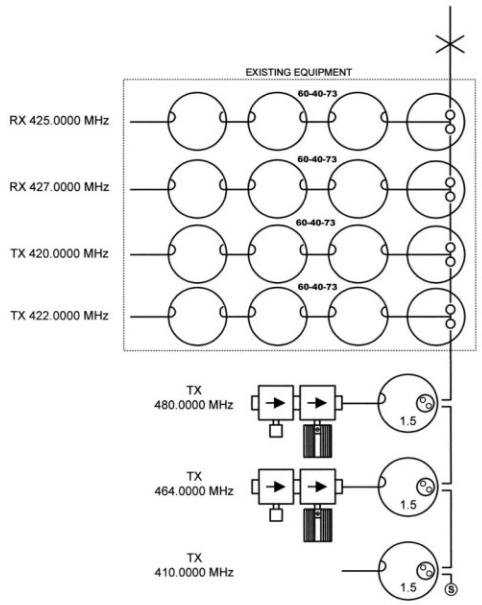
EXPANDABLE, TRANSMIT-RECEIVE, MULTICOUPLER

Our X-Pass technology can combine your TX & RX frequencies onto the same antenna. Our System Design Department can integrate any combination of frequency, and close frequency spacing, minimizing the system's physical space, and maximizing the efficiency of your system.

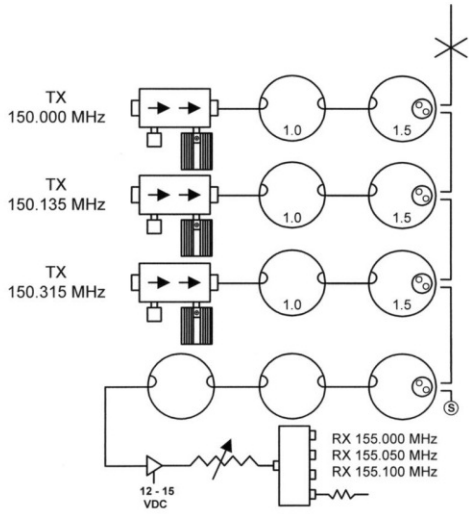
Each of our system designs comes with a full intermodulation study that examines the Intermodulation products followed with a customized solution specific to your clients needs. There are no off-the-shelf solutions - each system is custom tailored to your exact requirements.

Contact Comprod for a free customized system quotation. TX and RX frequencies will be required.

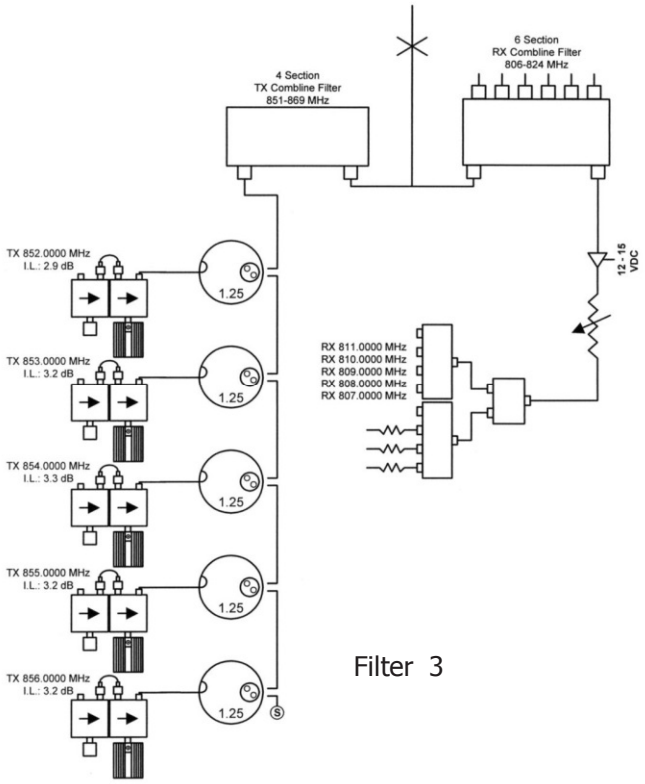
Here are some design examples:



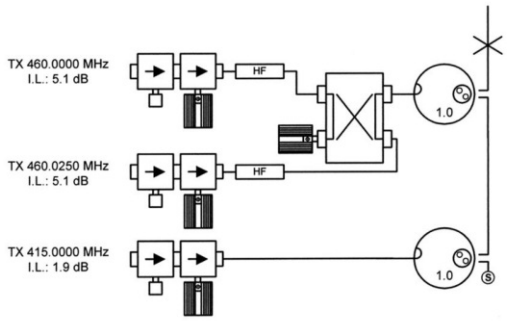
Filter 1



Filter 2



Filter 3

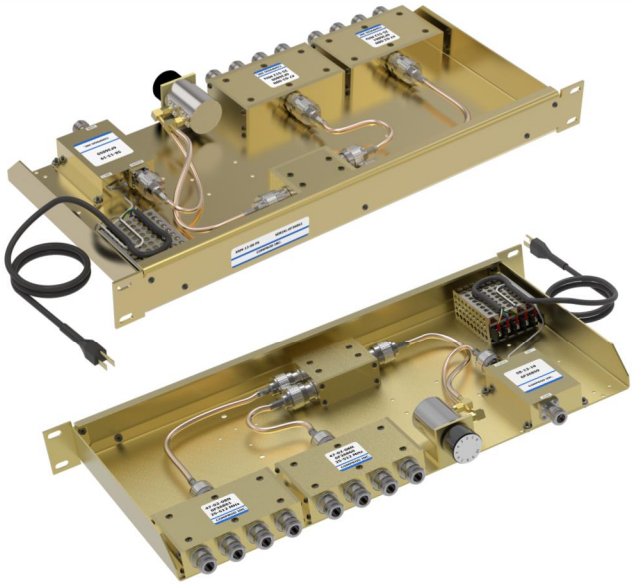


Filter 4

RECEIVER MULTICOUPLER 138-225MHz

XRM-FF-PP Series

Comprod Inc. Expandable Receiver Multicouplers are simple and compact. They are available in 2, 4, 8, 12 and 16 port configurations. This is an affordable means of combining multiple RX frequencies onto the same antenna. We offer three mounting versions: our standard 19" rack, a tray mounted or a cavity mounted version. Each unit consists of a power splitter and an RF amplifier. Every Expandable Receiver Multicoupler has the optional plug-in power supply.



- Design
- Simple and cost effective
- Mounting
- 19" rack mount (RM)
- Cavity mount (CM)
- Tray mount (TRM)
- Optional 100-240 VAC power supply (PS)

Electrical Specifications	XRM-13-02	XRM-13-04	XRM-13-08	XRM-13-16
Frequency Range, MHz	138-225	138-225	138-225	138-225
Pass Band, MHz	3-8	3-8	3-8	3-8
Number of Channels	2	4	8	16
RX/RX Isolation, dB	23+	23+	23+	23+
Amplifier Gain, dB	18	18	18	18
Amplifier Noise Figure, dB	1.9	1.9	1.9	1.9
Amplifier Bias Voltage, VDC	+13-28	+13-28	+13-28	+13-28
Amplifier Current Draw, mA	130	130	130	130
Nominal Impedance, Ohms	50	50	50	50
Max VSWR	1.25:1	1.25:1	1.25:1	1.25:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	XRM-13-02	XRM-13-04	XRM-13-08	XRM-13-16
Mounting	RM / CM	RM / CM	RM / CM	RM / CM
Connectors (Optional)	N (BNC)	N (BNC)	N (BNC)	N (BNC)
Weight, lbs	5-12	5-12	5-12	5-12

Order Information	Rack Mount	Cavity Mount	Tray Mount	Power Supply
XRM-13-02	XRM-13-02RM	XRM-13-02CM	XRM-13-02TRM	XRM-13-02PS
XRM-13-04	XRM-13-04RM	XRM-13-04CM	XRM-13-04TRM	XRM-13-04PS
XRM-13-08	XRM-13-08RM	XRM-13-08CM	XRM-13-08TRM	XRM-13-08PS
XRM-13-16	XRM-13-16RM	XRM-13-16CM	XRM-13-16TRM	XRM-13-16PS

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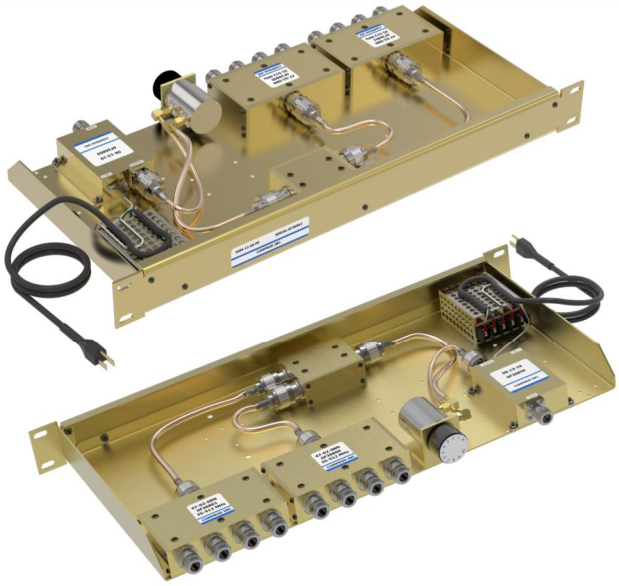
RECEIVER MULTICOUPLER 300-512MHZ

XRM-FF-PP Series

Comprod Inc. Expandable Receiver Multicouplers are simple and compact. They are available in 2, 4, 8, 12 and 16 port configurations. This is an affordable means of combining multiple RX frequencies onto the same antenna. We offer three mounting versions: our standard 19" rack, a tray mounted or a cavity mounted version. Each unit consists of a power splitter and an RF amplifier. Every Expandable Receiver Multicoupler has the optional plug-in power supply.



- Design
  - Simple and cost effective
- Mounting
  - 19" rack mount (RM)
  - Cavity mount (CM)
  - Tray mount (TRM)
- Optional 100-240 VAC power supply (PS)

Electrical Specifications	XRM-38-02	XRM-38-04	XRM-38-08	XRM-38-16
Frequency Range, MHz	380-512	380-512	380-512	380-512
Pass Band, MHz	3-10	3-10	3-10	3-10
Number of Channels	2	4	8	16
RX/RX Isolation, dB	23+	23+	23+	23+
Amplifier Gain, dB	18.5	18.5	18.5	18.5
Amplifier Noise Figure, dB	1.9	1.9	1.9	1.9
Amplifier Bias Voltage, VDC	+13-28	+13-28	+13-28	+13-28
Amplifier Current Draw, mA	130	130	130	130
Nominal Impedance, Ohms	50	50	50	50
Max VSWR	1.25:1	1.25:1	1.25:1	1.25:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	XRM-38-02	XRM-38-04	XRM-38-08	XRM-38-16
Mounting	RM / CM	RM / CM	RM / CM	RM / CM
Connectors (Optional)	N (BNC)	N (BNC)	N (BNC)	N (BNC)
Weight, lbs	5-12	5-12	5-12	5-12

Order Information	Rack Mount	Cavity Mount	Tray Mount	Power Supply
XRM-38-02	XRM-38-02RM	XRM-38-02CM	XRM-38-02TRM	XRM-38-02PS
XRM-38-04	XRM-38-04RM	XRM-38-04CM	XRM-38-04TRM	XRM-38-04PS
XRM-38-08	XRM-38-08RM	XRM-38-08CM	XRM-38-08TRM	XRM-38-08PS
XRM-38-16	XRM-38-16RM	XRM-38-16CM	XRM-38-16TRM	XRM-38-16PS

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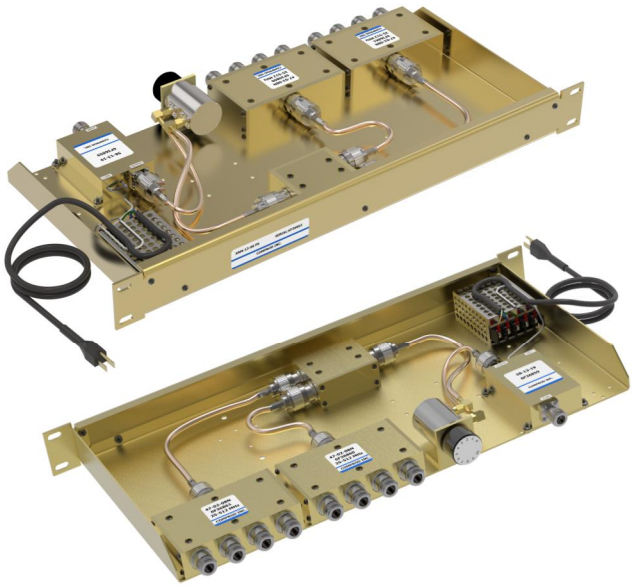
RECEIVER MULTICOUPLER 806-896MHZ

XRM-FF-PP Series

Comprod Inc. Expandable Receiver Multicouplers are simple and compact. They are available in 2, 4, 8, 12 and 16 port configurations. This is an affordable means of combining multiple RX frequencies onto the same antenna. We offer three mounting versions: our standard 19" rack, a tray mounted or a cavity mounted version. Each unit consists of a power splitter and an RF amplifier. Every Expandable Receiver Multicoupler has the optional plug-in power supply.



- Design
  - Simple and cost effective
- Mounting
  - 19" rack mount (RM)
  - Cavity mount (CM)
  - Tray mount (TRM)
- Optional 100-240 VAC power supply (PS)

Electrical Specifications	XRM-80-02	XRM-80-04	XRM-80-08	XRM-80-16	XRM-80-32
Frequency Range, MHz	806-896	806-896	806-896	806-896	806-896
Pass Band, MHz	3-18	3-18	3-18	3-18	3-18
Number of Channels	2	4	8	16	32
RX/RX Isolation, dB	23+	23+	23+	23+	23+
Amplifier Gain, dB	19	19	19	19	19
Amplifier Noise Figure, dB	1.9	1.9	1.9	1.9	1.9
Amplifier Bias Voltage, VDC	+13-28	+13-28	+13-28	+13-28	+13-28
Amplifier Current Draw, mA	130	130	130	130	130
Nominal Impedance, Ohms	50	50	50	50	50
Max VSWR	1.25:1	1.25:1	1.25:1	1.25:1	1.25:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	XRM-80-02	XRM-80-04	XRM-80-08	XRM-80-16	XRM-80-32
Mounting	RM / CM	RM / CM	RM / CM	RM / CM	RM / CM
Connectors (Optional)	N (BNC)	N (BNC)	N (BNC)	N (BNC)	N (BNC)
Weight, lbs	5-12	5-12	5-12	5-12	5-12

Order Information	Rack Mount	Cavity Mount	Tray Mount	Power Supply
XRM-80-02	XRM-80-02RM	XRM-80-02CM	XRM-80-02TRM	XRM-80-02PS
XRM-80-04	XRM-80-04RM	XRM-80-04CM	XRM-80-04TRM	XRM-80-04PS
XRM-80-08	XRM-80-08RM	XRM-80-08CM	XRM-80-08TRM	XRM-80-08PS
XRM-80-16	XRM-80-16RM	XRM-80-16CM	XRM-80-16TRM	XRM-80-16PS

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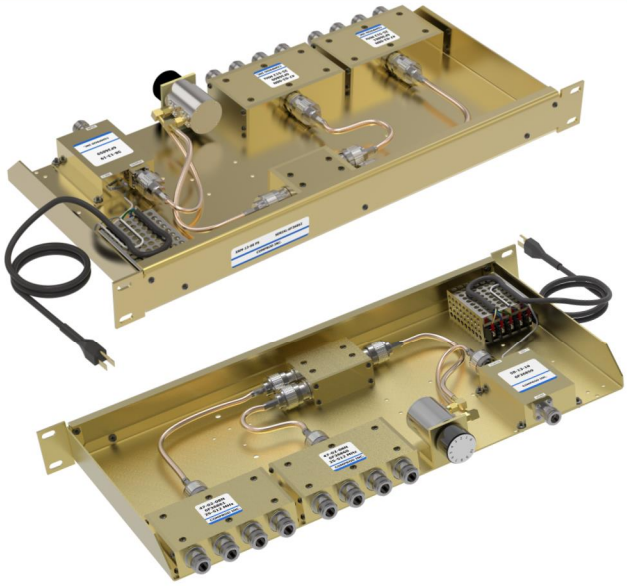
RECEIVER MULTICOUPLER 896-960MHZ

XRM-FF-PP Series

Comprod Inc. Expandable Receiver Multicouplers are simple and compact. They are available in 2, 4, 8, 12 and 16 port configurations. This is an affordable means of combining multiple RX frequencies onto the same antenna. We offer three mounting versions: our standard 19" rack, a tray mounted or a cavity mounted version. Each unit consists of a power splitter and an RF amplifier. Every Expandable Receiver Multicoupler has the optional plug-in power supply.



- Design
- Simple and cost effective
- Mounting
- 19" rack mount (RM)
- Cavity mount (CM)
- Tray mount (TRM)
- Optional power supply (PS)

Electrical Specifications	XRM-90-02	XRM-90-04	XRM-90-08	XRM-90-16	XRM-90-32
Frequency Range, MHz	896-960	896-960	896-960	896-960	896-960
Pass Band, MHz	3-15	3-15	3-15	3-15	3-15
Number of Channels	2	4	8	16	32
RX/RX Isolation, dB	23+	23+	23+	23+	23+
Amplifier Gain, dB	19	19	19	19	19
Amplifier Noise Figure, dB	1.9	1.9	1.9	1.9	1.9
Amplifier Bias Voltage, VDC	+13-28	+13-28	+13-28	+13-28	+13-28
Amplifier Current Draw, mA	130	130	130	130	130
Nominal Impedance, Ohms	50	50	50	50	50
Max VSWR	1.25:1	1.25:1	1.25:1	1.25:1	1.25:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	XRM-90-02	XRM-90-04	XRM-90-08	XRM-90-16	XRM-90-32
Mounting	RM / CM	RM / CM	RM / CM	RM / CM	RM / CM
Connectors (Optional)	N (BNC)	N (BNC)	N (BNC)	N (BNC)	N (BNC)
Weight, lbs	5-12	5-12	5-12	5-12	5-12

Order Information	Rack Mount	Cavity Mount	Tray Mount	Power Supply
XRM-90-02	XRM-90-02RM	XRM-90-02CM	XRM-90-02TRM	XRM-90-02PS
XRM-90-04	XRM-90-04RM	XRM-90-04CM	XRM-90-04TRM	XRM-90-04PS
XRM-90-08	XRM-90-08RM	XRM-90-08CM	XRM-90-08TRM	XRM-90-08PS
XRM-90-16	XRM-90-16RM	XRM-90-16CM	XRM-90-16TRM	XRM-90-16PS

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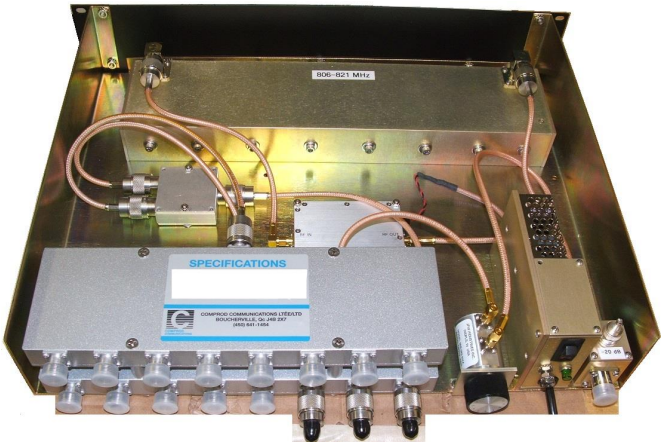
Fax: 1.800.554.1033

EXPANDABLE RECEIVER MULTICOUPLER — UHF, 794-824 MHz

Expandable Receiver Multicoupler 90 Series



Comprod Inc.'s Expandable Receiver Multicoupler provides an affordable means of combining multiple Receiver frequencies onto the same antenna. They are available in 2, 4, 8, 12 and 16 port configurations.

Key features:

- A low noise amplifier provides gain across the frequency band
- Low noise figure and low intermodulation generation
- Features up to 16 ports (24 and 32 port versions are available)
- -30 dB signal sampler port that can also be used to inject a signal

Electrical Specifications

Frequency Band, MHz	UHF	794-824
Number of output ports	2 to 16 (24 and 32 port versions available)	2 to 16 (24 and 32 port versions available)
Input Preselector Bandwidth Options	2 or 3 MHz Bandwidth 380-512 MHz	794 - 824 MHz, 3/6/12 MHz BW 806 - 821 MHz, 15 MHz BW 806 - 824 MHz, 18 MHz BW 794 - 824 MHz, 30 MHz BW
VSWR	1.5:1	1.5:1
Amplifier Gain, dB	18.5 typical	19 typical
Amplifier Output IP3, dB	+40 Min	+40 Min
Amplifier Noise Figure, dB	1.9 typical	1.9 typical
Manual Attenuation Selection	0 to –10dB in 1 dB steps	0 to –10dB in 1 dB steps
RX to RX Isolation, dB	>20	>20
TX Band Rejection, dB	>40 at 2MHz TX-RX	>80
Connector, Input	N (Female)	N (Female)
Connector, Output	N (Female)	N (Female)
Connector, Signal Sampler	BNC (Female)	BNC (Female)
Power Input, Standard	110/220 VAC 50/60Hz 10W	110/220 VAC 50/60Hz 10W
AC Power Input Connector	Hardwired 3-wire	Hardwired 3-wire
DC Power (optional), VDC	+13-28	+13-28
Mounting	EIA Standard 19” 3 RU	EIA Standard 19” 2 RU
Temperature Range C	-30 to +60 C	-30 to +60 C

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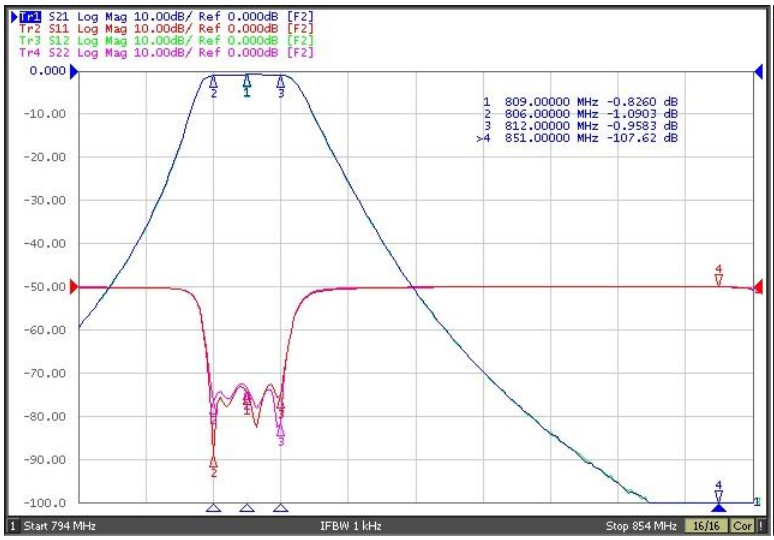
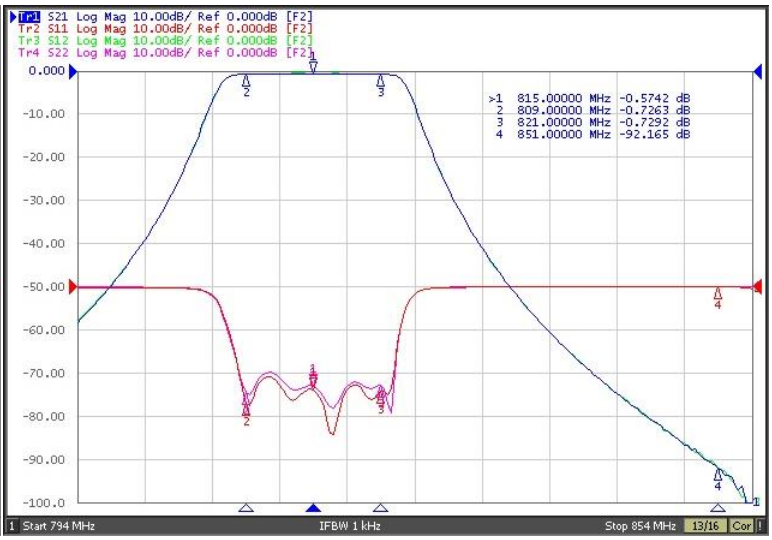
EXPANDABLE RECEIVER MULTICOUPLER — UHF, 794-824 MHz

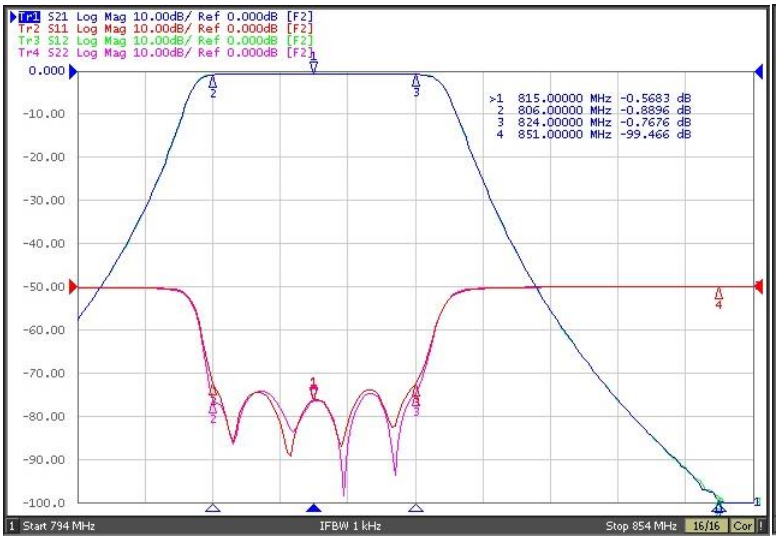
800 MHz Pass: 806-812MHz (6MHz)



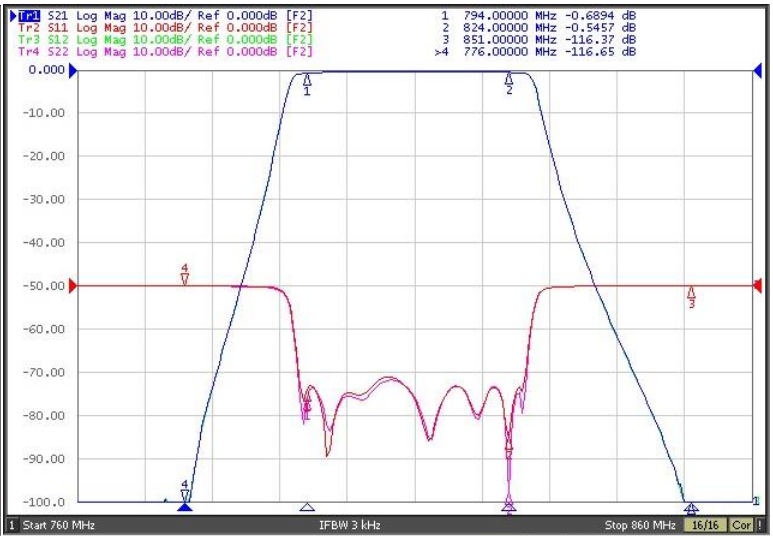
800MHz Pass: 809-821MHz (12MHz)



800MHz Pass: 806-824MHz (18MHz)



800MHz Pass: 794-824MHz (30MHz)



Ordering Format:

9	W	-	FF	-	PP	C	BB

9	Series 90	
W	1,2	Number of Pass Windows
FF	76	794-806 MHz
	85	806-824 MHz
	First 2 digits of Freq. 38/40/43/45/47	380-512 MHz
PP	2,4,8,16,24	Number of Ports
C	N/B	N or BNC Connectors
BB	02/03/06/12/15/18/30	Bandwidth in MHz

Example: Model # 91-85-8N18

RX Multicoupler, 1 Pass Window, 806MHz,
8 Output Ports, N female, 18 MHz Bandwidth

TTA, Tower Top Amplifier — UHF, 794-824 MHz

Comprod Inc. Tower- Top Amplifier (TTA) systems provide superior receiver system performance and excellent electrical reliability in a rugged, weather-proof design. The tower unit is housed in a seamless cylindrical aluminum housing with a durable finish to repel both weather and solar energy. The aluminum shell connector plate provide much lower electrical resistance than competing stainless steel housings, enhancing the performance of the internal lightning surge protection. A high permeability internal magnetic shield provides protection against damage from lightning-induced magnetic pulses and is many times more effective than a stainless steel enclosure.

