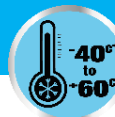## VHF EXPOSED DIPOLES

**134-178 MHz**

F-33029D-SM-1/2

The F-33029D-SM-1/2 is is a Wide Band Antenna with Black Anodized boom and dipoles. It is specifically designed for trunked Multicoupler such as X-pass systems. The 1/2 Wavelength dipole to mast spacing offers a bidirectional radiation pattern. Material the antenna is made of is Aluminium 6061-T6.

This antenna is extremely rugged and is well suited for use in severe environmental conditions. This antenna is a Low Intermod design that incorporates a minimum of moveable joints in its construction and replaces standard castings with heavy duty welded joints. The F-33029D-SM-1/2 has internal cabling design and is not field adjustable.

- 1/4 wavelength dipole-to-mast spacing is also available for offset radiation pattern.
- 3/8 wavelength dipole-to-mast spacing is also available for a radiation pattern between the elliptic and the offset.

Electrical Specifications	F-33029D-SM-1/2
Frequency Range, MHz	138-174
Nominal Gain, dBd	8.0-8.5
Number of Dipoles	4
Bandwidth 1.5:1 VSWR, MHz	36
Polarization	Vertical
Pattern	Bidirectional
Power Rating, Watts	450
Nominal Impedance, Ohms	50
Lightning Protection	DC Ground
Passive Intermodulation	-107 dBm (-150 dBc)
Standard Termination	7/16 DIN male attached to end of 118 in (3000 mm) RG-214 Cable

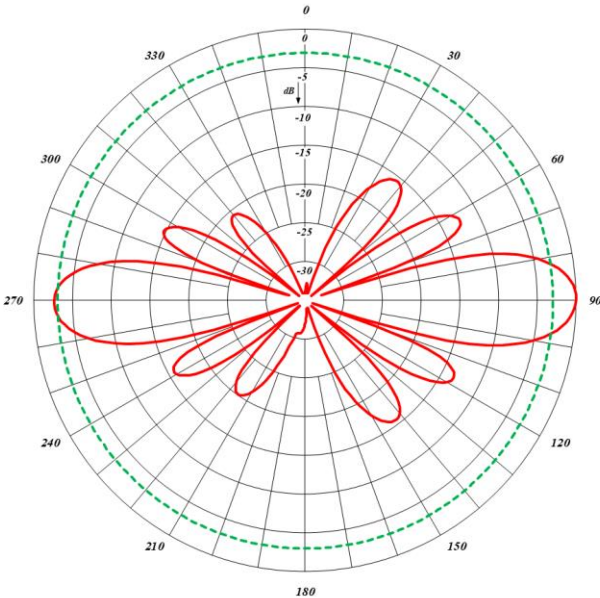| Mechanical Specifications	F-33029D-SM-1/2
Length, in (mm)	222 (5639)
Width (1/2 Wave Spacing), in (mm)	42 (1067)
Weight, lbs. (kg)	70 (32)
Weight with 1,57" (40mm) ice, lbs (kg)	418 (189)
Lateral Thrust lb (N)	462 (2056)
Lateral torque lb-ft (N-m)	1055 (1364)
Projected Area, ft² (m²)	7.92 (0.736)
Mounting Information	Mast 2.88" (73 mm) O.D.
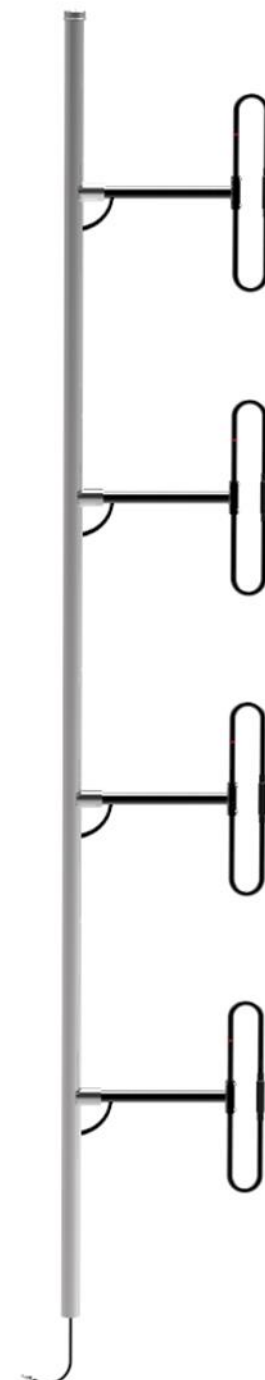