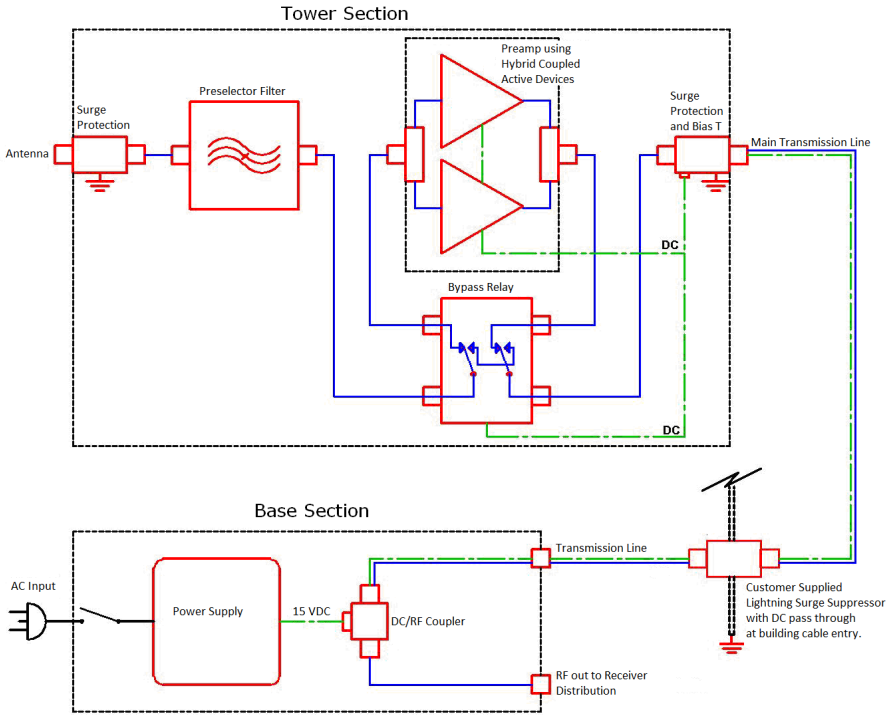
The tower housing has two drain holes to release any water due to condensation build up. RF connections stay weather-resistant longer as a result of the protection provided by a 360° drip - edge. Superior electrical performance starts with a highly selective Combline preselector that provides excellent out-of-band rejection with minimum loss. Our preamplifier uses PHEMT (GaAs FET) device technology to provide low noise performance (1.6dB typical) and high intermodulation immunity (+39 dBm OIP3).

For greater reliability, the preamplifier uses a pair of hybrid -coupled devices to provide amplifier redundancy. This circuit provides useful gain should only one device be operational. The preamp features internal transient suppression that complements lightning surge protection provided on all TTA ports.

In addition to amplifier redundancy, full amplifier bypass capability is provided. A hermetically sealed, high-reliability bypass relay will fully remove the amplifier from the circuit and provide a non-amplified connection from the antenna to keep the system up and running even if the preamplifier totally ceases operation. Bypass mode is activated when DC power to the tower unit is disabled.

The base unit is housed in a 19” rack assembly that includes the power supply and DC injector to send DC (12 V) over the transmission line to operate the tower unit. The base unit has jacks for measurement of tower unit Current using a standard digital multi-meter. Type N connectors provided. Tower unit mounting hardware included.

Building- entry lightning surge suppressor w/DC pass-thru is recommended but not supplied.



TTA, Tower Top Amplifier — UHF, 794-902 MHz

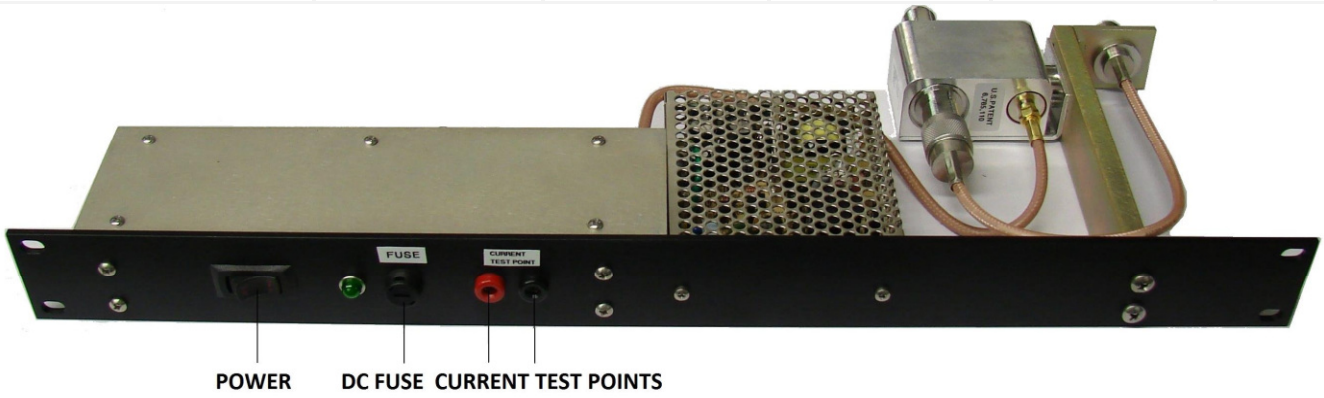
Tower Section

Frequency Range, MHz	UHF (406-512)	794-806	792-824	806-824	896-902
Bandwidth, MHZ	2-3	3, 6, 10, 12	32	18	6
Gain, dB	16-19	16-19	16-19	16-19	16-19
Noise Figure, dB	2-4	2-4	2-4	2-4	3-4
3rd Order Intercept Point, dBm	+40	+40	+40	+40	+40
Connectors	N Female	N Female	N Female	N Female	N Female
Power, VDC	+13-28	+13-28	+13-28	+13-28	+13-28
Housing Diameter, in	16 x 14 x 6	7	7	7	7
Housing Length, in	N/A	21	21	21	21
Finish	Grey Anodize	Grey Anodize	Grey Anodize	Grey Anodize	Grey Anodize
Temperature Range	- 40° to +50° C	- 40° to +50° C	- 40° to +50° C	- 40° to +50° C	- 40° to +50° C
Weight, lbs	45 with clamps	45 with clamps	45 with clamps	45 with clamps	45 with clamps

Base Unit

Size (H,W,D) in	1.75 x 19 x 6
Finish, Front	Black
Connectors	Transmission Line, RF Output
Connector Type	N Female
Power Input, Standard	110/220 VAC 50/60Hz, 12W
Weight, lbs	5
DC Power (optional), VDC	13-28
Mounting	EIA Standard 19" 1 RU
Temperature Range, C	-0 to +50

Ordering Information	TTA-40-00	TTA-70-00	TTA-79-00	TTA-80-00	TTA-90-00
Frequency, MHz	406-512	794-806	792-824	806-824	896-902



RECEIVER AMPLIFIERS 138-960MHZ

Models: 58-13-19 (138-174 MHz)
58-40-19 (406-512 MHz)
58-74-19 (740-960 MHz)

The Comprod Inc. line of low noise, medium power robust amplifiers are designed for unconditionally stable performance in professional communications systems. Featuring rugged construction, internal voltage regulator, hybrid-combined redundant amplifier pairs and low pass filters. The amplifiers will provide higher system dynamic range for fixed receiver systems, tower mounted amplifiers, or Bi-Directional in-building repeaters and boosters.

- High Gain, Low Noise - Maximum performance with minimum noise.
- Filtering on DC Terminals - Greater than 70 dB attenuation from as low as 5 MHz to several GHz

Electrical Specifications	58-13-19	58-40-19	58-74-19
Frequency Range, MHz	100-225	300-520	700-1000
Bandwidth, MHz	125	220	300
Amplifier Type	Low Noise/Medium Power	Low Noise/Medium Power	Low Noise/Medium Power
Typical Gain, dB	18	18.5	19
Amplifier Noise figure, dB	1.9	1.9	1.9
3rd Order Intercept, dBm	+41	+41	+41
Output 1 dB Compression Point, dBm	25.0	25.0	25.0
Input/output Return loss, dB	-18 Typ.	-18 Typ.	-18 Typ.
Operating Voltage, VDC	12.5-28	12.5-28	12.5-28
Typical DC Current Draw, mA	130	130	130
Standard Connectors (Optional)	N Female (SMA)	N Female (SMA)	N Female (SMA)
Maximum Input Power, dBm	+15	+15	+15
Temperature Range, C	-20 to +70	-20 to +70	-20 to +70

Mechanical Specifications	
Height, in (mm)	4.375 (111)
Width, in (mm)	2.5 (63.5)
Depth, in (mm) (including Connectors)	0.9375 (23.8)
Weight, lb (kg)	0.42 (0.187)
Finish	Alodine (yellow)

Order Information	58-13-19	58-40-19	58-74-19
Frequency MHz	138-174	406-512	740-960

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
Email: sales@comprodcom.com
Fax: 1.800.554.1033

LOW POWER SINGLE ISOLATORS

21-FF-PP

Comprod Inc. Isolators are among the best in the industry for blocking the transfer of RF power flow in the opposite direction. Low to medium power, and total reliability are two of the characteristics of these isolators. Used for intermodulation panels, protecting your transmitters from reflected power and providing extra isolation are just a few of the possible applications. These isolators can be combined with a variety of loads, 5/25/60/100/150/250 watt combinations, as well as combined with second harmonic filters for Hybrid Combiners (HTCs).

- High Isolation
- Minimizes intermodulation products
- Low loss
- Maximizes system performance
- Continuous Power
- Physical size and materials used maximize the performance across the operating band

Electrical Specifications	21-13-XX	21-40-XX	21-80-XX
Frequency Range, MHz	138-174	406-512	746-960
Frequency Split, MHz	30	24	24
Bandwidth	2.5% Cent. Freq.	1% Cent. Freq.	2.5% Cent. Freq.
Continuous Power Input, Watts	100	100	100
Connectors	N Female	N Female	N Female
Output Load Size	5/25/60/100/150	5/25/60/100/150	5/25/60/100/150
Reverse Isolation, dB	30	30	30
Typical Insertion Loss, dB	0.45	0.35	0.25
VSWR	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	21-13-XX	21-40-XX	21-80-XX
Dimensions, in (H x W X D)	3.94 x 3.75 x 1.78	4.19 x 3.99 x 1.78	5.63 x 3.15 x 1.84
Weight, lbs	1.40	1.41	1.32
Mounting	Cavity / Plate / Cabinet / Rack Mount Are All Available		

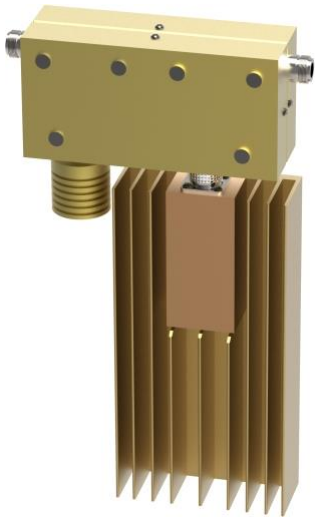
Order Information	5 Watt Load	25 Watt Load	60 Watt Load	100 Watt Load	150 Watt Load
21-13-XX	21-13-05	21-13-25	21-13-60	21-13-100	21-13-150
21-40-XX	21-40-05	21-40-25	21-40-60	21-40-100	21-40-150
21-80-XX	21-80-05	21-80-25	21-80-60	21-80-100	21-80-150

XX = load size

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
Email: sales@comprodcom.com
Fax: 1.800.554.1033

LOW POWER DUAL ISOLATORS

22-FF-PP



Comprod Inc. Isolators are among the best in the industry for blocking the transfer of RF power flow in the opposite direction. Low to medium power and total reliability are two of the characteristics of these isolators. Used for intermodulation panels, protecting your transmitters from reflected power, and providing extra isolation are just a few of the possible applications. These isolators can be combined with a variety of loads, 5/25/60/100/150/250 watt combinations, and combined with second harmonic filters for Hybrid Combiners (HTCs).

- High Isolation
- Minimizes intermodulation products
- Low loss
- Maximizes system performance
- Continuous Power
- Physical size and materials used maximize the performance across the operating band

Electrical Specifications	22-13-XX	22-40-XX	22-80-XX
Frequency Range, MHz	138-174	406-512	746-960
Frequency Split, MHz	30	24	24
Bandwidth	2.5% Cent. Freq.	1% Cent. Freq.	2.5% Cent. Freq.
Continuous Power Input, Watts	100	100	100
Connectors	N Female	N Female	N Female
Output Load Size	5/25/60/100/150	5/25/60/100/150	5/25/60/100/150
Reverse Isolation, dB	50	50	50
Typical Insertion Loss, dB	0.9	0.7	0.5
VSWR	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	22-13-XX	22-40-XX	22-80-XX
Dimensions, in (H x W X D)	3.94 x 6.25 x 1.78	4.19 x 8.75 x 1.78	5.63 x 6.13 x 1.84
Weight, lbs	2.6	2.8	2.75
Mounting	Cavity / Plate / Cabinet / Rack Mount Are All Available		

Order Information	5 Watt Load	25 Watt Load	60 Watt Load	100 Watt Load	150 Watt Load
22-13-XX	22-13-05	22-13-25	22-13-60	22-13-100	22-13-150
22-40-XX	22-40-05	22-40-25	22-40-60	22-40-100	22-40-150
22-80-XX	22-80-05	22-80-25	22-80-60	22-80-100	22-80-150

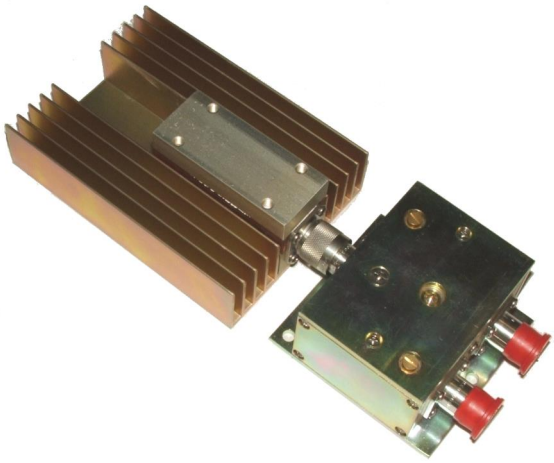
XX = load size

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
Email: sales@comprodcom.com
Fax: 1.800.554.1033

HIGH POWER SINGLE ISOLATORS

41-FF-PP

Comprod Inc. Isolators are among the best in the industry for blocking the transfer of RF power flow in the opposite direction. High power and total reliability are two of the characteristics of these isolators. Used for intermodulation panels, protecting your transmitters from reflected power, and providing extra isolation are just a few of the possible applications. These isolators can be combined with a variety of loads, 5/25/60/100/150/250 watt combinations, and combined with second harmonic filters for Hybrid Combiners (HTCs).



- High Isolation
- Minimizes intermodulation products
- Low loss
- Maximizes system performance
- Continuous Power
- Physical size and materials used maximize the performance across the operating band

Electrical Specifications	41-13-XX	41-40-XX	41-80-XX
Frequency Range, MHz	138-174	406-512	746-960
Frequency Split, MHz	30	24	24
Bandwidth	2.5% Cent. Freq.	1% Cent. Freq.	2.5% Cent. Freq.
Continuous Power Input, Watts	150	250	150
Connectors	N Female	N Female	N Female
Output Load Size	5/25/60/100/150	5/25/60/100/150	5/25/60/100/150
Reverse Isolation, dB	30	30	30
Typical Insertion Loss, dB	0.45	0.45	0.25
VSWR	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	41-13-XX	41-40-XX	41-80-XX
Dimensions, in (H x W X D)	3.94 x 3.75 x 1.78	4.19 x 3.99 x 1.78	5.63 x 3.15 x 1.84
Weight, lbs	1,40	1,41	1,32
Mounting	Cavity / Plate / Cabinet / Rack Mount Are All Available		

Order Information	5 Watt Load	25 Watt Load	60 Watt Load	100 Watt Load	150 Watt Load
41-13-XX	41-13-05	41-13-25	41-13-60	41-13-100	41-13-150
41-40-XX	41-40-05	41-40-25	41-40-60	41-40-100	41-40-150
41-80-XX	41-80-05	41-80-25	41-80-60	41-80-100	41-80-150

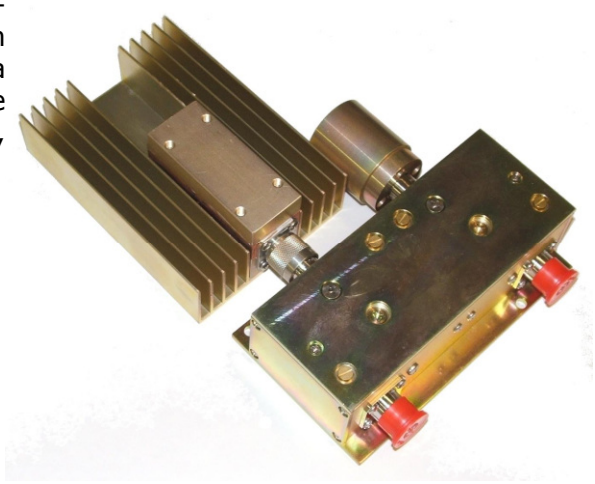
XX = load size

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
Email: sales@comprodcom.com
Fax: 1.800.554.1033

HIGH POWER DUAL ISOLATORS

42-FF-PP

Comprod Inc. Isolators are among the best in the industry for blocking the transfer of RF power flow in the opposite direction. High power and total reliability are two of the characteristics of these isolators. Used for intermodulation panels, protecting your transmitters from reflected power, and providing extra isolation are just a few of the possible applications. These isolators can be combined with a variety of loads, 5/25/60/100/150/250 watt combinations, and combined with second harmonic filters for Hybrid Combiners (HTCs).



- High Isolation
- Minimizes intermodulation products
- Low loss
- Maximizes system performance
- Continuous Power
- Physical size and materials used maximize the performance across operating band

Electrical Specifications	42-13-XX	42-40-XX	42-80-XX
Frequency Range, MHz	138-174	406-512	746-960
Frequency Split, MHz	30	24	24
Bandwidth	2.5% Cent. Freq.	1% Cent. Freq.	2.5% Cent. Freq.
Continuous Power Input, Watts	150	250	150
Connectors	N Female	N Female	N Female
Output Load Size	5/25/60/100/150	5/25/60/100/150	5/25/60/100/150
Reverse Isolation, dB	60	60	60
Typical Insertion Loss, dB	0.9	0.7	0.5
VSWR	1.22:1	1.22:1	1.22:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	42-13-XX	42-40-XX	42-80-XX
Dimensions, in (H x W X D)	3.94 x 6.25 x 1.78	4.19 x 8.75 x 1.78	5.63 x 6.13 x 1.84
Weight, lbs	2.6	2.8	2.75
Mounting	Cavity / Plate / Cabinet / Rack Mount Are All Available		

Order Information	5 Watt Load	25 Watt Load	60 Watt Load	100 Watt Load	150 Watt Load
42-13-XX	42-13-05	42-13-25	42-13-60	42-13-100	42-13-150
42-40-XX	42-40-05	42-40-25	42-40-60	42-40-100	42-40-150
42-80-XX	42-80-05	42-80-25	42-80-60	42-80-100	42-80-150

XX = load size

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
Email: sales@comprodcom.com
Fax: 1.800.554.1033

RF LOADS 25-1000MHz

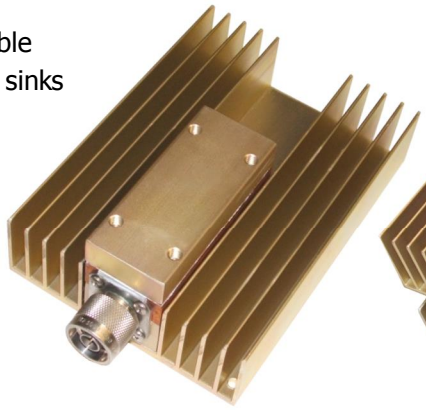
45-05-PP Series

Comprod Inc. continuous power RF Loads have been specifically developed to provide our customers with a product that is extremely reliable. The RF loads are specifically designed to continually absorb reflected power. Our loads are traditionally larger than the industry average. These heavy duty versions provide constant protection to your transmitters with their oversized heat sinks.

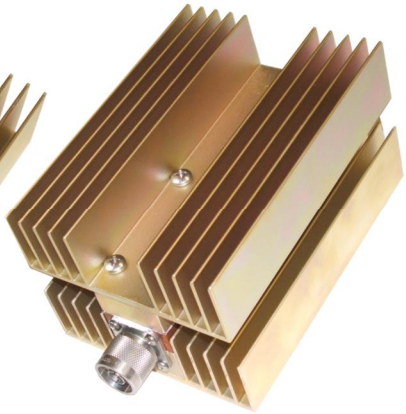
- Excellent return loss
- Continuous duty power
- 24/7 operation
- Extremely reliable
- Oversized heat sinks

45-05-05

45-05-25



45-05-60



45-05-100

45-05-250

Electrical Specifications	45-05-05	45-05-25	45-05-60	45-05-100	45-05-250
Frequency Range, MHz	5 - 1000	5 - 1000	5 - 1000	5 - 1000	5 - 1000
Load Type	Dry	Dry	Dry	Dry	Dry
Cooling	Natural Air Convention				
Duty Cycle	Continuous				
Connectors	N Male	N Male	N Male	N Male	N Female
Impedance, Ohms	50	50	50	50	50
Maximum RF Input Power, Watts	5	25	60	100	250
Resistor Element Rating, Watts	60	60	250	250	250
Heatsink Area, in (cm)	9.2 (59)	57 (368)	172.7 (1114)	334.7 (2159)	898.2 (5795)
Heatsink Power Density, Watts/inches	0.54	0.44	0.35	0.3	0.28
VSWR	1.05:1	1.05:1	1.05:1	1.05:1	1.05:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60

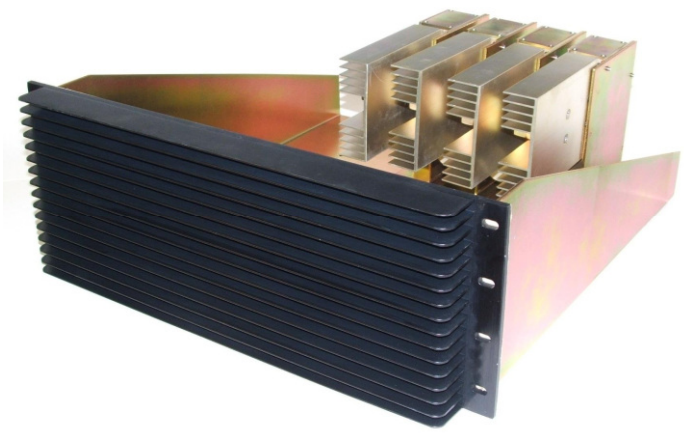
Mechanical Specifications	45-05-05	45-05-25	45-05-60	45-05-100	45-05-250
Dimensions, in (H x W X D)	1.31 x 1.50	5.06 x 1.50	6.3 x 3.9 x 1.6	6.3 x 3.9 x 2.9	7.4 x 8.00 x 4.3
Weight, lbs	0.18	0.64	1.28	2.00	7.52

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
Email: sales@comprodcom.com
Fax: 1.800.554.1033

HIGH POWER HYBRID COMBINERS 138-174MHz

HTC-13-OX

Our Hybrid Transmit Combiners are designed for compact, close frequency installations. Our HTCs are perfect for very closely spaced frequency transmitters. These devices are ideal for use when our X-Pass technology does not provide adequate performance and isolation for very close TX-TX spacing. Hybrid Combiners are also ideal for intermodulation panels, providing extra protection with their second harmonic filters, or when physical space is at a premium, and for providing extra isolation between two very close transmitters.



- High Isolation
- Minimizes intermodulation products
- Low loss
- Maximizes system performance
- Continuous power
- Physical size and materials used maximizes the performance across the operating band

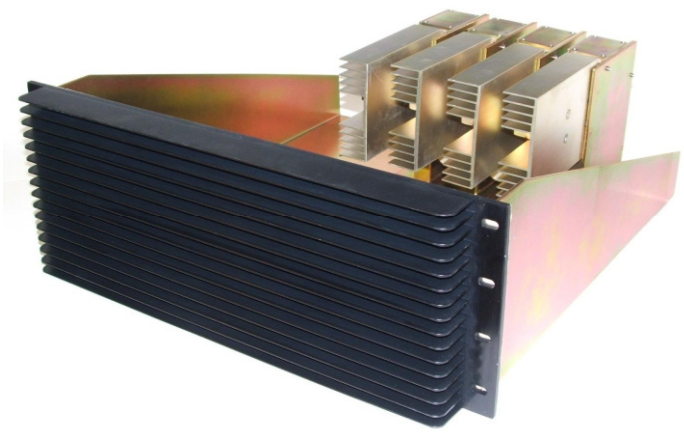
Electrical Specifications	HTC-13-04HS	HTC-13-02HS	HTC-13-04HD	HTC-13-02HD
Frequency Range, MHz	138-174	138-174	138-174	138-174
Frequency Split, MHz	30	30	24	24
Bandwidth	2.5% Cent. Freq.	2.5% Cent. Freq.	1% Cent. Freq.	1% Cent. Freq.
Channels	4	2	4	2
Continuous Power Input, Watts	100	100	100	100
Connectors	N Female	N Female	N Female	N Female
Isolator	Single	Single	Dual	Dual
Isolation TX/TX, dB	65	65	100	100
Isolation Ant/TX	35+	35+	70+	70+
Typical Insertion Loss, dB	6.8	3.5	7.0	3.7
VSWR - Input/output	1.1:1 / 1.3:1	1.1:1 / 1.3:1	1.1:1 / 1.3:1	1.1:1 / 1.3:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	HTC-13-04HS	HTC-13-02HS	HTC-13-04HD	HTC-13-02HD
Dimensions, in (H x W X D)	6.5 x 19 x 18	6.5 x 19 x 18	6.5 x 19 x 18	6.5 x 19 x 18
Weight, lbs	11.8	9.3-11	12.8	9.3-11
Mounting	19" Rack Mount	19" Rack Mount	19" Rack Mount	19" Rack Mount

HIGH POWER HYBRID COMBINERS 406-512MHz

HTC-40-OX

Our Hybrid Transmit Combiners are designed for compact, close frequency installations. Our HTCs are perfect for very closely spaced frequency transmitters. These devices are ideal for use when our X-Pass technology does not provide adequate performance and isolation for very close TX-TX spacing. Hybrid Combiners are also ideal for intermodulation panels, providing extra protection with their second harmonic filters, or when physical space is at a premium, and for providing extra isolation between two very close transmitters.



- High Isolation
- Minimizes intermodulation products
- Low loss
- Maximizes system performance
- Continuous power
- Physical size and materials used maximizes the performance across the operating band

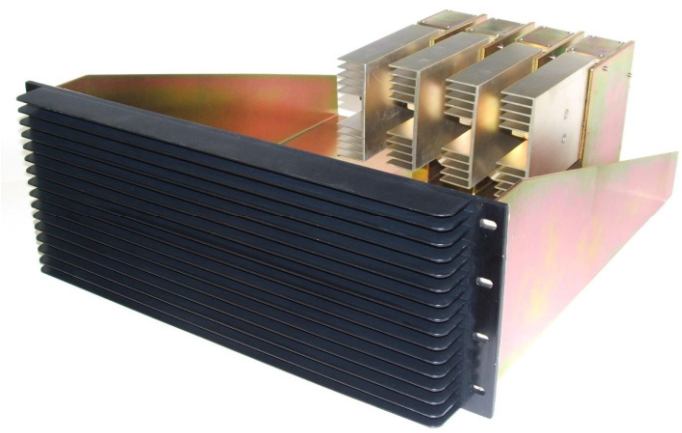
Electrical Specifications	HTC-40-04HS	HTC-40-02HS	HTC-40-04HD	HTC-40-02HD
Frequency Range, MHz	406-512	406-512	406-512	406-512
Frequency Split, MHz	30	30	24	24
Bandwidth	2.5% Cent. Freq.	2.5% Cent. Freq.	1% Cent. Freq.	1% Cent. Freq.
Channels	4	2	4	2
Continuous Power Input, Watts	100	100	100	100
Connectors	N Female	N Female	N Female	N Female
Isolator	Single	Single	Dual	Dual
Isolation TX/TX, dB	65	65	100	100
Isolation Ant/TX	35+	35+	70+	70+
Typical Insertion Loss, dB	6.8	3.5	7.0	3.7
VSWR - Input/output	1.1:1 / 1.3:1	1.1:1 / 1.3:1	1.1:1 / 1.3:1	1.1:1 / 1.3:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	HTC-40-04HS	HTC-40-02HS	HTC-40-04HD	HTC-40-02HD
Dimensions, in (H x W X D)	6.5 x 19 x 18	6.5 x 19 x 18	6.5 x 19 x 18	6.5 x 19 x 18
Weight, lbs	11.8	9.3-11	12.8	9.3-11
Mounting	19" Rack Mount	19" Rack Mount	19" Rack Mount	19" Rack Mount

HIGH POWER HYBRID COMBINERS 806-960MHz

HTC-80-OX

Our Hybrid Transmit Combiners are designed for compact, close frequency installations. Our HTCs are perfect for very closely spaced frequency transmitters. These devices are ideal for use when our X-Pass technology does not provide adequate performance and isolation for very close TX-TX spacing. Hybrid Combiners are also ideal for intermodulation panels, providing extra protection with their second harmonic filters, or when physical space is at a premium, and for providing extra isolation between two very close transmitters.



- High Isolation
- Minimizes intermodulation products
- Low loss
- Maximizes system performance
- Continuous power
- Physical size and materials used maximizes the performance across the operating band

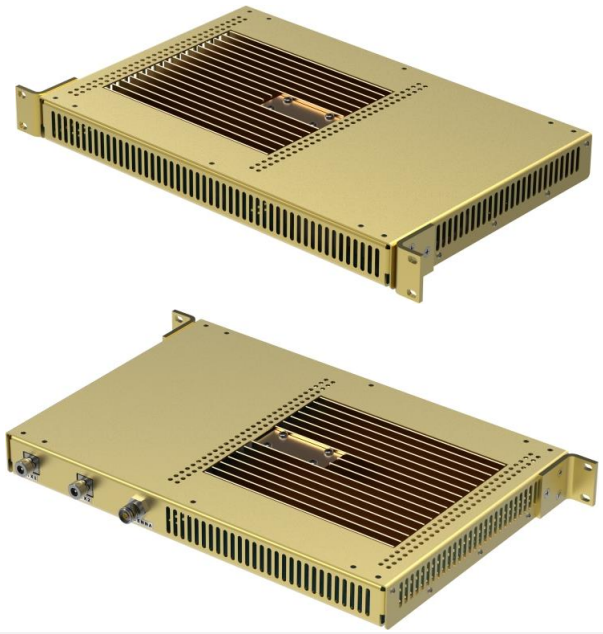
Electrical Specifications	HTC-80-04HS	HTC-80-02HS	HTC-80-04HD	HTC-80-02HD
Frequency Range, MHz	806-960	806-960	806-960	806-960
Frequency Split, MHz	30	30	24	24
Bandwidth	2.5% Cent. Freq.	2.5% Cent. Freq.	1% Cent. Freq.	1% Cent. Freq.
Channels	4	2	4	2
Continuous Power Input, Watts	100	100	100	100
Connectors	N Female	N Female	N Female	N Female
Isolator	Single	Single	Dual	Dual
Isolation TX/TX, dB	65	65	100	100
Isolation Ant/TX	35+	35+	70+	70+
Typical Insertion Loss, dB	6.8	3.5	7.0	3.7
VSWR - Input/output	1.1:1 / 1.3:1	1.1:1 / 1.3:1	1.1:1 / 1.3:1	1.1:1 / 1.3:1
Temperature ºC	-40 to +60	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	HTC-80-04HS	HTC-80-02HS	HTC-80-04HD	HTC-80-02HD
Dimensions, in (H x W X D)	6.5 x 19 x 18	6.5 x 19 x 18	6.5 x 19 x 18	6.5 x 19 x 18
Weight, lbs	11.8	9.3-11	12.8	9.3-11
Mounting	19" Rack Mount	19" Rack Mount	19" Rack Mount	19" Rack Mount

HYBRID TRANSMIT COMBINER 806-960MHz

HTC-90-O2DLP

Our Hybrid Transmit Combiners are designed for compact, close frequency installations. Our HTCs are perfect for very closely spaced frequency transmitters. These devices are ideal for use when our X-Pass technology does not provide adequate performance and isolation for very close TX-TX spacing. Hybrid Combiners are also ideal for intermodulation panels, providing extra protection with their second harmonic filters, or when physical space is at a premium or is constrained, and for providing extra isolation between two very close transmitters.



- High Isolation
- Minimizes intermodulation products
- Low loss
- Maximizes system performance
- Continuous power
- Physical size and materials used maximizes the performance across the operating band.

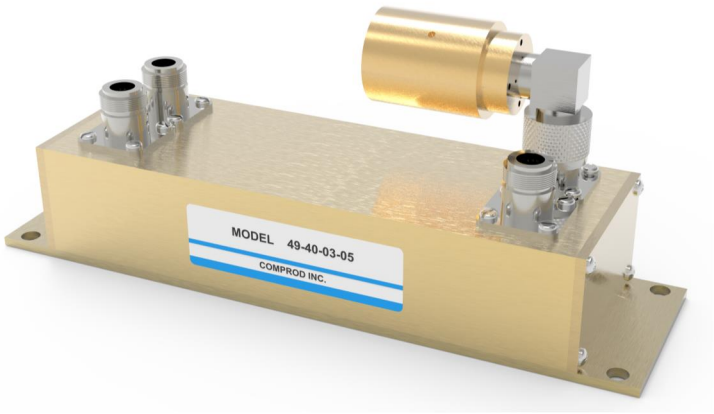
Electrical Specifications	HTC-90-02DLP
Frequency Range, MHz	896-960
Channels	2
Maximum Power Per Channel, Watts	50
Connectors	N Female
Isolator	Single
Isolation TX/TX, dB	70
Isolation Ant/TX, dB	50
Typical Insertion Loss, dB	3.7
Maximum Input VSWR	1.22:1
Maximum Output VSWR	1.3:1
Temperature ºC	-40 to +80
Impedance, Ohms	50
Transmit Antenna Return Loss, dB	18

Mechanical Specifications	
Height, in (mm)	1.75 (44.5)
Width, in (mm)	19 (483)
Depth, in (mm)	11.25 (286)
Weight, lb (kg)	8.8 (4.0)
Mounting Information	19” Rack Mount, 1 Rack Unit

HYBRID DIRECTIONAL COUPLERS 138-960MHz

49-FF-YY-XX Series

Comprod Inc. offers a full line of Hybrid Directional Couplers. The full range of decoupling values allows balanced power division and distribution. These couplers are bidirectional and are well suited for two-way communications systems. A full line of Tri-Band models is available for distribution of VHF, UHF and 800 MHz via a single transmission line. Standard finish is gold Alodine.



- Low Insertion Loss
- High Isolation between ports
- Excellent VSWR
- Tri-Band and other models are available and customizable. Please contact a Comprod Inc. Technical support technician for consultation.

Model With No Load	Model With 5 Watt Load	Model With 25 Watt Load	Frequency Range	Decoupling (dB)	Insertion Loss (dB)	Power Split Ratio (%)
49-13-03-00	49-13-03-05	49-13-03-25	138-174MHz	-3.0, ±0.7	-3.0, ±0.3	50 / 50
49-13-48-00	49-13-48-05	49-13-48-25	138-174MHz	-4.8, ±0.7	-1.8, ±0.3	67 / 33
49-13-06-00	49-13-06-05	49-13-06-25	138-174MHz	-6.0, ±1.0	-1.2, ±0.2	75 / 25
49-13-07-00	49-13-07-05	49-13-07-25	138-174MHz	-7.0, ±1.0	-1.0, ±0.2	80 / 20
49-13-10-00	49-13-10-05	49-13-10-25	138-174MHz	-10.0, ±1.0	-0.5, ±0.2	90 / 10
49-13-20-00	49-13-20-05	49-13-20-25	138-174MHz	-20.0, ±1.0	-0.3 max.	99 / 1
49-38-03-00	49-38-03-05	49-38-03-25	380-512MHz	-3.0, ±0.7	-3.0, ±0.3	50 / 50
49-38-48-00	49-38-48-05	49-38-48-25	380-512MHz	-4.8, ±0.7	-1.8, ±0.3	67 / 33
49-38-06-00	49-38-06-05	49-38-06-25	380-512MHz	-6.0, ±1.0	-1.2, ±0.2	75 / 25
49-38-07-00	49-38-07-05	49-38-07-25	380-512MHz	-7.0, ±1.0	-1.0, ±0.2	80 / 20
49-38-10-00	49-38-10-05	49-38-10-25	380-512MHz	-10.0, ±1.0	-0.5, ±0.2	90 / 10
49-38-15-00	49-38-15-05	49-38-15-25	380-512MHz	-15.0	-0.2 max.	97 / 3
49-38-20-00	49-38-20-05	49-38-20-25	380-512MHz	-20.0	-0.2 max.	99 / 1
49-38-30-00	49-38-30-05	49-38-30-25	380-512MHz	-30.0	-0.2 max.	99.9 / 0.1
49-74-03-00	49-74-03-05	49-74-03-25	760-960MHz	-3.0, ±0.7	-3.0, ±0.3	50 / 50
49-74-48-00	49-74-48-05	49-74-48-25	760-960MHz	-4.8, ±0.7	-1.8, ±0.3	67 / 33
49-74-06-00	49-74-06-05	49-74-06-25	760-960MHz	-6.0, ±1.0	-1.2, ±0.2	75 / 25
49-74-07-00	49-74-07-05	49-74-07-25	760-960MHz	-7.0, ±1.0	-1.0, ±0.2	80 / 20
49-74-10-00	49-74-10-05	49-74-10-25	760-960MHz	-10.0, ±1.0	-0.5, ±0.2	90 / 10
49-74-15-00	49-74-15-05	49-74-15-25	760-960MHz	-15.0	-0.2 max.	97 / 3
49-74-20-00	49-74-20-05	49-74-20-25	760-960MHz	-20.0	-0.2 max.	99 / 1
49-74-30-00	49-74-30-05	49-74-30-25	760-960MHz	-30.0	-0.2 max.	99.9 / 0.1

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
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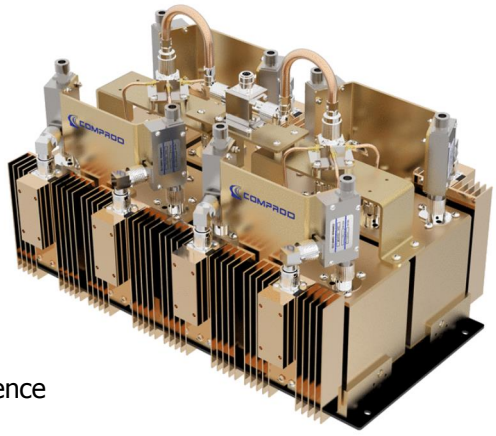
CERAMIC COMBINER 764-776, 851-869 & 935-941 MHz

Star Junction Ceramic Combiner

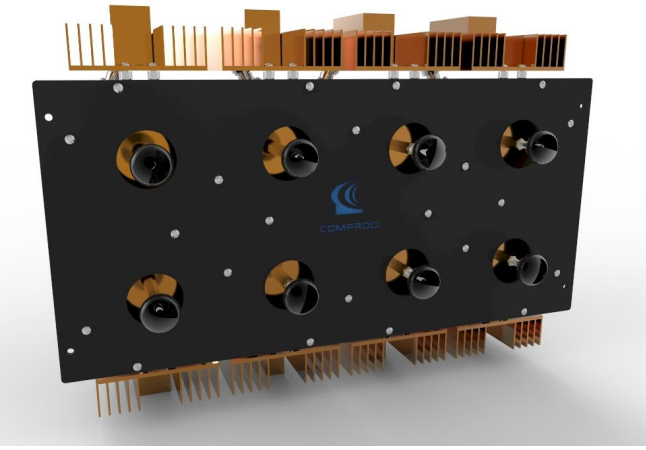


Comprod Inc.'s Ceramic Combiner uses dielectric resonator technology to offer higher performance than standard RF cavities in a much smaller package. It combines 8 channels in only 8.5" of standard 19" rack space. The resonator allows combining of transmitters at a frequency spacing as close as 150 kHz. Lower insertion loss per channel is another result of the sharper filtering performance. Expandable in individual channel increments. Available in Star or X-Pass (expandable) configuration.

- Available for the 764-776, 851-869 and 935-941 MHz bands
- Designed for tight channel spacing
- Lowest insertion loss, high isolation for maximum coverage and reduced interference
- Star Configuration
- Compact, robust design for rapid installations, increased mobility and ease of maintenance

Electrical Specifications	
Frequency Range, MHz	764-776, 851-869 & 935-941
Frequency Spacing, Min.	150 kHz
Temperature Range, °C	-35 to +60
TX to TX Isolation at Minimum Frequency Spacing of 150 kHz	65 dB min (double junction isolator)
ANT to TX Isolation	60 dB min (double junction isolator)
Insertion Loss	1.8 dB – 4 Ch. at 500 kHz 2.5 dB – 16 Ch. at 500 kHz 3.8 dB – 24 Ch. at 500 kHz
Power Input / Channel (Watts)	125
Transmitter Input VSWR (max)	1.25:1

Mechanical Specifications	
Dimensions (HWD), in (mm)	14 x 8.5 x 19 (356 x 216 x 483)
Weight, lb (kg)	8 Channel system 62.17 (28.2)



CERAMIC COMBINER — 764-776, 851-869 & 935-941 MHz

X-Pass Ceramic Combiner

Comprod Inc.'s Ceramic Combiner uses dielectric resonator technology to offer higher performance than standard RF cavities in a much smaller package. It combines 4 channels in only 7.75" of standard 19" rack space. The resonator allows combining of transmitters at a frequency spacing as close as 150 kHz. Lower insertion loss per channel is another result of the sharper filtering performance. Expandable in individual channel increments. Available in Star or X-Pass (expandable) configuration.

- Available for the 764-776, 851-869 and 935-941 MHz bands
- Designed for tight channel spacing
- Lowest insertion loss, high isolation for maximum coverage and reduced interference
- Easy field expandability with X-Pass technology - one channel at a time
- Compact, robust design for rapid installations, increased mobility and ease of maintenance

Electrical Specifications	
Frequency Range, MHz	764-776, 851-869 & 935-941
Frequency Spacing, Min.	150 kHz
Temperature Range, °C	-35 to +60
TX to TX Isolation at Minimum Frequency Spacing of 150 kHz	65 dB min (double junction isolator)
ANT to TX Isolation	60 dB min (double junction isolator)
Insertion Loss	1.8 dB – 4 Ch. at 500 kHz 2.5 dB – 16 Ch. at 500 kHz 3.8 dB – 24 Ch. at 500 kHz
Power Input / Channel (Watts)	125
Transmitter Input VSWR (max)	1.25:1

Mechanical Specifications	
Dimensions (HWD), in (mm)	7.75 x 19 x 14 (197 x 483 x 356)
Weight, lb (kg)	4 Channel system 32 (15)

DRXC	-	FF	-	XX	N
DRXC	Dielectric Resonator X-Pass				
FF	Frequency band: 76=764-776 85=851-869 93=935-940				
XX	Number of Channels				
N	N Female Connectors				

Example: Model # RDXC-85-04N

Ceramic Combiner, 851-869 MHz, 4 Channel N Connectors

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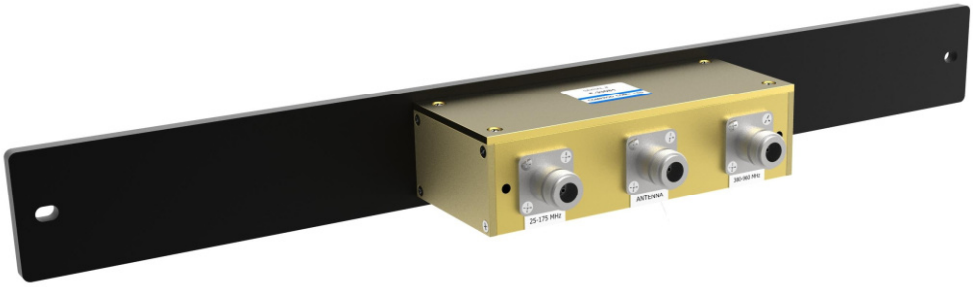
X-BAND COUPLER 25-960MHz

Comprod Inc. Cross Band Couplers are designed for easy installation, reducing coaxial runs, and for in-building applications with multi-band antennas. They allow multiple bands to share the same transmission lines. They are available in VHF, UHF and 800/900MHz bands. They can be tower mounted (TM), rack mounted (RM), tray-mounted (TRM) or stand alone.



Electrical Specifications		XBC-02-38	XBC-02-38R	XBC-38-80	XBC-38-80R	XBC-38-80RX
Frequency Range, MHz	1ST	25-175	25-175	380-512	380-512	380-512
	2nd	380-960	380-960	806-960	806-960	806-960
Typical Loss, dB	1ST	0.35	0.35	0.20	0.35	0.30
	2nd	0.50	0.50	0.20	0.50	0.50
Isolation, dB		40	40	40	40	40
Power Rating, Watts	1ST	250	RX Only	250	RX Only	250
	2nd	250	RX Only	250	RX Only	RX Only
Connectors		N Female				
VSWR		1.25:1				
Temperature ºC		-40 to +60	-40 to +60	-40 to +60	-40 to +60	-40 to +60

Mechanical Specifications	XBC-02-38	XBC-02-38R	XBC-38-80	XBC-38-80R	XBC-38-80RX
Dimensions	DEPENDS on Mounting Configuration				
Rack Mount	DEPENDS on Mounting Configuration				
Tower Mount	DEPENDS on Mounting Configuration				

Order Information	19" Rack Mount	Tower Mount	Tray Mount	Without Bracket
XBC-02-38	XBC-02-38-RM	XBC-02-38-TM	XBC-02-38-TRM	XBC-02-38-WB
XBC-02-38R	XBC-02-38R-RM	XBC-02-38R-TM	XBC-02-38R-TRM	XBC-02-38R-WB
XBC-38-80	XBC-38-80-RM	XBC-38-80-TM	XBC-38-80-TRM	XBC-38-80-WB
XBC-38-80R	XBC-38-80R-RM	XBC-38-80R-TM	XBC-38-80R-TRM	XBC-38-80R-WB
XBC-38-80RX	XBC-38-80RX-RM	XBC-38-80RX-TM	XBC-38-80RXTRM	XBC-38-80RX-WB

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
Email: sales@comprodcom.com
Fax: 1.800.554.1033

COMBLINE FILTERS / PRESELECTORS 30-960MHz

57-FF-XX Series

Comprod Inc. Combline filters are designed for minimizing interference from adjacent channels and outside systems. They are available in a wide range of bandwidths and frequency splits. Used in front of a wideband receiver multicoupler, the preselectors narrow the passband to the desired bandwidth. Each filter is temperature compensated for operation between -40ºC to +60ºC. Each filter has silver-plated loops, and silver-plated tuning rods. Comprod Inc. preselectors are available in a wide range of frequency splits, bandwidth and cavity sizes.

- Temperature Compensation
- Ensures Frequency Stability
- High Attenuation
- Minimizes desense and interference from adjacent systems

Several other preselectors are also available. They include comblines and our full line of cavity based preselectors. Sizes range from the very compact 1" helical filter to the very selective 6.625" cavity preselector. Please contact a Comprod Inc. Technical support technician for consultation.

Electrical Specifications	57-45-04	57-80-05	57-80-07	57-80-15	57-80-18
Frequency Range, MHz	450-470	766-960	766-960	766-960	766-960
Type	Combline	Combline	Combline	Combline	Combline
Insertion Loss Bandwidth, dB	3	1.5	1.5	0.8	0.8
Pass Bandwidth, MHz	4.0	5.0	7.0	15.0	18.0
Return Loss, dB (VSWR)	20 (1.22)	20 (1.22)	20 (1.22)	20 (1.22)	20 (1.22)
Typical Selectivity, dB @ MHz	38 @ 5	80 @ 45	80 @ 45	70 @ 45	70 @ 45
Temperature Range, ºC	-30 to +60	-30 to +60	-30 to +60	-30 to +60	-30 to +60
Input Power, Watt	RX Only	RX Only	RX Only	RX Only	RX Only
Connectors, Antenna/Output	N-F/N-F	N-F/N-F	N-F/N-F	N-F/N-F	N-F/N-F

Mechanical Specifications	57-45-04	57-80-05	57-80-07	57-80-15	57-80-18
Finish	Black	Black and gold Alodine			
Dimensions H x W x D, in (mm)	5.25 x 19 x 4.5	3.5 x 19 x 6	3.5 x 19 x 6	3.5 x 19 x 6	3.5 x 19 x 6
	(133 x 686 x 114)	(89 x 483 x 152)	(89 x 483 x 152)	(89 x 483 x 152)	(89 x 483 x 152)

Order information: specify working frequency, bandwidth, power and isolation required.

FILTER RACKS AND MOUNTING

Filter Rack Mounting Systems

Comprod Inc. filter racks are designed for flexible, space saving filter systems. Each rack has its own benefits, space constraints, ease of installation and cost effectiveness.

We offer four types of racks:

19 inch Standard Rack

This is a standard 19" rack with mounting holes on either side of the rack for ease of installation. Racks are available in different heights.

X–Rack

The X-Rack was specifically developed for our X-Series Cavities. This rack system allows for maximum cavity installation, but minimizes the amount of physical space that is used. All cavities mount horizontally for easy installation and removal. Most X-Rack systems will be supplied turnkey and pre-assembled for quick installation. The maximum capacity per rack is 21 cavities. Racks are available in different heights.

Stack Rack

The Stack Rack is used when space is at a premium. It must be assembled on-site. Two Stack Racks can hold 40 cavities. All cavities are mounted horizontally, with 4 cavities per row.

Wall-Mount and Cabinets

We have multiple versions of these cabinets and cavity mounts. Please contact us for additional information. Do not hesitate to ask for custom installations.

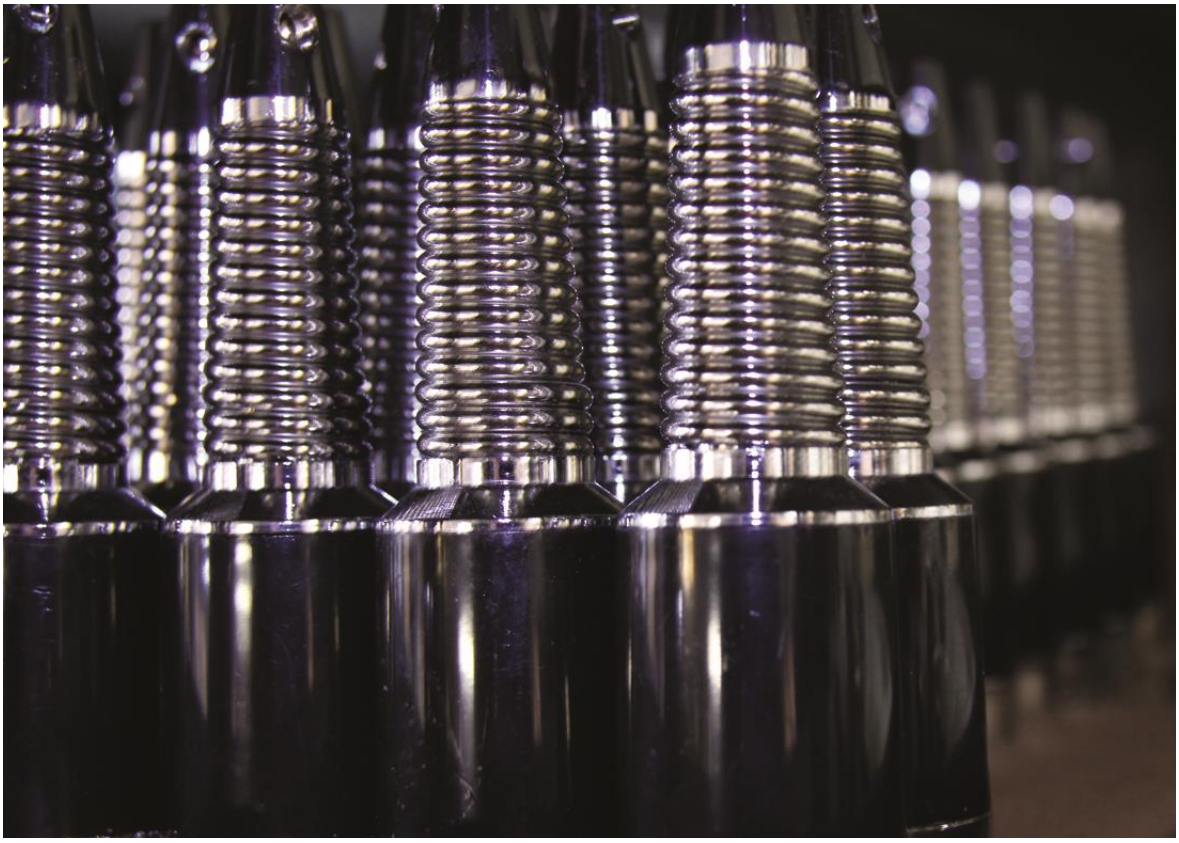
We offer four types of mounting hardware:

- Cabinet Mount - (CM)
- Wall Mount - (WM)
- Rack Mount - (RM)
- Tower Mount - (TM)
- Tray Mount - (TRM)

We supply mounting hardware manufactured to your specifications. Comprod offers the ability to design, and build your custom concepts.

Rack Style	Model Number	Cavity Size	Cavity Length	# of Cavity	Height	Width	Depth
X Rack	19-10-26-13	10"	26"	13	79.5"	24"	28.69"
X Rack	19-07-11-20	6.625"	11.5"	21	86.5"	24"	14.19"
X Rack	19-07-26-20	6.625"	26"	21	86.5"	24"	28.69"
X Rack	19-07-13-20	6.625"	13"	21	86.5"	24"	15.81"
X Rack	19-10-26-19	10"	26"	19	108"	24"	28.69"
Stack Rack	HRV-85	6.625"	26"	20	42.62"	32.75"	30.25"
Stack Rack	HRU-85	6.625"	11.5"	20	42.62"	32.75"	18.25"
19" Standard Rack	Call for Available Dimensions						

Mobile / Transit Antennas



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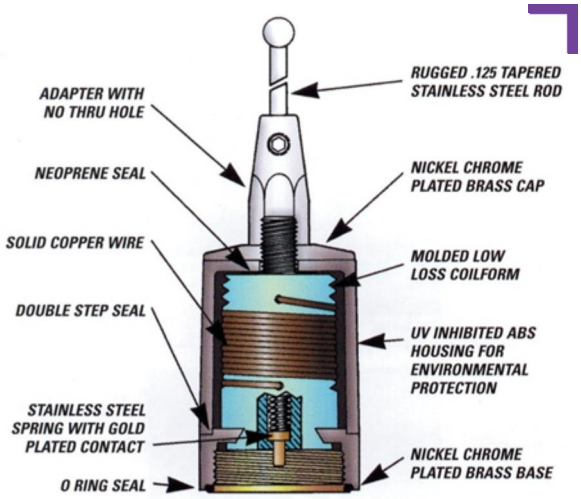
MOBILE/TRANSIT ANTENNAS

Our Mobile and Transit Antenna lines are suited for Government and Utility applications and result in long term, problem-free installations.

We use stainless steel whips, incorporate high-impact ABS, and gold-plated, spring-loaded contacts, ensuring long term reliability and performance.

Our multi-band antennas have been developed for transmitting and receiving Data and Voice.

We have also customized many Wideband and Full-Band VHF, UHF, and 700/800/900 MHz antenna models for unique requirements. Please contact a Comprod Inc. Technical support technician for consultation if you require customized antennas.



Model	Frequency								Gain				Options		
	Low Band	VHF	220	UHF	700	800	900	Dual Band	Unity	2dB	3dB	3.5dB	No Gnd Plane	Black	With Spring
550-75		●	●	●	●	●	●		●					●	
552-75		●	●	●					●					●	●
555-75		●	●	●	●	●	●		●					●	
565-75	●								●					●	●
575-75		●								●			●		●
576-75		●								●			●		●
577-75		●								●			●		●
578-75		●								●					●
580-75		●									●			●	●
583-75				●							●			●	●
590-75					●	●	●				●			●	
591-75					●	●	●				●			●	
592-75					●	●	●				●				
593-75					●	●					●			●	
594-75					●	●					●			●	
595-75					●	●	●					●		●	●
599-75						●	●				●		●	●	●
690-75						●	●	●						●	
692-75							●	●						●	
694-75						●	●	●						●	
696-75							●	●						●	
357-75		●							●						
358-75		●							●						
364-75			●						●						
359-75				●					●						
360-75				●					●						
361-75						●	●		●						
362-75					●	●	●		●						

1/4 WAVE BROADBAND 132-512 MHz

552-75 Series

Performance: These antennas provide unity gain in a broadband design for extra heavy-duty service.

Stylish and Durable: These antennas are manufactured using the best corrosion resistant materials and finishes available. They come with an integrated shock spring and a heavy-duty stainless steel whip that is designed to withstand severe shock.

Reliable: The ABS base has an ultrasonically welded brass insert and a gold-plated spring-loaded contact.

Broadband: This antenna provides 24 MHz of bandwidth using VHF frequencies and 100 MHz of bandwidth at UHF frequencies.

Standard Mounting: All base loaded antennas mate with the standard Motorola C, M type mount .

Electrical Specifications	
Frequency Range, MHz	132-512
Gain, dBd	Unity
Impedance, Ohms	50
Power Rating, Watts	150
Bandwidth / VSWR	VHF - 24MHz @ 2.0:1, UHF - 100MHz @ 2.0:1

Mechanical Specifications	
Radiator: Chrome A	Tapered S.S. whip., 0.125 dia.
Black B	Tapered S.S. whip., 0.10 dia.
Base	Ultrasonic brass insert
Contact	Spring-loaded, gold-plated
Length, in (mm)	21.5 (55) at 138MHz
Mounting	Motorola C, M type

Ordering Information	
Description	**Model**
Chrome finish, triple-plated chrome	552-75A
Black finish	552-75B

1/4 WAVE / VHF—UHF—TRUNKING 136-960 MHz

550-75 Series

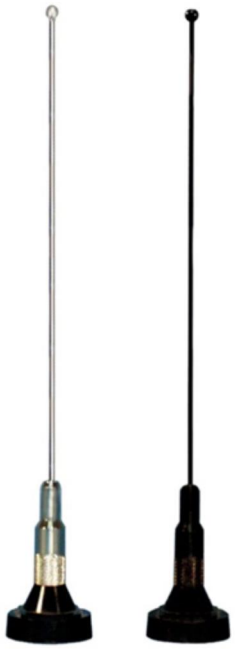
Performance: These antennas provide unity gain in a wideband design for heavy-duty service.

Stylish and Durable: These antennas are manufactured using the best corrosion resistant materials and finishes available. Triple-plated chrome or black finishes are available.

Reliable: The ABS base has an ultrasonically welded brass insert and a gold-plated spring-loaded contact.

Versatile: They are shipped with a 19" whip that can be cut by the customer to any frequency between 136 MHz and 960 MHz according to a cutting chart that is provided. They can also be supplied cut and tested to a specific frequency, at no extra charge.

Standard Mounting: These antennas mate with the standard Motorola NMO type mount, providing an excellent moisture seal even when the antenna is removed.



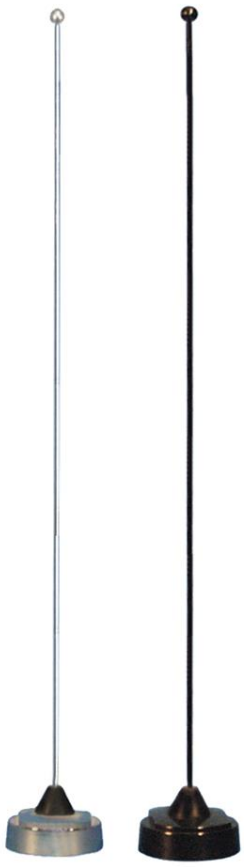
Electrical Specifications	
Frequency Range, MHz	136-960
Gain, dBd	Unity
Impedance, Ohms	50
Power Rating, Watts	150
Bandwidth/VSWR	VHF - 12MHz @ 2.0:1
	UHF - 50MHz @ 2.0:1

Mechanical Specifications	
Radiator	S.S.
Base	ABS, Ultrasonic brass insert
Contact	Spring-loaded contact
Length, in	19 maximum
Mounting	Std. Motorola C, M type

Ordering Information	
Description	**Model**
Chrome finish, triple-plated chrome	550-75A
Black finish	550-75B

ECONOMICAL 132-960 MHz

555-75 Series



Performance: These antennas provide unity gain in a wideband design for heavy-duty service.

Stylish and Durable: These antennas are manufactured using the best corrosion resistant materials and finishes available. Triple-plated chrome or black finishes are available.

Reliable: The ABS base has an ultrasonically welded brass insert and a gold-plated spring-loaded contact.

Versatile: They are shipped with a factory tuned whip cut to size based on the customer specified frequency range between 136 MHz and 960 MHz.

Standard Mounting: These antennas mate with the standard Motorola NMO type mount, providing an excellent moisture seal even when the antenna is removed.

Electrical Specifications	
Frequency Range, MHz	132-960
Gain, dBd	Unity
Impedance, Ohms	50
Power Rating, Watts	200
VSWR	1.5:1
Bandwidth/VSWR	VHF - 12MHz @ 2.0:1
	UHF - 50MHz @ 2.0:1

Mechanical Specifications	
Radiator: Chrome A	Tapered S.S., 0.10 dia.
Black B	Tapered S.S., 0.10 dia.
Base	ABS
Length, in	20 maximum
Mounting	Std. Motorola C, M type

Ordering Information	
Description	**Model**
Chrome finish, triple-plated chrome	555-75A
Black finish	555-75B

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
Email: sales@comprodcom.com
Fax: 1.800.554.1033

LOW BAND 27-54 MHz

565-75 Series

Performance: Unity gain, base loaded antenna with a power handling capacity of 200 Watts.

Stylish and Durable: These antennas are manufactured using the best corrosion resistant materials and finishes available. The base is triple-plated chrome brass with a large insert, molded low loss coil form and a spring-loaded gold-plated contact.

Broadband: The large diameter coil form used in the construction of the loading coil allows for a wider operational bandwidth and better matching characteristics.

Weatherproof: O-ring seals and overlap construction keeps moisture out of the antenna.

Standard Mounting: These antennas mate with the standard Motorola NMO type mount, providing an excellent moisture seal even when the antenna is removed.

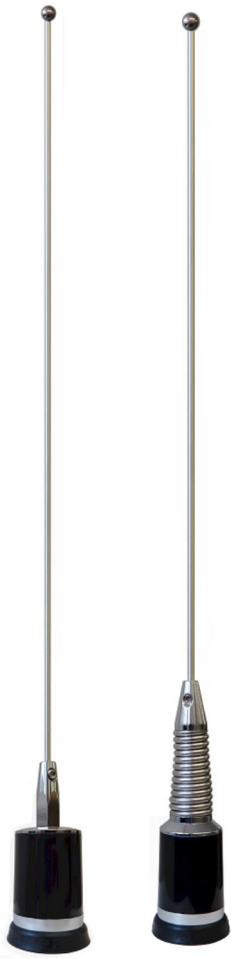
Electrical Specifications	
Frequency Range, MHz	27-54
Gain, dBd	Unity
Impedance, Ohms	50
Power Rating, Watts	200
VSWR	1.5:1
Bandwidth	2% of center freq.

Mechanical Specifications	
Radiator: Chrome A	Tapered S.S., 0.125 dia.
Black B	Tapered S.S., 0.10 dia.
Base	ABS, spring-loaded contact
Length, in	52 Maximum
Mounting	Std. Motorola C, M type

Ordering Information		
Frequency	**Chrome**	**Black**
27-31 MHz	565-75A-1	565-75B-1
30-35 MHz	565-75A-2	565-75B-2
34-40 MHz	565-75A-3	565-75B-3
40-47 MHz	565-75A-4	565-75B-4
47-54 MHz	565-75A-5	565-75B-5

VHF WIDEBAND / 2 dBd — 138-174 MHz

575-75 Series - No-Ground Plane Antenna



Performance: This broadband 1/2-wave antenna provides 2.0 dBd of gain over its operating bandwidth. No ground plane is needed for this antenna.

Stylish and durable: The antennas are manufactured using the best corrosion resistant materials and finishes available. The base is triple-plated chrome brass with a large insert, molded low loss coil form and a spring-loaded, gold-plated contact.

Weatherproof: O-ring seals or Rubber boot option keeps moisture out of the antenna base. Rubber boot avoids scratching/rusting of vehicle if antenna is frequently removed, for maintenance or car wash activities.

Standard Mounting: All base loaded antennas mate with the standard Motorola NMO type mount.

Electrical Specifications	
Frequency Range, MHz	138-174
Gain, dBd	2.0
Impedance, Ohms	50
Power Rating, Watts	75
Bandwidth/VSWR	VHF - 26MHz @ 2.0:1
Mechanical Specifications	
Radiator	17-7 PH S.S.
Base	ABS, spring-loaded contact
Length, in	52 maximum
Mounting	Standard Motorola type 3/4
Ordering Information	
Description	**Model**
Antenna Chrome finish	575-75
Antenna with rubber boot	575-75R
With shock spring	575-75S
With shock spring and rubber boot	575-75SR

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Fax: 1.800.554.1033

VHF WIDEBAND / 2 dBd — 148-174 MHz

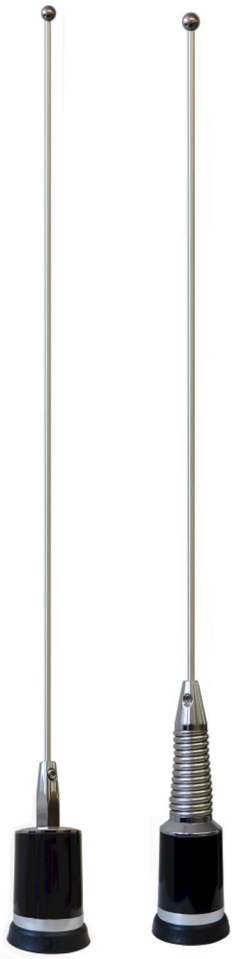
576-75 Series - No-Ground Plane Antenna

Performance: This broadband 1/2-wave antenna provides 2.0 dBd of gain over its operating bandwidth. No ground plane is needed for this antenna.

Stylish and durable: The antennas are manufactured using the best corrosion resistant materials and finishes available. The base is triple-plated chrome brass with a large insert, molded low loss coil form and a spring-loaded, gold-plated contact.

Weatherproof: O-ring seals or Rubber boot option keeps moisture out of the antenna base. Rubber boot avoids scratching/rusting of vehicle if antenna is frequently removed, for maintenance or car wash activities.

Standard Mounting: All base loaded antennas mate with the standard Motorola NMO type mount.



Electrical Specifications	
Frequency Range, MHz	148-174
Gain, dBd	2.0
Impedance, Ohms	50
Power Rating, Watts	150
Bandwidth/VSWR	VHF - 26MHz @ 1.5:1
Mechanical Specifications	
Radiator	17-7 PH S.S.
Base	ABS, spring-loaded contact
Length, in	52 maximum
Mounting	Standard Motorola NMO type
Ordering Information	
Description	**Model**
Antenna Chrome finish	576-75
Antenna with rubber boot	576-75R
With shock spring	576-75S
With shock spring and rubber boot	576-75SR

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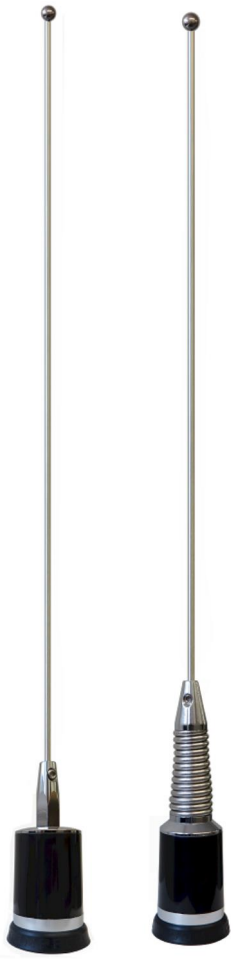
VHF WIDEBAND / 2 dBd — 136-174 MHz

577-75 Series - No-Ground Plane Antenna



Performance: This broadband 1/2-wave antenna provides 2.0 dBd of gain over its operating bandwidth. No ground plane is needed for this antenna.

Stylish and durable: The antennas are manufactured using the best corrosion resistant materials and finishes available. The base is triple-plated chrome brass with a large insert, molded low loss coil form and a spring-loaded, gold-plated contact.

Weatherproof: O-ring seals or Rubber boot option keeps moisture out of the antenna base. Rubber boot avoids scratching/rusting of vehicle if antenna is frequently removed, for maintenance or car wash activities.

Standard Mounting: All base loaded antennas mate with the standard Motorola C, M type mount.

Electrical Specifications	
Frequency Range, MHz	136-174
Gain, dBd	2.0
Impedance, Ohms	50
Power Rating, Watts	75
Bandwidth/VSWR	VHF - 11MHz @ 1.5:1, 19MHz @ 2.0:1

Mechanical Specifications	
Radiator	17-7 PH S.S.
Base	ABS, spring-loaded contact
Length, in	52 maximum
Mounting	Standard Motorola C, M type

Ordering Information		
Description	**Standard Model**	**With Spring**
Antenna Chrome finish	577-75	577-75S
Antenna with rubber boot	577-75R	577-75SR

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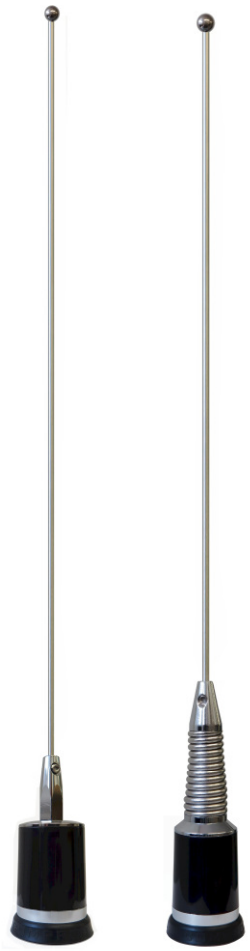
VHF WIDEBAND / 2 dBd — 138-174 MHz

578-75



Performance: This broadband 1/2-wave antenna provides 2.0 dBd of gain over its operating bandwidth.

Stylish and Durable: The antennas are manufactured using the best corrosion resistant materials and finishes available. The base is triple-plated chrome brass with a large insert molded low loss coil form and a spring-loaded, gold-plated contact.

Weatherproof: O-ring seals or Rubber boot option keeps moisture out of the antenna base. Rubber boot avoids scratching/rusting of vehicle if antenna is frequently removed, for maintenance or car wash activities.

Standard Mounting: All base loaded antennas mate with the standard TAD / NMO type mount.

Electrical Specifications	
Frequency Range, MHz	138-174
Gain, dBd	2.0
Impedance, Ohms	50
Power Rating, Watts	100
Bandwidth/VSWR	40MHz, 1.8:1

Mechanical Specifications	
Radiator	S.S.
Base	ABS, spring-loaded contact
Length, in	36.5
Mounting	Standard Motorola NMO

Ordering Information		
Description	**Standard Model**	**With Spring Mount**
Antenna Chrome finish	578-75	578-75S
Antenna with rubber boot	578-75R	578-75SR

VHF / 3 dBd 132-174 MHz

580-75 Series

Performance: 3 dBd gain is achieved with these premium antennas by featuring a 5/8-wave whip with a base loaded matching coil.

Stylish and durable: The antennas are manufactured using the best corrosion resistant materials and finishes available. The base is triple-plated chrome brass with a large insert molded low loss coil form and a spring-loaded, gold-plated contact.

Weatherproof: O-ring seals and overlap construction keeps moisture out of the antenna.

Standard Mounting: All base loaded antennas mate with the standard Motorola NMO type mount.

Electrical Specifications	
Frequency Range, MHz	132-174
Gain, dBd	3.0
Impedance, Ohms	50
Power Rating, Watts	200
VSWR	1.5:1
Bandwidth, MHz	6

Mechanical Specifications	
Radiator: Chrome A	Tapered S.S. whip., 0.125 dia.
Black B	Tapered S.S. whip., 0.10 dia.
Base	ABS, spring-loaded contact
Length, in	55 whip
Mounting	Standard Motorola NMO type

Ordering Information		
Description	**Model**	**With Spring**
Chrome finish, triple-plated chrome	580-75A	580-75AS
Black finish	580-75B	580-75BS

UHF / 3 dBd — 406-512 MHz

583-75 Series

Performance: 3 dBd gain is achieved with these premium antennas by featuring a 5/8-wave whip with a base loaded matching coil.

Stylish and durable: The antennas are manufactured using the best corrosion resistant materials and finishes available. The base is triple-plated chrome brass with a large insert molded low loss coil form and a spring-loaded, gold-plated contact.

Broadband: The large diameter coil form used in the construction of the loading coil allows for a wider operational bandwidth and better matching characteristics.

Weatherproof: O-ring seals or Rubber boot option keeps moisture out of the antenna base. Rubber boot avoids scratching/rusting of vehicle if antenna is frequently removed, for maintenance or car wash activities.

Standard Mounting: All base loaded antennas mate with the standard Motorola NMO type mount.

Electrical Specifications	
Frequency Range, MHz	406-512
Gain, dBd	3.0
Impedance, Ohms	50
Power Rating, Watts	200
Bandwidth at 1.5:1 VSWR, MHz	20

Mechanical Specifications	
Radiator: Chrome A	S.S. whip. 0.10 dia.
Black B	S.S. whip. 0.10 dia.
Base	ABS, spring-loaded contact
Length, in	21 whip
Mounting	Standard Motorola NMO type

Ordering Information

Frequency	Chrome	Chrome and Spring	Chrome and Rubber Boot	Black	Black and Spring	Black and Rubber Boot
406-430MHz	583-75A-1	583-75AS-1	583-75AR-1	583-75B-1	583-75BS-1	583-75BR-1
430-450MHz	583-75A-2	583-75AS-2	583-75AR-2	583-75B-2	583-75BS-2	583-75BR-2
450-470MHz	583-75A-3	583-75AS-3	583-75AR-3	583-75B-3	583-75BS-3	583-75BR-3
470-490MHz	583-75A-4	583-75AS-4	583-75AR-4	583-75B-4	583-75BS-4	583-75BR-4
490-512MHz	583-75A-5	583-75AS-5	583-75AR-5	583-75B-5	583-75BS-5	583-75BR-5

To order with shock spring, and rubber boot add suffix SR to part number. Example: 583-75ASR-3.

CELLULAR—TRUNKING / 3 dBd 760-960 MHz

590-75 Series

Performance: 3 dBd gain is achieved with these premium antennas by featuring a 5/8 wave antenna above a 1/4 wave antenna design.

Stylish and durable: These antennas are manufactured using the best corrosion resistant materials and finishes available. Triple-plated chrome or black finishes available.

Reliable: The ABS base has an ultrasonically welded brass insert and a leaf spring-loaded contact for long term reliability.

Standard Mounting: These antennas mate with the standard Motorola NMO type mount, providing an excellent moisture seal even when the antenna is removed.

Electrical Specifications	
Frequency Range, MHz	760-960
Gain, dBd	3.0
Impedance, Ohms	50
Power Rating, Watts	200
Bandwidth at 2.0:1 VSWR, MHz	70

Mechanical Specifications	
Radiator: Chrome A	S.S.
Black B	S.S.
Base	ABS, Ultrasonic brass insert
Contact	Spring-loaded, gold-plated
Length, in	14 maximum
Mounting	Standard Motorola NMO type

Ordering Information		
Frequency	**Chrome**	**Black**
806-866MHz	590-75A-1	590-75B-1
825-896MHz	590-75A-2	590-75B-2
896-960MHz	590-75A-3	590-75B-3
746-806MHz	590-75A-4	590-75B-4

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591-75 Series

Performance: 3 dBd gain is achieved with these premium antennas by featuring a 5/8 wave antenna above a 1/4 wave antenna with an open coil design.

Stylish and durable: These antennas are manufactured using the best corrosion resistant materials and finishes available. Triple-plated chrome or black finishes available.

Reliable: The ABS base has an ultrasonically welded brass insert and a leaf spring-loaded contact for long term reliability.

Standard Mounting: These antennas made with the standard Motorola NMO type mount, providing an excellent moisture seal even when the antenna is removed.

Electrical Specifications	
Frequency Range, MHz	760-960
Gain, dBd	3.0
Impedance, Ohms	50
Power Rating, Watts	200
Bandwidth at 2.0:1 VSWR, MHz	70

Mechanical Specifications	
Radiator: Chrome A	S.S. whip, 0.10 dia.
Black B	S.S. whip, 0.10 dia.
Base	Leaf Design
Length, in	15 maximum
Mounting	Standard Motorola NMO type

Ordering Information		
Frequency	**Chrome**	**Black**
806-866MHz	591-75A-1	591-75B-1
825-896MHz	591-75A-2	591-75B-2
896-960MHz	591-75A-3	591-75B-3
746-806MHz	591-75A-4	591-75B-4

CELLULAR—TRUNKING / 3 dBd CLOSED COIL 760-960 MHz

592-75 Series

Performance: 3.0 dBd gain is achieved with these premium antennas by featuring a 5/8 wave antenna above a 1/2 wave antenna with a closed coil design.

Stylish and durable: These antennas are manufactured using the best corrosion resistant materials and finishes available. Triple-plated chrome or black finishes available.

Reliable: The ABS base has an ultrasonically welded brass insert and a leaf spring-loaded contact for long term reliability.

Standard Mounting: These antennas mate with the standard Motorola NMO type mount, providing an excellent moisture seal even when the antenna is removed.

Electrical Specifications	
Frequency Range, MHz	760-960
Gain, dBd	3.0
Impedance, Ohms	50
Power Rating, Watts	200
Bandwidth at 2.0:1 VSWR, MHz	70

Mechanical Specifications	
Radiator: Chrome A	S.S.
Black B	S.S.
Base	ABS, Ultrasonic brass insert
Contact	Spring-loaded, gold-plated
Length, in	16 maximum
Mounting	Standard Motorola NMO type

Ordering Information		
Frequency	**Chrome**	**Black**
806-866MHz	592-75A-1	592-75B-1
825-896MHz	592-75A-2	592-75B-2
896-960MHz	592-75A-3	592-75B-3
746-806MHz	592-75A-4	592-75B-4

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CELLULAR—TRUNKING / SPRING MOUNT / 3 dBd 740-840 MHz

593-75

Performance: 3dB gain is achieved by using a 5/8 wave design above a 1/4 wave design

Stylish and Durable: These antennas are manufactured using the best corrosion resistant materials and finishes that are available.

Standard Mounting: These antennas mate with a standard TAD/NMO type mount, providing a water resistant seal even when the antenna is removed. The mount features a shock spring which is triple-plated chrome, in bright or black finish. The antenna mount is provided with a rubber boot, to ensure weatherproof seal between the base and the vehicle roof.

Electrical Specifications	
Frequency Range, MHz	740-840
Gain, dBd	3 dB
Impedance, Ohms	50
Power Rating, Watts	200
VSWR	<2:1

Mechanical Specifications	
Radiator	S.S.
Base	ABS, Brass insert spring-loaded contact
Length, inches	17
Mounting	Std. Motorola C, M type

Ordering Information		
Frequency	**Bright**	**Black**
740-840 MHz	593-75A	593-75B

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CELLULAR—TRUNKING / MAG MOUNT, 3 dBd Gain 700-850 MHz

594-75

Performance: 3dB gain is achieved by using a 5/8 wave design above a 1/4 wave design

Stylish and Durable: These antennas are manufactured using the best corrosion resistant materials and finishes that are available.

Magnetic Mounting: Features a powerful magnetic base with a protective Mylar to prevent damage to any mounting service. It is supplied with 12 feet of RG58U coax and your choice of connector. Available with Mini-UHF or TNC connector.

Electrical Specifications	
Frequency Range, MHz	700-850
Gain, dBd	3 dB
Impedance, Ohms	50
Power Rating, Watts	200
VSWR	<2:1

Mechanical Specifications	
Radiator	S.S.
Base	ABS, Gold-plated spring-loaded contact
Length, inches	16
Mounting	Mini-UHF or TNC connector on 12' cable,

Ordering Information		
Frequency	**Brite**	**Black**
700-850 MHz	594-75A	594-75B

CELLULAR—TRUNKING / 3.5 dBd CLOSED COIL 760-970 MHz

595-75 Series

Performance: 3.5 dBd gain is achieved with these premium antennas by featuring a 5/8 wave antenna above a 1/4 wave antenna design.

Stylish and durable: These antennas are manufactured using the best corrosion resistant materials and finishes available. It comes with an integrated shock spring and a heavy-duty stainless steel whip that is designed to withstand severe shock without suffering permanent damage. It is available in triple-plated chrome or black finish.

Reliable: The ABS base has an ultrasonically welded brass insert and a gold-plated, spring-loaded contact. The silver plated matching coil is fully enclosed to ensure years of dependable service.

Weatherproof: O-ring seals and overlap construction keeps moisture out of the antenna.

Standard Mounting: All base loaded antennas mate with the standard Motorola NMO type connector.

Electrical Specifications	
Frequency Range, MHz	760-970
Gain, dBd	3.5
Impedance, Ohms	50
Power Rating, Watts	200
Bandwidth at 2.0:1VSWR, MHz	70

Mechanical Specifications	
Radiator: Chrome A	S.S.
Black B	S.S.
Matching coil	Silver plated enclosed coil
Base	ABS, spring-loaded contact
Contact	Gold-plated, spring-loaded
Length, in	18 maximum
Mounting	Standard Motorola NMO type

Ordering Information		
Frequency	**Chrome**	**Black**
746-806MHz	595-75A-4	595-75B-4
806-866MHz	595-75A-1	595-75B-1
825-896MHz	595-75A-2	595-75B-2
896-970MHz	595-75A-3	595-75B-3

ELEVATED FEED / 3 dBd — 806-960 MHz

599-75 Series

Performance: 3 dBd gain is achieved with these premium antennas by featuring a 5/8 wave antenna above a 1/4 wave antenna design with an elevated feed point. This antenna requires no ground plane as a result of its collinear design. The elevated feed design is ideal for the antenna RF signal to clear any nearby obstructions.

Safety: The elevated feed-point design keeps the RF signals above and away from the passenger compartment.

Elegance This elegant black antenna gives a sleek appearance that blends well with the exterior treatments of most late model vehicles.

Dependability: The 599-75 antenna features a built in shock spring and a spring-loaded contact for long term dependability.

Standard Mounting: These antennas mate with the standard NMO type mount, providing an excellent moisture seal even when the antenna is removed.

Electrical Specifications	
Frequency Range, MHz	806-960
Gain, dBd	3.0
Impedance, Ohms	50
Power Rating, Watts	200
Bandwidth at 2.0:1VSWR, MHz	70

Mechanical Specifications	
Radiator	Black S.S.
Base	Open coil
Contact	Solid brass base
Length, in	23 maximum
Mounting	Standard Motorola NMO type
Finish	Black

Ordering Information	
Frequency	**Black finish**
806-866MHz	599-75-1
825-896MHz	599-75-2
896-960MHz	599-75-3

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DUAL BAND ANTENNAS 806-1970 MHz

690-75

Performance: Our premium dual band antennas feature heavy-duty design and excellent performance. Perfect for both voice and data transmission. These antennas are very wide in bandwidth.

Stylish and durable: These antennas are manufactured using the best corrosion resistant materials and finishes available. The antenna is low profile, extremely rugged and ideal for commercial applications.

Weatherproof: O-ring seals and overlap construction keeps moisture out of the antenna.

Standard Mounting: All base loaded antennas mate with the standard Motorola NMO type mount.

690-75

Electrical Specifications	
Frequency (Full Band)	806-940 / 1710-1970
Gain	Unity
Impedance, Ohms	50
Power Rating, Watts	200
Bandwidth at 2.0:1 VSWR, MHz	Full Band

Mechanical Specifications	
Radiator	S.S.
Base	ABS, Ultrasonic Brass Insert
Contact	Gold-plated spring-loaded
Length, in	4
Mounting	Standard Motorola NMO type
Finish	Black
Ordering Information	690-75

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692-75 Series

Performance: Our premium dual band antennas feature heavy-duty design and excellent performance. Perfect for both voice and data transmission. These antennas are very wide in bandwidth.

Stylish and durable: These antennas are manufactured using the best corrosion resistant materials and finishes available. The antenna is low profile, extremely rugged and ideal for commercial applications.

Weatherproof: O-ring seals and overlap construction keeps moisture out of the antenna.

Standard Mounting: All base loaded antennas mate with the standard Motorola NMO type mount.

692-75 Series

Electrical Specifications		
Frequency (Full Band)	900-930 / 2400-2500	900-930 / 2400-2500
Gain, dBd	2.0	2.0
Impedance, Ohms	50	50
Power Rating, Watts	250	250
Bandwidth at 2.0:1 VSWR, MHz	Full Band	Full Band

Mechanical Specifications		
Base	ABS	ABS
Contact	Gold-plated spring-loaded	Gold-plated spring-loaded
Length, in	3	3
Mounting	Standard Motorola NMO type	Standard Motorola NMO type
Finish	White	Black
Ordering Information	692-75W	692-75B

DUAL BAND ANTENNAS 806-2000 MHz

694-75 Series

Performance: Our premium dual band antennas feature heavy-duty design and excellent performance. Perfect for both voice and data transmission. These antennas are very wide in bandwidth.

Stylish and durable: These antennas are manufactured using the best corrosion resistant materials and finishes available. The antenna is low profile, extremely rugged and ideal for commercial applications.

Weatherproof: O-ring seals and overlap construction keeps moisture out of the antenna.

Standard Mounting: All base loaded antennas mate with the standard Motorola NMO type mount.

694-75 Series

Electrical Specifications	
Frequency (Full Band)	806-960 / 1850-1990
Gain, dBd	2.0
Impedance, Ohms	50
Power Rating, Watts	250
Bandwidth at 2.0:1VSWR, MHz	Full Band

Mechanical Specifications		
Base	ABS	ABS
Contact	Gold-plated spring-loaded	Gold-plated spring-loaded
Length, in	4	4
Mounting	Standard Motorola NMO type	Standard Motorola NMO type
Finish	White	Black
Ordering Information	694-75W	694-75B

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DUAL BAND ANTENNAS 880-2800 MHz

696-75 Series

Performance: Our premium dual band antennas feature heavy-duty design and excellent performance. Perfect for both voice and data transmission. These antennas are very wide in bandwidth.

Stylish and durable: These antennas are manufactured using the best corrosion resistant materials and finishes available. The antenna is low profile, extremely rugged and ideal for commercial applications.

Weatherproof: O-ring seals and overlap construction keeps moisture out of the antenna.

Standard Mounting: All base loaded antennas mate with the standard Motorola NMO type mount.

696-75 Series

Electrical Specifications		
Frequency (Full Band)	880-1200 / 2300-2600	1100-1500 / 2400-2800
Gain	Unity	Unity
Impedance, Ohms	50	50
Power Rating, Watts	200	200
Bandwidth at 2.0:1VSWR, MHz	Full Band	Full Band

Mechanical Specifications		
Radiator	Polyester Coated Brass	Polyester Coated Brass
Base	ABS, Ultrasonic, Brass insert	ABS, Ultrasonic, Brass insert
Contact	Gold-plated spring-loaded	Gold-plated spring-loaded
Length, in	2.75	2.75
Mounting	Standard Motorola NMO type	Standard Motorola NMO type
Finish	Black	Black
Ordering Information	696-75B	696-75-1B

MOBILE ANTENNAS / ACCESSORIES


MGAS 545-75


MGLAS 546-75


547-75


548-75


MMM


TMBM


MMNMO


BSMN

MOBILE ANTENNAS / ACCESSORIES / ADAPTERS	
412-75	Stainless Steel Trunk Groove Mounting Bracket (3/8" hole)
412M-75	Stainless Steel Trunk Groove Mounting Bracket (3/4" hole)
435-75	Rubber Hole Plug / 3/8" Hole Diameter
451-75	Universal Base Mount
453-75	Straight Whip (24" Length) + 5/16 - 24 Thread Adapter
455-75	Unity Gain Whip and Base (451-75 + 453-75)
456-75	Cable Kit / 15ft of RG-58U + PL-259 + UG-175U
545-75	Magnet Mount Kit, Motorola Base, 12 ft. RG58A/U, PL-259
546-75	Magnet Mount Kit, 5/16" Stud Mount, 12 ft. RG58A/U, PL-259
547-75	Trunk Mount Kit, Motorola Base, 17 ft. RG58A/U, PL-259
548-75	Trunk Mount Kit, 5/16" Stud Mount, 17 ft. RG58A/U, PL-259
551-75	C-Mount (3/8"-3/4") c/w 17 ft.RG58A/U, PL-259
634-75	Rubber Hole Plug 7/8" Hole Diameter
TMBM	Trunk Mount Stainless Steel
MMNMO	Mirror Mount Kit, Motorola Base, 12 ft. RG-58A/U, PL-259
BSMN	Mirror Mount, Motorola Base, UHF Connector
WAB	Whip Adapter, Black
WAC	Whip Adapter, Chrome
A1001A	Battery Tap (5 Individually packed)


Whip Adapter—Black


Whip Adapter—Chrome


Battery Tap A1001A

MOBILE ANTENNAS / ACCESSORIES

UTBM

Mount Terminates as Mini-UHF.

UTBM-UHF

Mount Terminates as UHF.

UTBM-NM

Mount Terminates as N Female.

UTCR

Celling Mounts Terminates as Mini-UHF.

UNIBKT

Mobile-to-base adapter only,
includes hose clamps.

BSMO-150

VHF mobile-to-base adapter w/artificial ground plane, N Female connector.

BSMO-450

UHF mobile-to-base adapter w/artificial ground plane, N Female connector.

BSMO-800

800-900 mobile-to-base adapter w/artificial ground plane, N Female connector.

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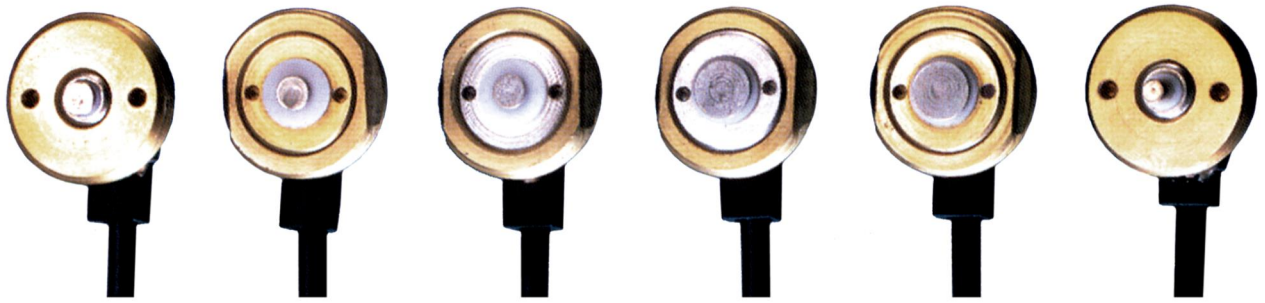
MOBILE ANTENNAS / ACCESSORIES

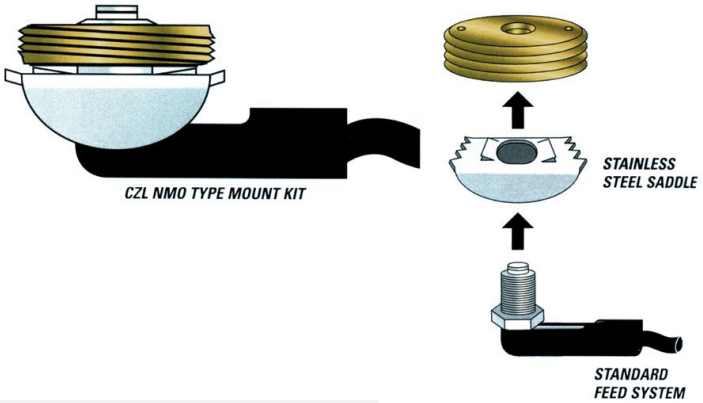
MOBILE MOUNTS



C TYPE	MB TYPE	M TYPE	MH TYPE	MHB TYPE	ASC TYPE
All Brass	All Brass	Standard	Standard	All Brass	All Brass
3/8"-3/4" Hole	3/4" Hole	3/4" Hole	Hi Dist Cap	Hi Dist Cap	Male/Female

CABLE KITS

Comprod Inc.'s brass mounts and cable kits are among the best in the Industry. The cable kits present a consistent 50 Ohms impedance to match our mobile antennas, ensuring that our customers receive the best combined performance from the antennas and the cable kits. The quality of our designs is one of the factors that allows our wideband models to outperform the competition.



551-75	C	All Brass	3/4-3/8 inch mount only
551A-75	M	Standard	3/4 inch mount only
551B-75	MB	All Brass	3/4 inch mount only
551C-75	MH	Standard	3/4 inch mount only (large contact)
551D-75	MHB	All Brass	3/4 inch mount only (large contact)
551E-75	ASC	All Brass	3/4-3/8 inch k166 type mount

CONNECTORS

We carry and stock a complete line of connectors. Please contact a Comprod Inc. Technical support technician for additional information.

MOBILE ANTENNAS / ACCESSORIES

RG-58A/U Stranded	RG-58/U Solid	ANTENNA MOUNTS WITH 17 Ft of RG-58A/U Stranded Center or RG-58/U solid center cable
551-75CA	551-75CU	C Mount No Connector
551A-75CA	551A-75CU	M Mount No Connector
551B-75CA	551B-75CU	MB Mount No Connector
551E-75CA	551E-75CU	ASC Mount No Connector
551-75CA-01	551-75CU-01	C Mount Crimp TNC
551A-75CA-01	551A-75CU-01	M Mount Crimp TNC
551B-75CA-01	551B-75CU-01	MB Mount Crimp TNC
551E-75CA-01	551E-75CU-01	ASC Mount Crimp TNC
551-75CA-02	551-75CU-02	C Mount Crimp BNC
551A-75CA-02	551A-75CU-02	M Mount Crimp BNC
551B-75CA-02	551B-75CU-02	MB Mount Crimp BNC
551E-75CA-02	551E-75CU-02	ASC Mount Crimp BNC
551-75CA-03	551-75CU-03	C Mount Teflon PL-259
551A-75CA-03	551A-75CU-03	M Mount Teflon PL-259
551B-75CA-03	551B-75CU-03	MB Mount Teflon PL-259
551E-75CA-03	551E-75CU-03	ASC Mount Teflon PL-259
551-75CA-04	551-75CU-04	C Mount Crimp Mini UHF
551A-75CA-04	551A-75CU-04	M Mount Crimp Mini UHF
551B-75CA-04	551B-75CU-04	MB Mount Crimp Mini UHF
551E-75CA-04	551E-75CU-04	ASC Mount Crimp Mini UHF
551-75CA-05	551-75CU-05	C Mount Solder N
551A-75CA-05	551A-75CU-05	M Mount Solder N
551B-75CA-05	551B-75CU-05	MB Mount Solder N
551E-75CA-05	551E-75CU-05	ASC Mount Solder N
551-75CA-06	551-75CU-06	C Mount Crimp PL-259
551A-75CA-06	551A-75CU-06	M Mount Crimp PL-259
551B-75CA-06	551B-75CU-06	MB Mount Crimp PL-259
551E-75CA-06	551E-75CU-06	ASC Mount Crimp PL-259
551-75CA-07	551-75CU-07	C Mount Crimp N
551A-75CA-07	551A-75CU-07	M Mount Crimp N
551B-75CA-07	551B-75CU-07	MB Mount Crimp N
551E-75CA-07	551E-75CU-07	ASC Mount Crimp N

MOBILE ANTENNAS / ACCESSORIES

MAGNET MOUNTS WITH 12FT OF RG-58A/U CABLE

545-75-01	Magnet Mount with TNC
545-75-02	Magnet Mount with BNC
545-75-03	Magnet Mount with PL-259
545-75-04	Magnet Mount with Mini UHF
545-75-05	Magnet Mount with Type N
545-75-06	Magnet Mount with Crimp UHF
545-75-07	Magnet Mount with Crimp N
546-75-01	Magnet Mount with TNC
546-75-02	Magnet Mount with BNC
546-75-03	Magnet Mount with PL-259
546-75-04	Magnet Mount with Mini UHF
546-75-05	Magnet Mount with Type N
546-75-06	Magnet Mount with Crimp UHF
546-75-07	Magnet Mount with Crimp N

TRUNK MOUNTS WITH 17FT OF RG-58A/U CABLE

547-75-01	Trunk Mount with TNC
547-75-02	Trunk Mount with BNC
547-75-03	Trunk Mount with PL-259
547-75-04	Trunk Mount with Mini UHF
547-75-05	Trunk Mount with Type N
547-75-06	Trunk Mount with Crimp UHF
547-75-07	Trunk Mount with Crimp N
548-75-01	Trunk Mount with TNC
548-75-02	Trunk Mount with BNC
548-75-03	Trunk Mount with PL-259
548-75-04	Trunk Mount with Mini UHF
548-75-05	Trunk Mount with Type N
548-75-06	Trunk Mount with Crimp UHF
548-75-07	Trunk Mount with Crimp N

MOBILE ANTENNAS / ACCESSORIES

MOUNTING BRACKETS

TMBC	Stainless Trunk L 3/8 inch Hole (Chrome)
TMBM	Stainless Trunk L 3/4 inch Hole (Chrome)
TMBCB	Stainless Trunk L 3/8 inch Hole (Black)
TMBMB	Stainless Trunk L 3/4 inch Hole (Black)
MMM	Mirror Mount Bracket
MMCB	Mirror Mount CB with 12 ft. of coax., PL-259
MMCM	Mirror Bracket, C-Mount & 12 ft. Coax.

UNIVERSAL THICK BODY MOUNT

UTBM	Mount Terminates as Mini-UHF, Maximum Thickness 5/8 inch Order Cable Kits Separately

MOBILE ANTENNA PARTS	Description
DBW	Dual Band Whip 0.10
DBWB	Dual Band Whip 0.10, Black
WPDB33	Dual Band Whip Assembly, 4 dB
WPDB33B	Dual Band Whip Assembly, 4 dB, Black
QWP	20 inch Stainless Whip 0.10
QWPB	20 inch Stainless Whip 0.10, Black
WPBL125	52 inch Stainless Taper Whip 0.125
WPBL100	52 inch Stainless Taper Whip 0.10
WPBL100B	52 inch Stainless Taper Whip 0.10, Black
EFW	Elevated Feed Whip Assembly
WP85A-X	3.5 dB Whip Assembly 800 MHz
WP85B-X	3.5 dB Whip Assembly 800 MHz, Black
WP855A-X	5 dB Whip Assembly 800 MHz
WP855B-X	5 dB Whip Assembly 800 MHz, Black
WP45A-X	3.5 dB Whip Assembly 450 MHz
WP45B-X	3.5 dB Whip Assembly 450 MHz, Black
WPBL45AX	5 dB Base Load Whip 450 MHz
WPBL45BX	5 dB Base Load Whip 450 MHz, Black

VHF / TRANSIT ANTENNAS 138-174, 215-225 MHz

357-75, 358-75 and 364-75

The Comprod Inc.'s line of VHF transit antennas is a low profile rugged alternative to a 1/4 wave whip mobile antenna. When mounted on a horizontal surface, maximum radiation is omnidirectional and vertically polarized.

These antennas are an excellent choice for low clearance applications such as those found on trains, public transit vehicles, construction equipment and police vehicles.

The model 357-75-ABS is a folded 1/4 wavelength section of aluminum tube housed in an impact resistant ABS radome. To ensure a moisture proof installation, the model 357-75-ABS is supplied with a mounting gasket.

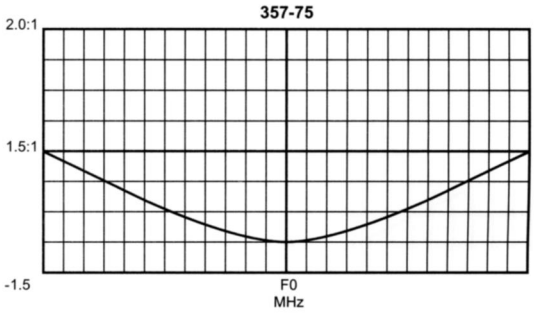
The model 358-75 and 364-75 are high strength cast aluminum designs. The antennas can be coated for additional protection against harsh environmental conditions. To ensure a moisture proof installation, the 358-75 and 364-75 are supplied with an O-ring.

357-75-ABS

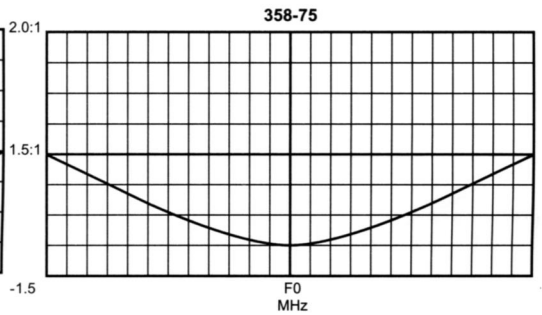
358-75

Electrical Specifications	357-75-ABS	358-75	364-75
Nominal Gain	Unity	Unity	Unity
Maximum Power, Watts	150	150	150
Frequency Range, MHz	148-174	138-174	215-225
Bandwidth VSWR: 1.5:1, MHz	3.0	3.0	10
Bandwidth VSWR: 2.0:1. MHz	4.5	4.5	>10
Nominal Impedance, Ohms	50	50	50
Radiation Pattern	Omni	Omni	Omni
Polarization	Vertical	Vertical	Vertical
Radome Material	High Impact ABS	N/A	N/A
Connector	UHF / BNC / N Female	UHF / BNC / N Female	UHF / BNC / N Female
Height, in (mm)	4 (102)	4 (102)	4 (102)
Length, in (mm)	21 (533)	23-1/2 (597)	17 (432)
Width, in (mm)	3 (76)	2-1/8 (54)	2 (51)
Weight, lbs (kg)	2.1 (0.945)	6 (2.7)	5 (2.27)
Minimum Ground Plane Size, in (mm)	36 x 48 (914 x 1219)	36 x 48 (914 x 1219)	36 x 48 (914 x 1219)

Ordering information: Specify exact frequency, Specify connector type, UHF, BNC or N Female

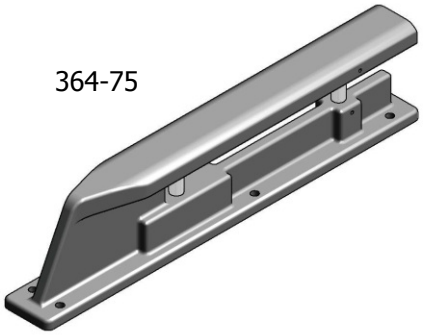


357-75



358 -75

364-75



Tel: US 1.877.825.2007 / CAN 1.800.603.1454
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Fax: 1.800.554.1033

UHF / TRANSIT ANTENNAS 406-512 MHz

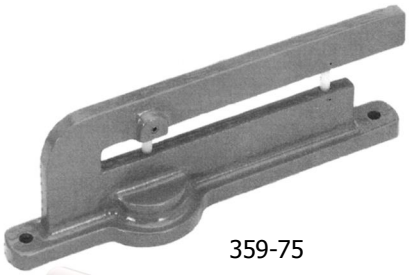
359-75 and 360-75

The Comprod Inc.'s line of UHF transit antennas is a low profile rugged alternative to 1/4 wave whips. When mounted on a horizontal surface, maximum radiation is omnidirectional and vertically polarized.

These antennas are an excellent choice for low clearance applications such as those found on trains, public transit vehicles, construction equipment and police vehicles.

The model 359-75 is a high strength cast aluminum design. The antenna can be coated for additional protection against harsh environmental conditions. To ensure a moisture proof installation, the model 359-75 is supplied with an O-ring.

The model 360-75-ABS is a folded 1/4 wavelength section of aluminum tube housed in an impact resistant ABS radome. To ensure a moisture proof installation, the model 360-75-ABS is supplied with a mounting gasket.



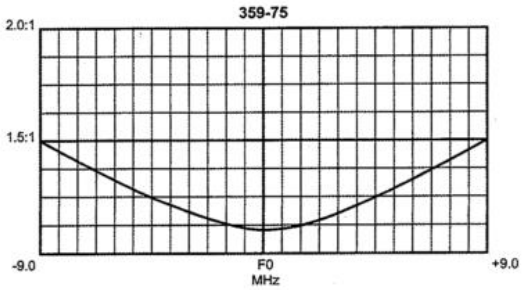
359-75

360-75-ABS

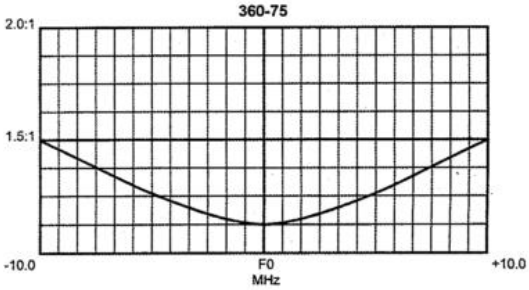
Electrical Specifications	359-75	360-75-ABS
Nominal Gain	Unity	Unity
Maximum Power, Watts	125	125
Frequency Range, MHz	406-512	406-512
Bandwidth VSWR: 1.5:1, MHz	18	20
Bandwidth VSWR: 2.0:1, MHz	27	40
Nominal Impedance, Ohms	50	50
Radiation Pattern	Omnidirectional	Omnidirectional
Polarization	Vertical	Vertical
Radome Material	N/A	High Impact ABS
Connector	UHF / BNC / N Female	UHF / BNC / N Female
Height, in (mm)	2-1/2 (64)	3 (76)
Length, in (mm)	8 (203)	11 (279)
Width, in (mm)	2 (51)	3-1/4 (83)
Weight, lbs (kg)	0.75 (0.338)	1 (0.45)
Minimum Ground Plane Size, in (mm)	20 x 16 (508 x 406)	20 x 16 (508 x 406)

Ordering information:

- Specify center frequency
- Specify connector type, UHF, BNC or N Female



359-75



360-75

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800 MHz TRANSIT ANTENNAS 760-960 MHz

361-75 and 362-75

The Comprod Inc.'s line of radome transit antennas for operation in the 806 -960 MHz band consists of compact, low profile antennas in weatherproof ABS radomes. When mounted on a horizontal surface, maximum radiation is omnidirectional and vertically polarized.

These antennas are an excellent choice for low clearance applications such as those found on trains, mass transit vehicles, construction equipment and police and emergency vehicles.

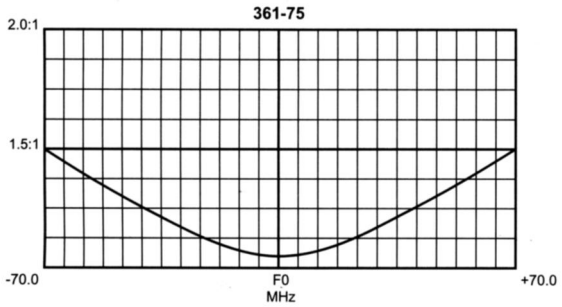
The 361-75-ABS model is a space diversity design that provides greater communication reliability in a poor environment. To ensure a moisture proof installation, the 361-75-ABS model is supplied with an O-ring.

The 362-75-ABS model is a standard, folded radiator housed in a sturdy high-impact ABS radome. To ensure a moisture proof installation, the 362-75-ABS model is supplied with a mounting gasket.

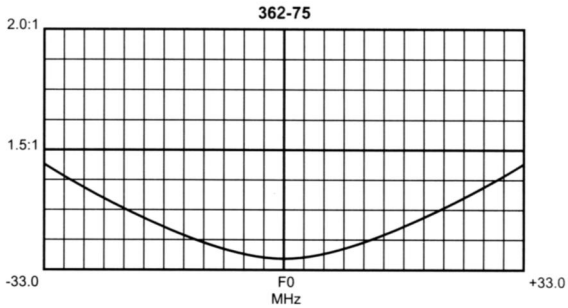
361-75-ABS

362-75-ABS

Electrical Specifications	361-75-ABS	362-75-ABS
Nominal Gain	Unity	Unity
Maximum Power, Watts	50	125
Frequency Range, MHz	806-960	760-960
Bandwidth VSWR: 1.5:1, MHz	140	66
Bandwidth VSWR: 2.0:1, MHz	N/A	100
Nominal Impedance, Ohms	50	50
Radiation Pattern	Omnidirectional	Omnidirectional
Polarization	Vertical	Vertical
Radome Material	High Impact ABS	High Impact ABS
Connector	N Female	N Female
Height, in (mm)	3.15 (80)	2 (51)
Diameter, in (mm)	9.3 (236)	4.5 (114)
Weight, lbs (kg)	2.5 (1.15)	0.375 (0.169)
Minimum Ground Plane Size, in (mm)	14 x 14 (355 x 355)	10 x 10 (254 x 254)



361-75



362-75

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
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Disguised Antennas

COMPROD
Simplifying RF Solutions

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Disguised antennas allow a public security organization to use a vehicle's existing AM/FM antennas for both conventional radio receiver functions as well as allowing a two-way radio to communicate over the same antenna. This allows a covert vehicle to avoid the need for a long mobile antenna, and disguise the fact that it is equipped with a two-way radio communication device. Comprod supplies either the Original Equipment Manufacturers (OEM) antennas, or adjustable universal mounted antennas, based on customer needs. A broadcast coupler is optionally available, to allow the two- way radio transmit and receive frequencies to be shared with the vehicle's AM/FM radio. The coupler prevents the transmit radio from damaging the AM/FM radio. When multi-band operation is required, Comprod provides the required Cross-band couplers, in order to support multiple frequency band operation on a single antenna.

Comprod has a long experience in supplying disguised antennas and associated couplers to some of the leading Public Safety and private security organizations across North America, for national, state, regional and municipal agencies. Our disguised antennas and filters are reliable and high quality to meet the needs of Mission-Critical communications. The antennas provide high-performance two-way communications in VHF (low and high band), UHF, dual, and 800-900 MHz mobile bands. Once installed, they will be indistinguishable from the original AM/FM broadcast antenna on the covert or undercover vehicle.

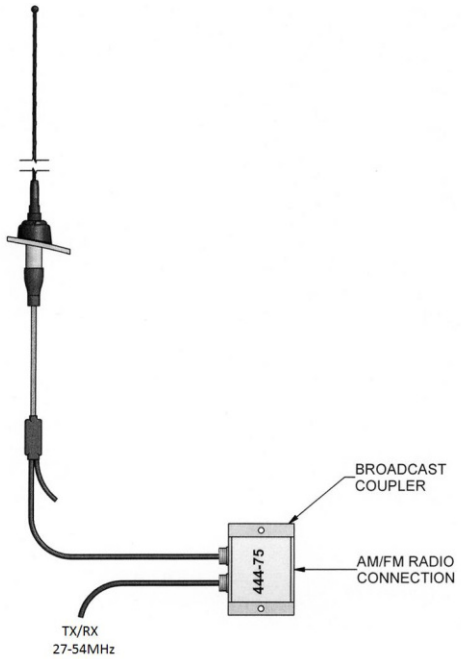
LOW BAND ANTENNA 27-50 MHz

Comprod supplies disguised antennas using an OEM antenna combined with a tuning circuit integrated with the coaxial cable. Each antenna assembly is individually calibrated to ensure the best performance in a disguised appearance, which will be completely undetectable from the original's vehicle's appearance.

There is an optional broadcast coupler to deliver an antenna that can offer both two-way radio communication in addition to AM/FM receiver functions. The antenna may also be modified to provide multi-band two-way communication.

We are capable of meeting customers' special requirements:

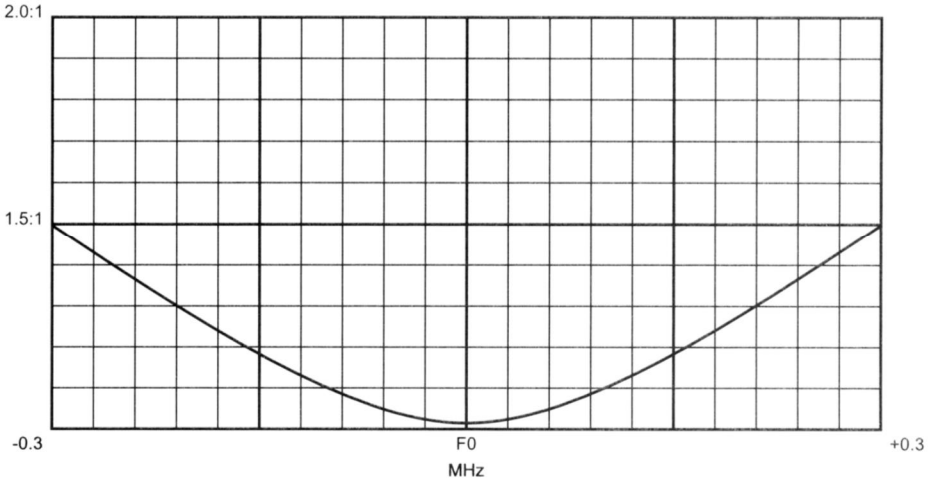
- Two or three separate frequency segments in a given mobile band
- Cross-channel operation in two mobile bands with one antenna
- Alternative antennas to an OEM version will be recommended, where required (e.g. Euro-style, or universal mount traditional whip)



Technical Specifications	
Nominal Gain	Unity
Bandwidth (1.5 to 1 VSWR), MHz	0.60
Power Rating, Watts	150
Radiator	Per OEM antenna
Length, in	Per OEM antenna
Feed Line	17 ft. RG58/U
Connector options (customer specified)	UHF, Mini-UHF, BNC, TNC
Broadcast Coupler (optional)	Model 444-75

If the antenna is not required to provide AM/FM Radio service, the Broadcast Coupler can be omitted.

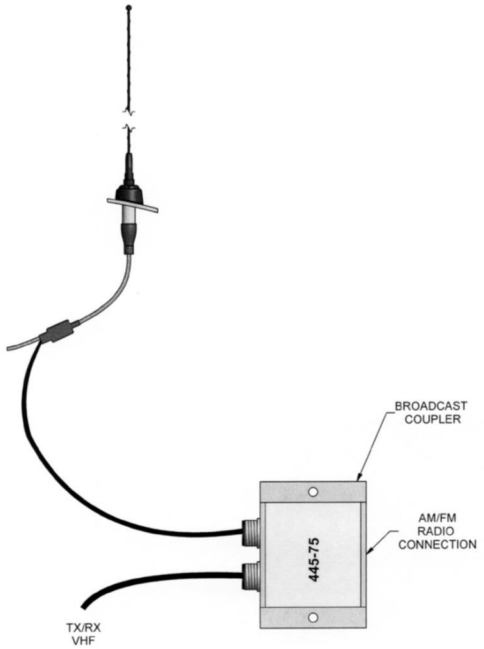
Typical VSWR vs Frequency curve



VHF ANTENNA 132-174 MHz

Comprod supplies disguised antennas using an OEM antenna combined with a tuning circuit integrated with the coaxial cable. Each antenna assembly is individually calibrated to ensure the best performance in a disguised appearance, which will be completely undetectable from the original's vehicle's appearance.

There is an optional broadcast coupler to deliver an antenna that can offer both two-way radio communication in addition to AM/FM receiver functions. The antenna may also be modified to provide multi-band two-way communication.



We are capable of meeting customers' special requirements:

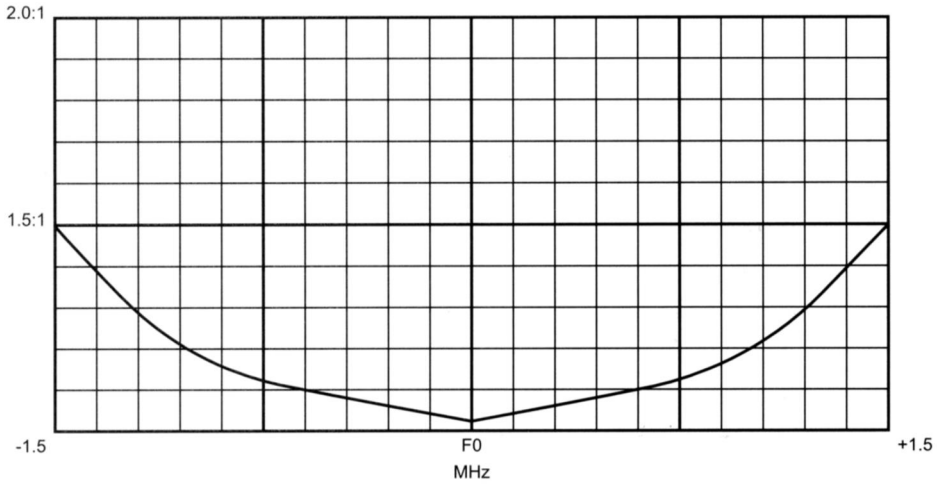
- Two or three separate frequency segments in a given mobile band
- Cross-channel operation in two mobile bands with one antenna
- Alternative antennas to an OEM version will be recommended, where required (e.g. Euro-style, or universal mount traditional whip)

Technical Specifications

Nominal Gain	Unity
Bandwidth (1.5 to 1 VSWR), MHz	3.0
Power Rating, Watts	150
Radiator	Per OEM antenna
Length, in	Per OEM antenna
Feed Line	17 ft. RG58/U
Connector options (customer specified)	UHF, Mini-UHF, BNC, TNC
Broadcast Coupler (optional)	Model 445-75

If the antenna is not required to provide AM/FM Radio service, the Broadcast Coupler can be omitted.

Typical VSWR vs Frequency curve



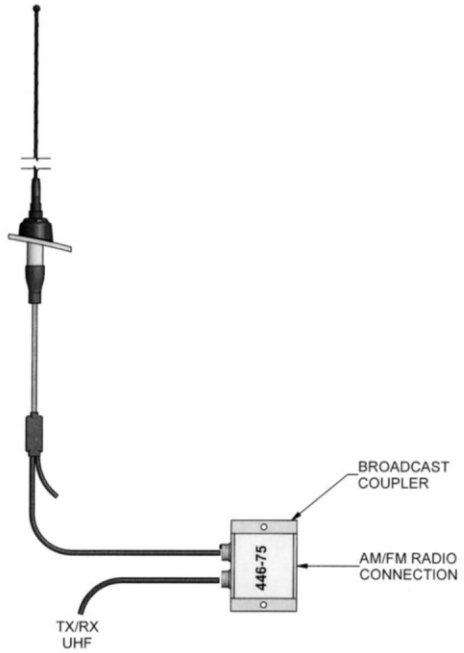
UHF ANTENNA 406-512 MHz

Comprod supplies disguised antennas using an OEM antenna combined with a tuning circuit integrated with the coaxial cable. Each antenna assembly is individually calibrated to ensure the best performance in a disguised appearance, which will be completely undetectable from the original's vehicle's appearance.

There is an optional broadcast coupler to deliver an antenna that can offer both two-way radio communication in addition to AM/FM receiver functions. The antenna may also be modified to provide multi-band two-way communication.

We are capable of meeting customers' special requirements:

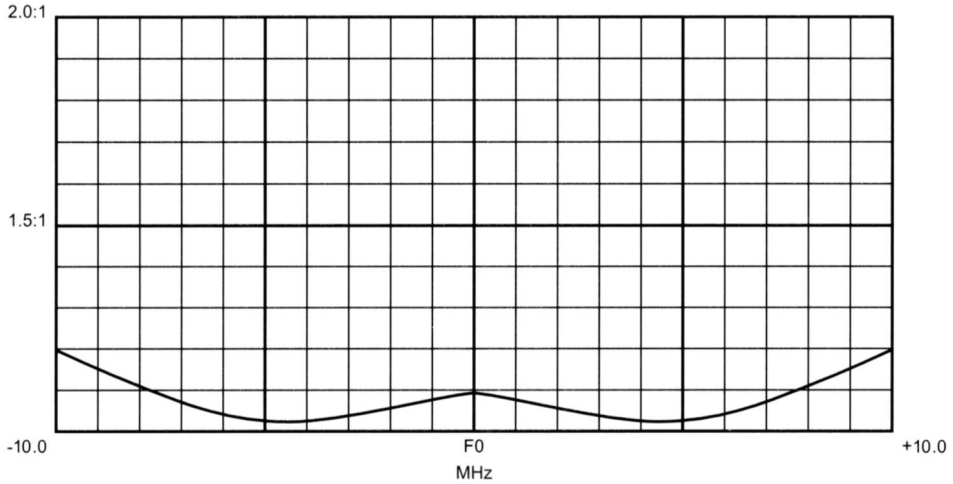
- Two or three separate frequency segments in a given mobile band
- Cross-channel operation in two mobile bands with one antenna
- Alternative antennas to an OEM version will be recommended, where required (e.g. Euro-style, or universal mount traditional whip)



Technical Specifications	
Nominal Gain	Unity
Bandwidth (1.5 to 1 VSWR), MHz	10-20
Power Rating, Watts	150
Radiator	Per OEM antenna
Length, in	Per OEM antenna
Feed Line	17 ft. RG-8X
Connector options (customer specified)	UHF, Mini-UHF, BNC, TNC
Broadcast Coupler (optional)	Model 446-75

If the antenna is not required to provide AM/FM Radio service, the Broadcast Coupler can be omitted.

Typical VSWR vs Frequency curve



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Fax: 1.800.554.1033

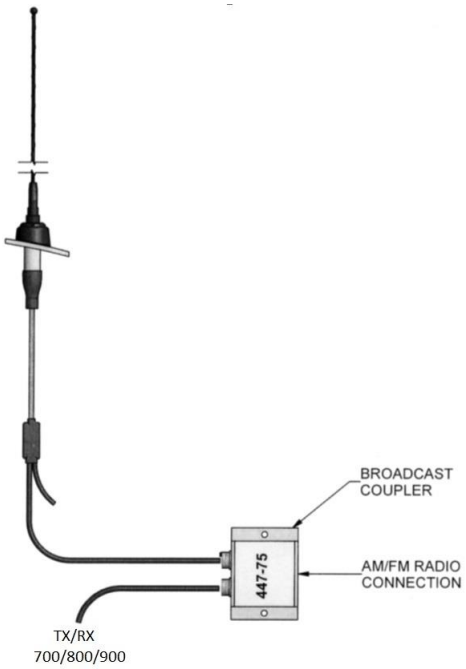
700/800/900 MHZ ANTENNA 764-960 MHz

Comprod supplies disguised antennas using an OEM antenna combined with a tuning circuit integrated with the coaxial cable. Each antenna assembly is individually calibrated to ensure the best performance in a disguised appearance, which will be completely undetectable from the original's vehicle's appearance.

There is an optional broadcast coupler to deliver an antenna that can offer both two-way radio communication in addition to AM/FM receiver functions. The antenna may also be modified to provide multi-band two-way communication.

We are capable of meeting customers' special requirements:

- Two or three separate frequency segments in a given mobile band
- Cross-channel operation in two mobile bands with one antenna
- Alternative antennas to an OEM version will be recommended, where required (e.g. Euro-style, or universal mount traditional whip)

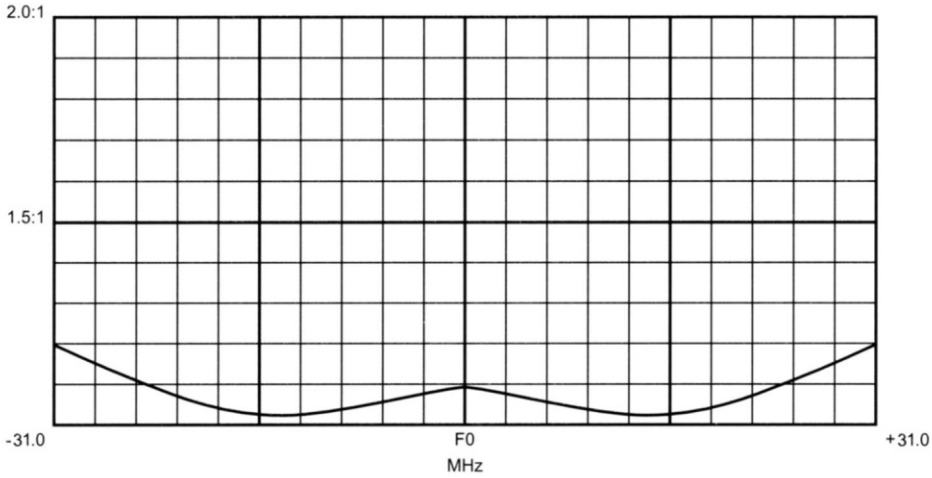


Technical Specifications

Nominal Gain	Unity
Bandwidth (1.5 to 1 VSWR), MHz	62
Power Rating, Watts	75
Radiator	Per OEM antenna
Length, in	Per OEM antenna
Feed Line	20 ft. LMR-195
Connector options (customer specified)	UHF, Mini-UHF, BNC, TNC
Broadcast Coupler (optional)	Model 447-75

If the antenna is not required to provide AM/FM Radio service, the Broadcast Coupler can be omitted.

Typical VSWR vs Frequency curve



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Email: sales@comprodcom.com
Fax: 1.800.554.1033

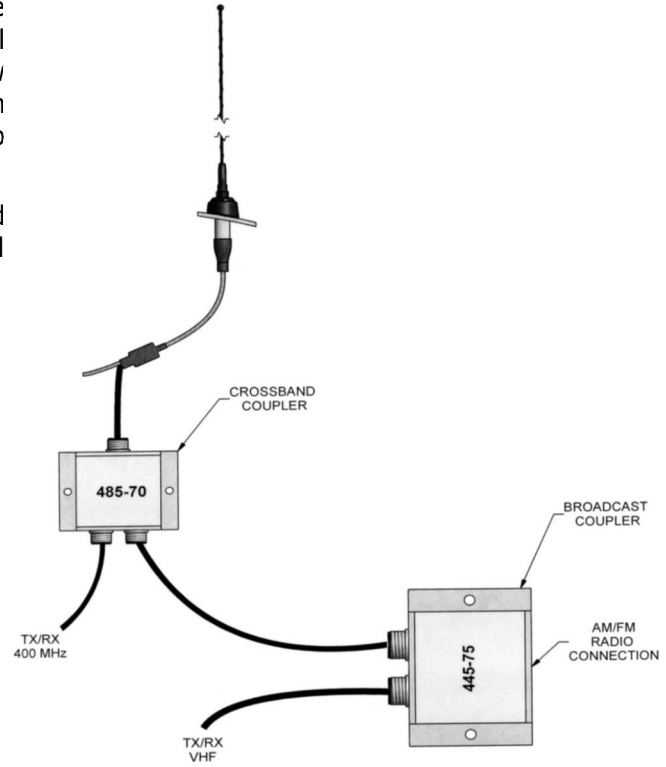
DUAL BAND ANTENNAS

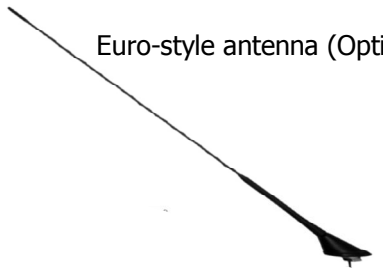
For multi-band communications needs, Comprod supplies either the Original Equipment Manufacturers (OEM) antennas, or universal mounted antennas. A broadcast coupler is optionally available, to allow the two way radio transmit and receive frequencies to be shared with the vehicle's AM/FM radio. The coupler prevents the transmit radio from damaging the AM/FM radio.

For the multi-band operation, Comprod Inc. provides the required Cross-band couplers, in order to support multiple frequency band operation on a single antenna.

We are capable of meeting customers' special requirements:

- Two or three separate frequency segments in a given mobile band
- Cross-channel operation in two mobile bands with one antenna



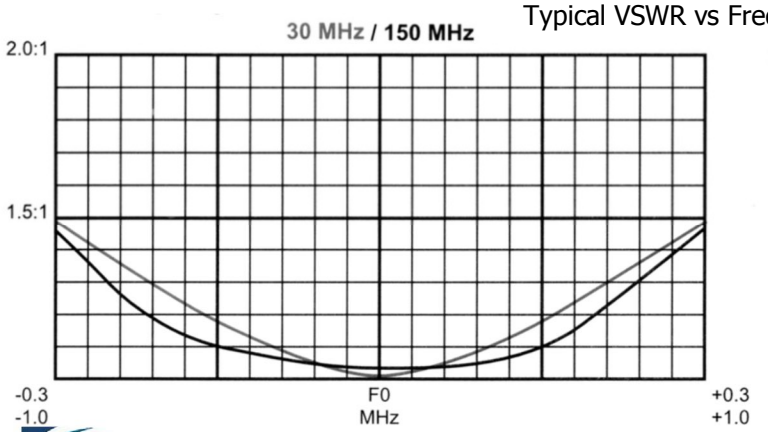


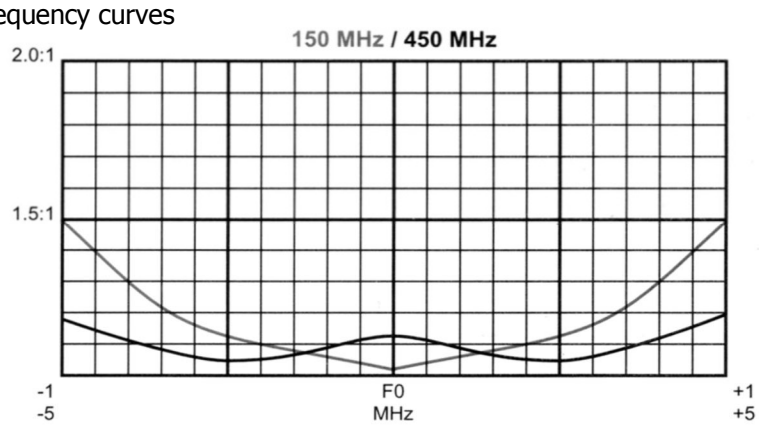
Euro-style antenna (Option)

Technical Specifications	
Frequency Range, MHz	30-50 and 150-174 150-174 and 406-512
Nominal Gain	Unity
Bandwidth, MHz	30-50: 0.6, 150-174: 2
VSWR	< 1.5:1
Pattern	Omnidirectional
Power Rating, Watts	30-512: 150W, 764-960: 75W
Appearance	OEM Antenna / Universal
Mounting	Front / Rear Fender
Finish	Black / Chrome
Height, in	29 to 35
Connector (customer specified)	UHF, Mini-UHF, BNC, TNC
Cable	VHF - 17' RG-58/U UHF - 17' RG-8X 764-960 - 5' LMR-240

When ordering, specify Year, Make and Model of vehicle and both operating frequencies

Typical VSWR vs Frequency curves





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COUPLERS 27-960 MHz

Comprod is a leader in the design of RF filtering and coupling devices. The following are the specifications for couplers and tuners required as part of a Disguised Antenna solution.

Broadcast couplers - allow AM-FM broadcast receiver operation along with normal two-way mobile radio operation.
Crossband couplers - allow mobile radios on two different bands to operate with a single disguised antenna.
Antenna tuners - provide impedance matching and partly retuning the existing antenna to new frequencies.

Broadcast Coupler Specifications

Model Number	Frequency Range	Insertion Loss Mobile	Insertion Loss AM-FM / RX	Max Power	Minimum Isolation
444-75	27-54 MHz	0.15 dB	1.5 dB	150 Watts	35 dB
445-75	138-174 MHz	0.15 dB	1.5 dB	150 Watts	35 dB
446-75	406-512 MHz	0.15 dB	1.5 dB	150 Watts	35 dB
447-75	764-960 MHz	0.20 dB	0.5 dB	50 Watts	40 dB

Crossband Coupler Specifications

Model Number	Frequency Range Low Pass	Frequency Range High Pass	Max Power	Insertion Loss	Minimum Isolation	Connectors	Size (H x W X L) In (mm)
485-75	138-174 MHz	406-512 MHz	100	0.4 dB	40 dB	UHF Female	1.6 x 3.5 x 3 (41 x 89 x 76)
486-75	30-50 MHz	138-174 MHz		0.3 dB	35 dB		
487-75	138-174 MHz	764-960 MHz		0.3 dB	35 dB		

Crossband Coupler

Antenna Tuner Specifications

Model Number	Frequency Range	Max Power	Impedance Input 1	Impedance Input 2
461-75	144-174 MHz	150 Watts	50 Ohms	10-700 Ohms
462-75	406-512 MHz	150 Watts	50 Ohms	10-700 Ohms

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In-Building Systems

COMPROD

Simplifying RF Solutions

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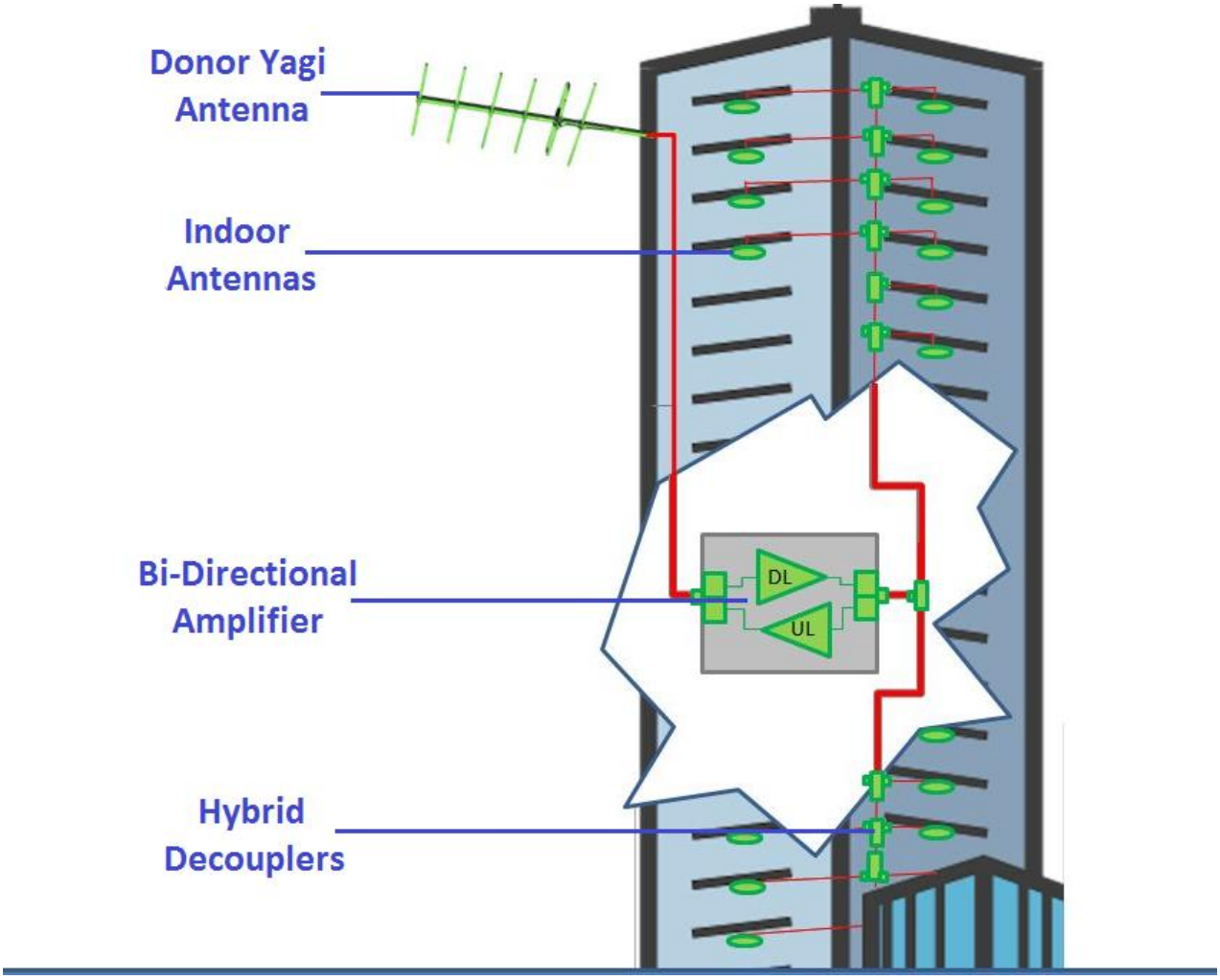
www.comprodcom.com

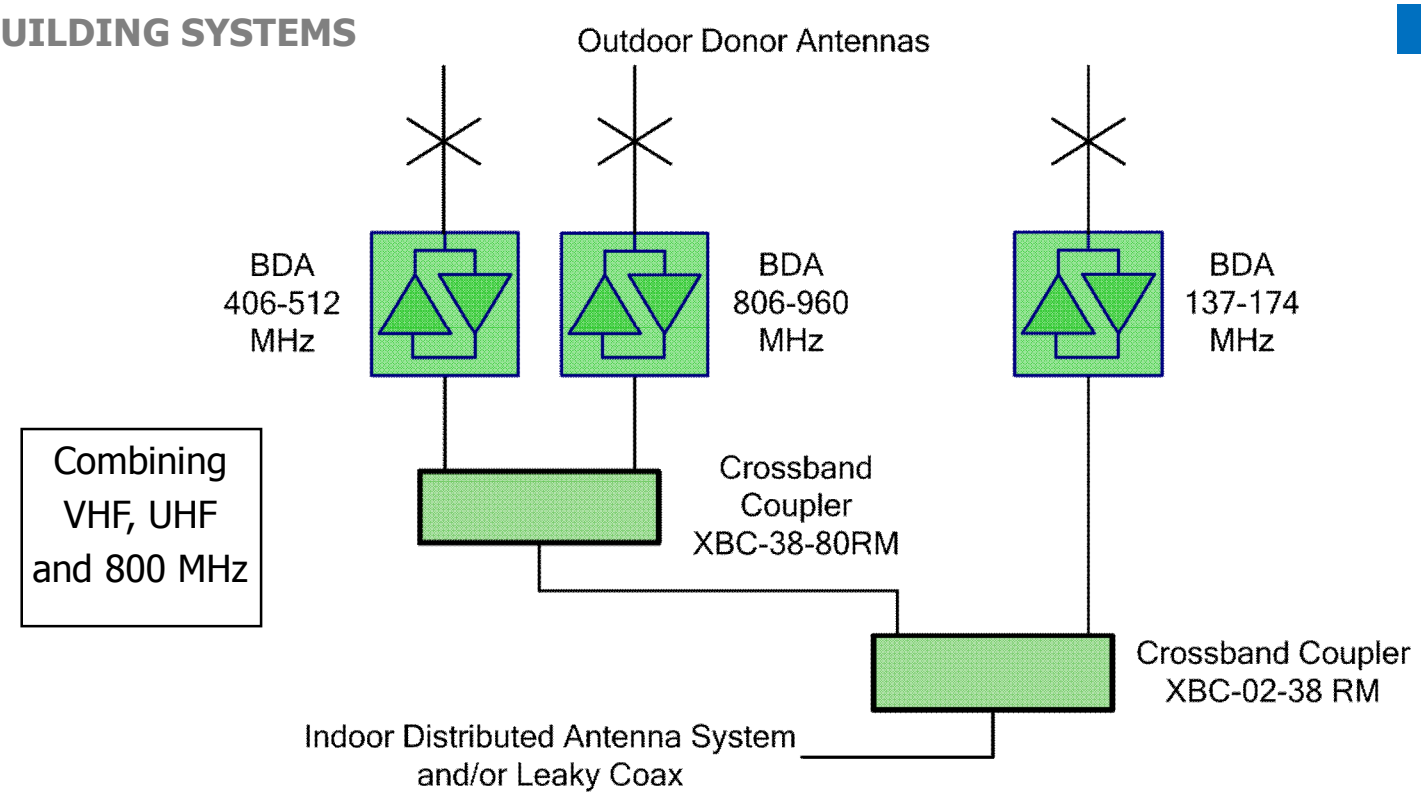
Comprod In-building antennas are offered for a variety of RF communication projects for environments that require internal propagation of RF for public safety needs. Our products have been deployed for mission critical projects including subway transit in-tunnel or underground projects, high-rise in-building systems, nuclear power plants, correctional facilities, shopping malls, parking garages, casinos and public sports arenas.

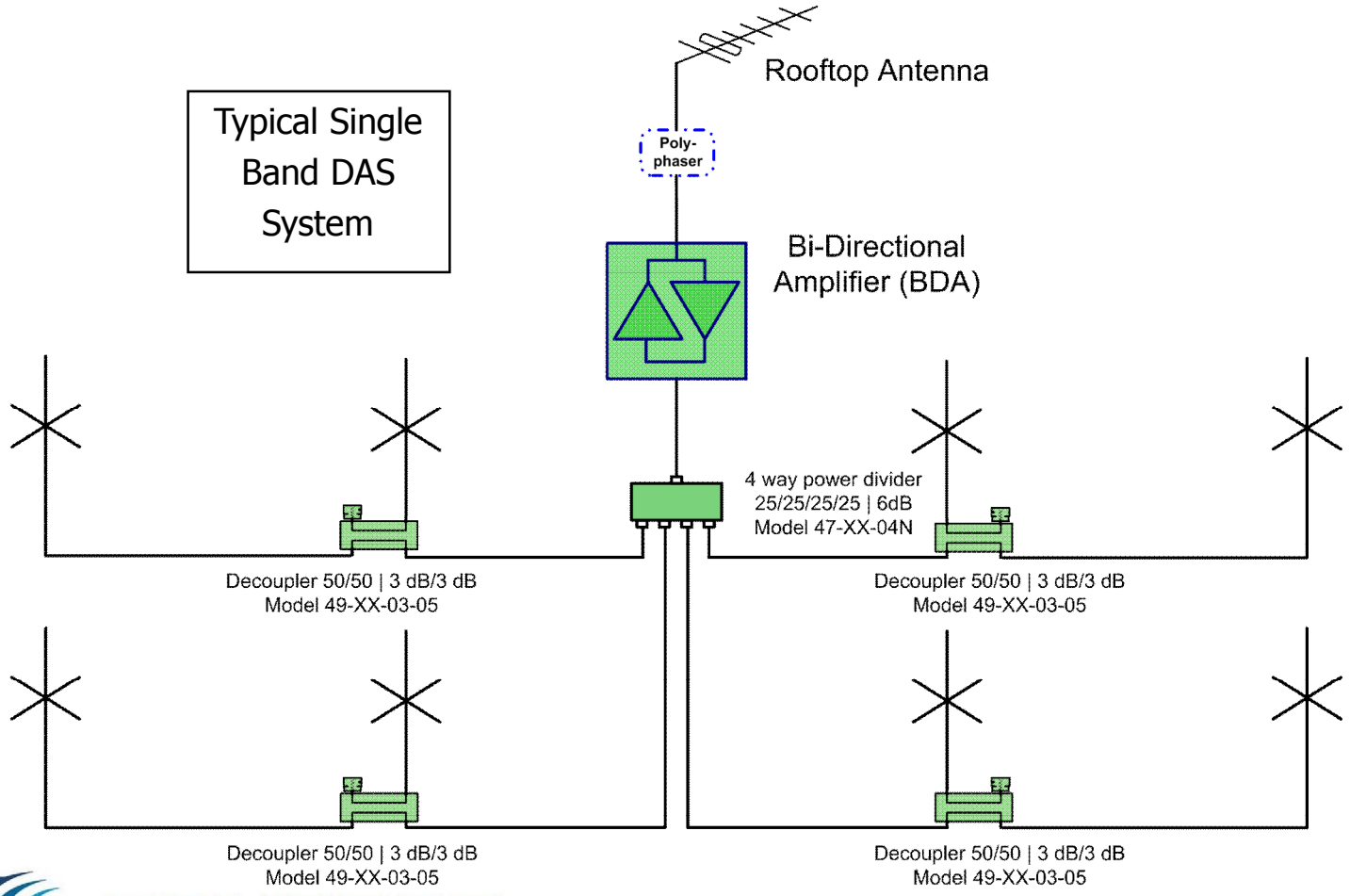
Our line of antenna system solutions incorporates single, dual, and tri-band frequency specifications. These antennas are offered in a wide range of enclosures: radomes, low profile, 6200 Kydex fire-retardant material, ABS high-impact, and polycarbonate.

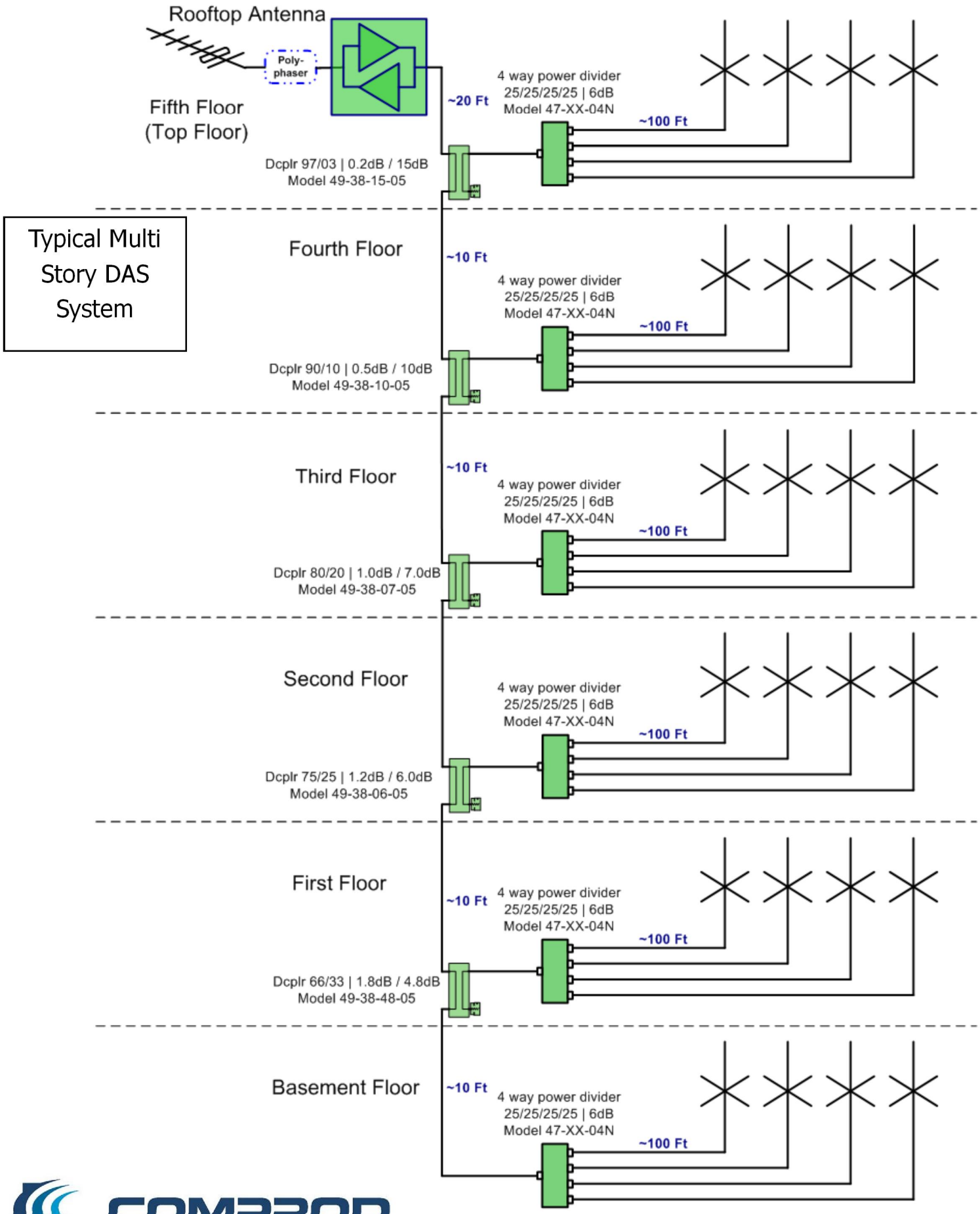
Comprod can complement antenna systems with other RF components from our portfolio to build out the network: splitters, couplers, taps, cables, connectors, signal boosters (Bi-Directional Amplifiers) required for complete RF needs for In-building public safety requirements.



NOTE: For Donor Yagi Antennas please refer to Yagi Antenna section of our Catalog


Outdoor Donor Antennas
BDA
406-512
MHz
BDA
806-960
MHz
BDA
137-174
MHz
Combining
VHF, UHF
and 800 MHz
Crossband
Coupler
XBC-38-80RM
Crossband Coupler
XBC-02-38 RM
Indoor Distributed Antenna System
and/or Leaky Coax


Rooftop Antenna
Typical Single
Band DAS
System
Poly-
phaser
Bi-Directional
Amplifier (BDA)
4 way power divider
25/25/25/25 | 6dB
Model 47-XX-04N
Decoupler 50/50 | 3 dB/3 dB
Model 49-XX-03-05
Decoupler 50/50 | 3 dB/3 dB
Model 49-XX-03-05
Decoupler 50/50 | 3 dB/3 dB
Model 49-XX-03-05
Decoupler 50/50 | 3 dB/3 dB
Model 49-XX-03-05


Rooftop Antenna
Poly-phaser
Fifth Floor (Top Floor)
~20 Ft
4 way power divider
25/25/25/25 | 6dB
Model 47-XX-04N
~100 Ft
Dcplr 97/03 | 0.2dB / 15dB
Model 49-38-15-05
Typical Multi Story DAS System
Fourth Floor
~10 Ft
4 way power divider
25/25/25/25 | 6dB
Model 47-XX-04N
~100 Ft
Dcplr 90/10 | 0.5dB / 10dB
Model 49-38-10-05
Third Floor
~10 Ft
4 way power divider
25/25/25/25 | 6dB
Model 47-XX-04N
~100 Ft
Dcplr 80/20 | 1.0dB / 7.0dB
Model 49-38-07-05
Second Floor
4 way power divider
25/25/25/25 | 6dB
Model 47-XX-04N
~100 Ft
Dcplr 75/25 | 1.2dB / 6.0dB
Model 49-38-06-05
First Floor
~10 Ft
4 way power divider
25/25/25/25 | 6dB
Model 47-XX-04N
~100 Ft
Dcplr 66/33 | 1.8dB / 4.8dB
Model 49-38-48-05
Basement Floor
~10 Ft
4 way power divider
25/25/25/25 | 6dB
Model 47-XX-04N
~100 Ft

Antennas								
Part Number	Frequency Range, MHz	Length, in (mm)	Diameter, in (mm)	Pattern	Power, Watts	Radome material	Color	Standard Connector
357-75	136-174	4 x 21 x 3		Omni	150	ABS/6200 Kydex	Grey/White	UHF/BNC
360-75	406-512	3.25 x 3 x 11		Omni	50	ABS/6200 Kydex	Grey/White	UHF/BNC
361-75	806-960	3.15 (80)	9.3 (236)	Omni	50	ABS/6200 Kydex	Grey/White	N Female
362-75	806-960	2.0 (51)	4.5 (114)	Omni	100	ABS/6200 Kydex	Grey/White	N Female
F3987	380-470	6.75 (171)	0.5 (12.75)	Omni	150	Aluminum	Black or white	N Male
F3953	406-512	7.0 (178.5)	0.625 (15.93)	Omni	50	Polycar-bonate	Black or white	N Male
F33005	806-960 / 1850-1990	2 (51)	4.5 (114)	Omni	50	6200 Kydex	White	N Female
F33048	740-960	2 (51)	4.5 (114)	Omni	50	6200 Kydex	White	N Female
F3749	VHF /UHF/ 806-960	9.78 (249)	7.0 (178.5)	Omni	50	6200 Kydex	White	N Female
F3741	VHF /UHF/ 806-960	11.25 (286.88)	0.65 (16.575)	Omni	50	Polycar-bonate	Black	N Male

Amplifiers									
Part Number	Frequency Range, MHz	Size, in (mm)	Color	Connectors	Max. Gain, dB	Noise Figure, dB	Max. Out-put Power, dBm	Input Voltage	Alarm Indicators
UBDA-138225	138-225 MHz	24H x 20W x 14D	Grey	N Female	+100	4 typical	DL: +29 UL: +29	AC: 115-220	Power Fail
UBDA-4551	380-512 MHz	24H x 24W x 12D	Grey	N Female	+70	4 typical	DL: +29 UL: +29	AC: 115-220	N/A
BDA 764806	DL: 764-776 UL: 794-806	10H x 16W x 8.5D	Grey/Red	N Female	+83.5	2.5 typical	DL: +31.5 UL: +31.5	AC: 115-220 DC: 24-27	AGC, S/D, Power Fail
BDA 806870	DL: 851-869 UL: 806-824	10H x 16W x 8.5D	Grey/Red	N Female	+83.5	2.5 typical	DL: +31.5 UL: +31.5	AC: 115-220 DC: 24-27	AGC, S/D, Power Fail
BDA 896941	DL: 935-941 UL: 896-901	10H x 16W x 8.5D	Grey/Red	N Female	+83.5	2.5 typical	DL: +31.5 UL: +31.5	AC: 115-220 DC: 24-27	AGC, S/D, Power Fail

SINGLE-BAND ANTENNAS

Comprod In-building antennas are designed to provide excellent coverage solutions in order for external Public Safety Radio Frequencies to propagate within buildings, tunnels or public use environments.

We offer a variety of antennas with Fire Retardant 6200 Kydex radomes. These materials are designed for In-building applications and inside public transport vehicles such as underground trains, vans, buses and trains. They meet the recommended fire safety practices of both the Federal Transit Administration (FTA) and the Federal Rail Administration (FRA) for smoke emission and flammability as tested under ASTM E-662 and ASTM E-162.

Our antennas have been installed worldwide and provide RF coverage inside nuclear power plants, correctional institutions, tunnels, high-rise buildings, subways, shopping malls, parking garages, power plants, high-security office networks and mine shafts.

362-75

Note: add the material and connector type to the part number when ordering:
-ABS is for outdoor use and is grey in color
-KYDEX is for indoor use and is white in color

Electrical Specifications	357-75	360-75	361-75	362-75
Frequency Range, MHz	148-174	406-512	806-960	806-960
Nominal Gain, dBd	Unity	Unity	Unity	Unity
Bandwidth 1.5:1 VSWR, MHz	3	20	140	66
Bandwidth: 2.0:1 VSWR, MHz	4	40	140	100
Polarization	Vertical	Vertical	Vertical	Vertical
Pattern	omnidirectional	omnidirectional	omnidirectional	omnidirectional
Power Rating, Watts	150	50	50	100
Nominal Impedance, Ohms	50	50	50	50
Radome	ABS / 6200 Kydex	ABS / 6200 Kydex	ABS / 6200 Kydex	ABS / 6200 Kydex
Color	Grey / White	Grey / White	Grey / White	Grey / White
Standard Termination	UHF / BNC / N	UHF / BNC / N	N Female	N Female

Mechanical Specifications	357-75	360-75	361-75	362-75
Width, in (mm)	4.0 (102)	3.0 (76)	3.15 (80)	2.0 (51)
Length, in (mm)	21.0 (533)	11.0 (279)	n/a	n/a
Height, in (mm)	3.0 (76)	3.25 (83)	n/a	n/a
Diameter, in (mm)	n/a	n/a	9.3 (236)	4.5 (114)
Weight, lbs (kg)	2.1 (0.945)	1.0 (0.45)	2.5 (1.15)	0.375 (0.169)
Required Minimum Ground Plane Size, in (mm)	36 x 48 (914 x 1219)	20 x 16 (508 x 406)	14 x 14 (355 x 355)	10 x 10 (254 x 254)

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
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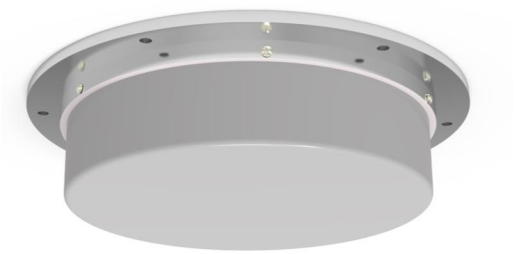
SINGLE-BAND ANTENNAS

357-75 Top and Underside-view



361-75

362-75 Top and Underside View

360-75

UHF IN-BUILDING ANTENNAS

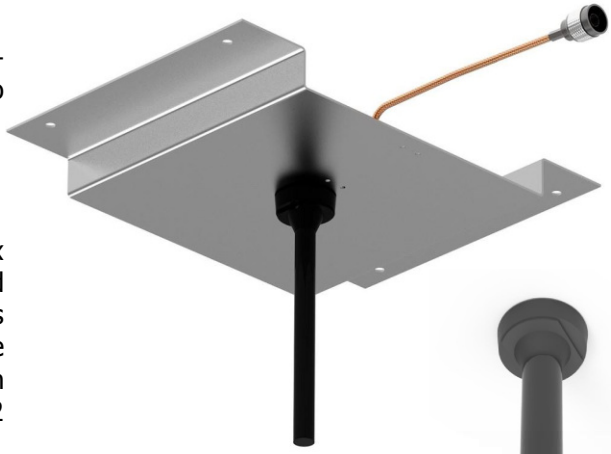
Comprod In-building antennas are designed to provide excellent coverage solutions in order for external Public Safety Radio Frequencies to propagate within buildings, tunnels or public use environments.

Our antennas can cover single or multiple frequency bands.

We offer a wide variety of antennas with Fire Retardant 6200 Kydex radomes. These materials are designed for In-building applications and inside public transport vehicles such as underground trains, vans, buses and trains. They meet the recommended fire safety practices of both the Federal Transit Administration (FTA) and the Federal Rail Administration (FRA) for smoke emission and flammability as tested under ASTM E-662 and ASTM E-162.

Our antennas have been installed worldwide and provide RF coverage inside nuclear power plants, correctional institutions, tunnels, high-rise buildings, subways, shopping malls, parking garages, power plants, high-security office networks and mine shafts.

Note: Add "NGP" to part number to order without the ground plane.



F-3987

F-3953

Electrical Specifications	F-3987	F-3953
Frequency Range, MHz	380-470	406-470 / 450-512
Nominal Gain, dBd	Unity	Unity
Bandwidth: 2.0:1 VSWR, MHz	90	64
Polarization	Vertical	Vertical
Pattern	omnidirectional	omnidirectional
Power Rating, Watts	150	50
Nominal Impedance, Ohms	50	50
Material	Aluminium painted	Aluminum painted
Color	Black or White	Black or White
Standard Termination	N Male	N Male

Mechanical Specifications	F-3987	F-3953
Max. Length, in (mm)	6.75 (171)	7.0 (178.5)
Diameter, in (mm)	0.5 (12.75)	0.625 (15.93)
Weight, lbs. (kg)	N/A	N/A
Required Minimum Ground Plane Size, in (mm)	8 x 8 (203 x 203)	8 x 8 (203 x 203)
Mounting Hardware	Included	Included

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MULTI-BAND ANTENNAS

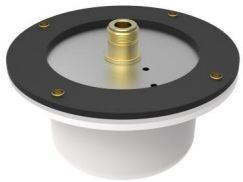
Comprod In-building antennas are designed to provide excellent coverage solutions in order for external Public Safety Radio Frequencies to propagate within buildings, tunnels or public use environments.

Our antennas can cover single or multiple frequency bands.

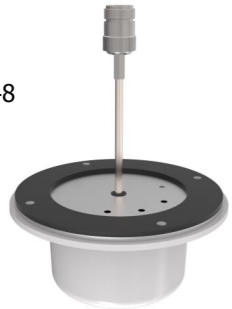
We offer a wide variety of antennas with Fire Retardant 6200 Kydex radomes. These materials are designed for In-building applications and inside public transport vehicles such as underground trains, vans, buses and trains. They meet the recommended fire safety practices of both the Federal Transit Administration (FTA) and the Federal Rail Administration (FRA) for smoke emission and flammability as tested under ASTM E-662 and ASTM E-162.

The antennas are installed on ceilings to provide RF coverage inside nuclear power plants, correctional institutions, tunnels, high-rise buildings, subways, shopping malls, parking garages, power plants, high-security office networks and mine shafts.

F-33005



F-33048



Electrical Specifications	F-33005	F-33048
Frequency Range, MHz	806-960 / 1850-1990	760-960
Nominal Gain, dBd	Unity	Unity
Bandwidth 1.5:1 VSWR, MHz		
138-174	n/a	n/a
406-512	n/a	n/a
760-960	n/a	200
806-960	72 (Specify Frequencies)	n/a
1800-1990	140	n/a
Polarization	Vertical	Vertical
Pattern	omnidirectional	omnidirectional
Power Rating, Watts	50	50
Nominal Impedance, Ohms	50	50
Radome	6200 Kydex	6200 Kydex
Standard Termination	N Female	32" Jumper - N Female
Mechanical Specifications	**F-33005**	**F-33048**
Max. Length, in (mm)	2 (51)	2 (51)
Diameter, in (mm)	4.5 (114)	4.5 (114)
Weight, lbs. (kg)	0.375 (0.169)	0.375 (0.169)
Required Minimum Ground Plane Size, in (mm)	8 x 8 (203 x 203)	8 x 8 (203 x 203)
Mounting hardware	Not Included	Not Included

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TRI-BAND IN-BUILDING ANTENNAS

Comprod In-building antennas are designed to provide excellent coverage solutions in order for external Public Safety Radio Frequencies to propagate within buildings, tunnels or public use environments.

Our antennas can cover single or multiple frequency bands. We offer a wide variety of antennas with Fire Retardant 6200 Kydex radomes. These materials are designed for In-building applications and inside public transport vehicles such as underground trains, vans, buses and trains. They meet the recommended fire safety practices of both the Federal Transit Administration (FTA) and the Federal Rail Administration (FRA) for smoke emission and flammability as tested under ASTM E-662 and ASTM E-162.

The F-3741 has been designed for mounting with a ground plane on a concrete surface. This is a requirement for meeting full bandwidth specifications. Polycarbonate tubing is used for the radome on the F-3741. It's a flame resistant and self-extinguishing material.

The F-3749 Antenna is available in custom colors for orders of 150 or more.

F-3749

Electrical Specifications	F-3741	F-3749	F-3749A
Frequency Range, MHz	VHF / UHF / 760-960	VHF / UHF / 760-960	VHF / UHF / 760-960
Nominal Gain, dBd	Unity	Unity	Unity
Bandwidth: 2.0:1 VSWR, MHz			
138-174	8	8	8
406-512	64	64	64
764-890	126	126	126
806-960	154	154	154
1800-1990	n/a	n/a	n/a
2400-3000	n/a	n/a	n/a
Polarization	Vertical	Vertical	Vertical
Pattern	Omnidirectional	Omnidirectional	Omnidirectional
Power Rating, Watts Total	50	50	50
Nominal Impedance, Ohms	50	50	50
Radome	Polycarbonate	6200 Kydex	6200 Kydex
Mean Time Between Failure, Hours	87,000	87,000	87,000
Color	Black	White	White
Standard Termination	N Male	N Female	2 foot jumper to N Male

Mechanical Specifications	F-3741	F-3749	F-3749A
Length, inch (mm)	11.25 (286.88)	9.78 (249)	9.78 (249)
Diameter, inch (mm)	0.65 (16.575)	7.0 (178.5)	7.0 (178.5)
Weight, lbs (kg)	N/A	4 (1.8)	4 (1.8)
Required Minimum Ground Plane Size, in (mm)	Included (Required)	14 x 14 (357 x 357)	14 x 14 (357 x 357)

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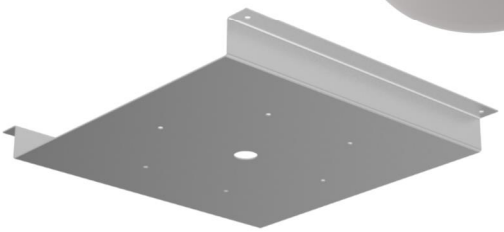
Fax: 1.800.554.1033

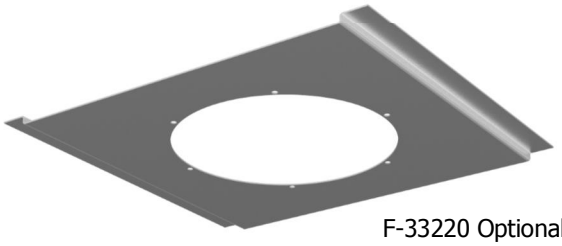
TRI-BAND ANTENNAS

F-3749 A Top
and Underside View

F-3749 Top and
Underside View

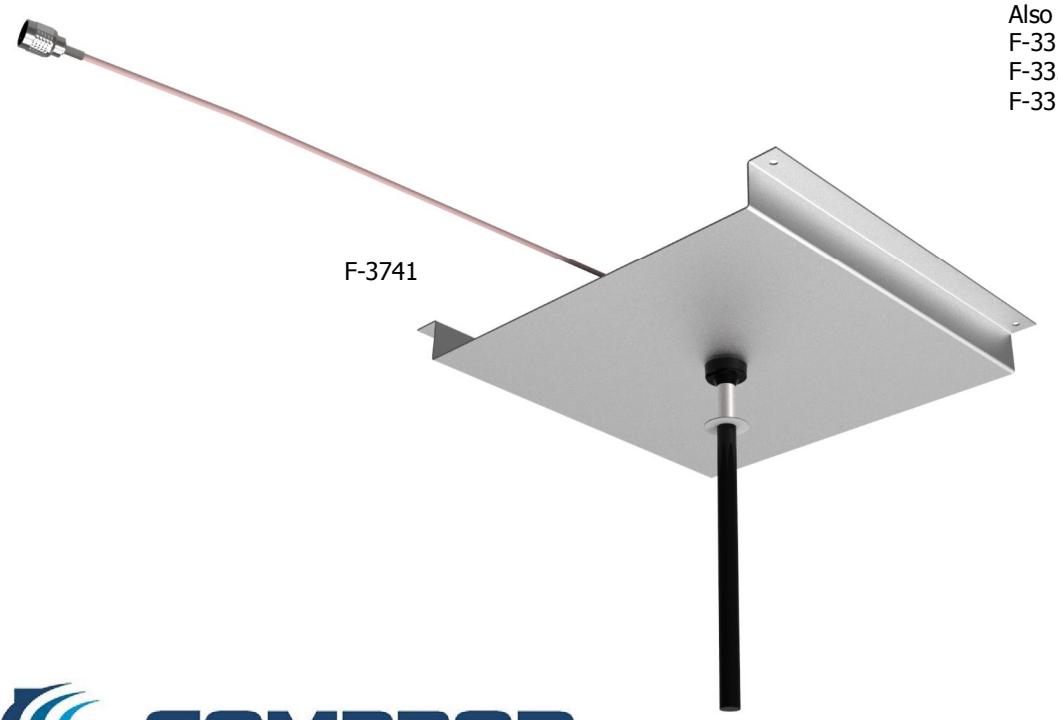


F-33034 Optional Mounting Bracket for F-3749/A



F-33220 Optional Mounting Bracket for F-3749

Also available:
F-33135 Optional 2′ by 4′ Mounting Bracket
F-33203 Optional 2′ by 2′ Mounting Bracket
F-33159 Optional 12″ by 26″ Mounting Bracket



F-3741

VHF BI-DIRECTIONAL AMPLIFIER (BDA) 138-225 MHz

BDA-138225-SERIES

Comprod Inc.'s BDA138225 is an unidirectional Class B signal booster. It covers both the 138-174 MHz and 216-225 MHz bands. The amplifier can be used with input / output filters as an Unidirectional Amplifier or it can be combined with input and output duplexers to create a FCC and IC Certified Bi-Directional Amplifier.

Note: The BDA138225 must have adequate input and output filtering to prevent undesired interference. Comprod Technical Solutions Specialists can provide guidance on the required filtering solution for a complete BDA system design.

Electrical Specifications	Canada	USA
Certification	IC: 7755A-UDA138225	FCC: WDM-BDA138225
Frequency Range, MHz	138-225	150-225
Automatic Level Control (ALC), dB	35	35
Amplifier Maximum Gain, dB	+ 100 Typical	+ 100 Typical
System Nominal Gain at –45 dBm input power	+ 75	+ 75
Input Manual Attenuator Range, dB	0 to 30 in 2 dB steps	0 to 30 in 2 dB steps
Output Level Manual Adjustment range, dB	0 to 15 in 1 dB steps	0 to 15 in 1 dB steps
3rd Order Output Intercept Point, dBm	+48 Typical	+48 Typical
Noise Figure, Typical (without filters), dB	4	4
Limited Output Composite Power, dBm	+31	+31
Nominal Impedance, Ohms	50	50
Input / Output Connectors	N Female	N Female
AC Power Source Input, Volts	100 to 260 50/60Hz	100 to 260 50/60Hz
Optional DC Power Source Voltages, Volts	+24 or +48	+24 or +48
Optional dry contact alarms	Power Failure	Power Failure

Mechanical Specifications (Typical)	
Dimensions, in H, W, D	24 x 20 x 13.5
Temperature Range, °F (°C)	-4 to 131 F (-20 to +55) C
Weight, lbs (Kg)	100 (45)

Tel: US 1.877.825.2007 / CAN 1.800.603.1454
Email: sales@comprodcom.com
Fax: 1.800.554.1033

UHF BI-DIRECTIONAL AMPLIFIER (BDA) 380-512 MHz

UBDA-3845/4551-SERIES

Our BDA system is designed for high standards with government and industrial clients in mind. The solution can be customized for unique client requirements.

Reliable RF coverage for public safety and utility clients in 380-512 MHz offered for applications including hotel parking garages, underground mining facilities, shopping malls, hospitals, government buildings, subway stations and tunnels. Available in rack mount, NEMA stainless steel or painted steel NEMA enclosures. Compliant to Govt. standards: FCC WDM-UBDA 4551; IC 7755A-UBDA4551. Comprod Technical Solutions Specialists can provide guidance on the required filtering solution for a complete BDA system design.

Electrical Specifications	
Frequency Range, MHz	380-512
Passbands	2 (4 passband version available)
Guard Band, MHz	2-3
Window Bandwidth, MHz (configured by channel filters)	2-3
Automatic Level Control (ALC), dB	Yes (30 dB)
Maximum Gain, dB	+ 70 dB Typical
Output Level / Input Attenuator Range, dB	0 to 15 in 1 dB steps / 0 to 30 in 2 dB steps
3rd Order Output Intercept Point, dBm	+48 Typical
Output 1 dB Compression Point, dBm	+38 Typical
Noise Figure, Typical (with filters), dB	5.5
Uplink Max Output (Composite), dBm	+29
Downlink Max Output (Composite), dBm	+29
Nominal Impedance, Ohms	50
VSWR	1.5:1
AC Power Input, Volts	117 to 260
Temperature Range, °F (°C)	-4 to 131 (-20 to +55)
Input / Output Connectors	N Female

Mechanical Specifications	
Enclosure	NEMA 4 Painted Steel
Dimensions, in H, W, D	24 x 16 x 11.5 (Large Enclosure) ; 14 x 8 x 7 (Attached Small Enclosure)
Weight, lbs (Kg) (Approximate)	100 (45)

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Fax: 1.800.554.1033

BI-DIRECTIONAL AMPLIFIER (BDA) 764-941 MHz

BDA-40-SERIES

Designed and engineered to meet the fire protection codes (NFPA and IFC standards), Comprod Inc.'s Bi-Directional Amplifier (BDA) features advanced Alarm, Monitoring & Control capabilities ensuring continuous availability of mission-critical services. Certified: FCC and IC.

- Available in 700, 800 and 900 MHz Public Safety bands
- Ideal for indoor applications in commercial and government buildings, parking garages, mining facilities, subway stations and tunnels
- Rack mounted or in NEMA 4/4x waterproof, stainless steel enclosures
- Low noise figure, wide dynamic range
- Visual alarms and remote failure monitoring with Graphical User Interface

Electrical Specifications	BDA 764806	BDA 806870	BDA 896941
Frequency Range, MHz	DL: 764-776 UL: 794-806	DL: 851-869 UL: 806-824	DL: 935-941 UL: 896-901
Passband Ripple, dB	+/- 1.5	+/- 1.5	+/- 1.5
Automatic Gain Control (AGC), dB	30	30	30
Maximum Gain, dB	+83.5	+83.5	+83.5
Manual Gain Control (MGC), dB	0-31 in 1 dB Steps	0-31 in 1 dB Steps	0-31 in 1 dB Steps
Noise Figure, dB	2.5 Typical	2.5 Typical	2.5 Typical
Delay, Max., µs	1	1	1
Max. Output Power, dBm	DL: +31.5 UL: +31.5	DL: +31.5 UL: +31.5	DL: +31.5 UL: +31.5
VSWR	1.5:1	1.5:1	1.5:1
Input Voltage, Volts	AC: 115-220 DC: 24-27	AC: 115-220 DC: 24-27	AC: 115-220 DC: 24-27
Temperature Range, °C	-30 to +60	-30 to +60	-30 to +60
Humidity, %	95	95	95
Connectors	N Female	N Female	N Female
LNA bypass Function Implementation, dBm	-20 @ Input Power	-20 @ Input Power	-20 @ Input Power
Alarms	AGC, S/D, Power	AGC, S/D, Power	AGC, S/D, Power

Mechanical Specifications	BDA 764806	BDA 806870	BDA 896941
Enclosure	NEMA 4 Painted Steel	NEMA 4 Painted Steel	NEMA 4 Painted Steel
Dimensions, in. H, W, D	17.5 x 11 x 9	17.5 x 11 x 9	17.5 x 11 x 9
Weight, lbs	33.5	33.5	33.5

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Monitoring & Control	Built-in via RS-232 Connector (USB Optional)	Built-in via RS-232 Connector (USB Optional)	Built-in via RS-232 Connector (USB Optional)

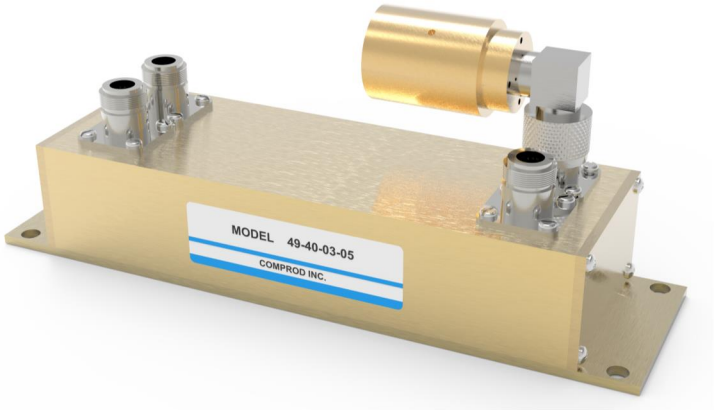
Monitor	BDA 764806	BDA 806870	BDA 896941
	- TX/RX System Gain - TX/RX Attenuation - TX Input Power - TX/RX Output Power - DC Voltage/Current - System Temperature	- TX/RX System Gain - TX/RX Attenuation - TX Input Power - TX/RX Output Power - DC Voltage/Current - System Temperature	- TX/RX System Gain - TX/RX Attenuation - TX Input Power - TX/RX Output Power - DC Voltage/Current - System Temperature
Alarm	**BDA 764806**	**BDA 806870**	**BDA 896941**
	- TX Input Over Power - TX/RX Output Over Power - AGC Range Alarm - TX/RX Shutdown - PSU Alarm - Over Temperature	- TX Input Over Power - TX/RX Output Over Power - AGC Range Alarm - TX/RX Shutdown - PSU Alarm - Over Temperature	- TX Input Over Power - TX/RX Output Over Power - AGC Range Alarm - TX/RX Shutdown - PSU Alarm - Over Temperature
Control	**BDA 764806**	**BDA 806870**	**BDA 896941**
	- HPA On/Off - Gain - AGC On/Off - Shutdown On/Off - MCU Reset - Alarm Limit	- HPA On/Off - Gain - AGC On/Off - Shutdown On/Off - MCU Reset - Alarm Limit	- HPA On/Off - Gain - AGC On/Off - Shutdown On/Off - MCU Reset - Alarm Limit

Visual Alarms and Remote Failure Monitoring with Graphical User Interface

HYBRID DIRECTIONAL COUPLERS 138-960MHz

49-FF-YY-XX Series

Comprod Communications Ltd. offers a full line of Hybrid Directional Couplers. The full range of decoupling values allows balanced power division and distribution. These couplers are bidirectional and are well suited for two-way communications systems. A full line of Tri-Band models is available for distribution of VHF, UHF and 800 MHz via a single transmission line. Standard finish is gold Alodine.



- Low Insertion Loss
- High Isolation between ports
- Excellent VSWR
- Tri-Band and other models are available and customizable. Please contact a Comprod Inc. Technical support technician for consultation.

Model With No Load	Model With 5 Watt Load	Model With 25 Watt Load	Frequency Range	Decoupling (dB)	Insertion Loss (dB)	Power Split Ratio (%)
49-13-03-00	49-13-03-05	49-13-03-25	138-174MHz	-3.0, ±0.7	-3.0, ±0.3	50 / 50
49-13-48-00	49-13-48-05	49-13-48-25	138-174MHz	-4.8, ±0.7	-1.8, ±0.3	67 / 33
49-13-06-00	49-13-06-05	49-13-06-25	138-174MHz	-6.0, ±1.0	-1.2, ±0.2	75 / 25
49-13-07-00	49-13-07-05	49-13-07-25	138-174MHz	-7.0, ±1.0	-1.0, ±0.2	80 / 20
49-13-10-00	49-13-10-05	49-13-10-25	138-174MHz	-10.0, ±1.0	-0.5, ±0.2	90 / 10
49-13-20-00	49-13-20-05	49-13-20-25	138-174MHz	-20.0, ±1.0	-0.3 max.	99 / 1
49-38-03-00	49-38-03-05	49-38-03-25	380-512MHz	-3.0, ±0.7	-3.0, ±0.3	50 / 50
49-38-48-00	49-38-48-05	49-38-48-25	380-512MHz	-4.8, ±0.7	-1.8, ±0.3	67 / 33
49-38-06-00	49-38-06-05	49-38-06-25	380-512MHz	-6.0, ±1.0	-1.2, ±0.2	75 / 25
49-38-07-00	49-38-07-05	49-38-07-25	380-512MHz	-7.0, ±1.0	-1.0, ±0.2	80 / 20
49-38-10-00	49-38-10-05	49-38-10-25	380-512MHz	-10.0, ±1.0	-0.5, ±0.2	90 / 10
49-38-15-00	49-38-15-05	49-38-15-25	380-512MHz	-15.0	-0.2 max.	97 / 3
49-38-20-00	49-38-20-05	49-38-20-25	380-512MHz	-20.0	-0.2 max.	99 / 1
49-38-30-00	49-38-30-05	49-38-30-25	380-512MHz	-30.0	-0.2 max.	99.9 / 0.1
49-74-03-00	49-74-03-05	49-74-03-25	746-960MHz	-3.0, ±0.7	-3.0, ±0.3	50 / 50
49-74-48-00	49-74-48-05	49-74-48-25	746-960MHz	-4.8, ±0.7	-1.8, ±0.3	67 / 33
49-74-06-00	49-74-06-05	49-74-06-25	746-960MHz	-6.0, ±1.0	-1.2, ±0.2	75 / 25
49-74-07-00	49-74-07-05	49-74-07-25	746-960MHz	-7.0, ±1.0	-1.0, ±0.2	80 / 20
49-74-10-00	49-74-10-05	49-74-10-25	746-960MHz	-10.0, ±1.0	-0.5, ±0.2	90 / 10
49-74-15-00	49-74-15-05	49-74-15-25	746-960MHz	-15.0	-0.2 max.	97 / 3
49-74-20-00	49-74-20-05	49-74-20-25	746-960MHz	-20.0	-0.2 max.	99 / 1
49-74-30-00	49-74-30-05	49-74-30-25	746-960MHz	-30.0	-0.2 max.	99.9 / 0.1

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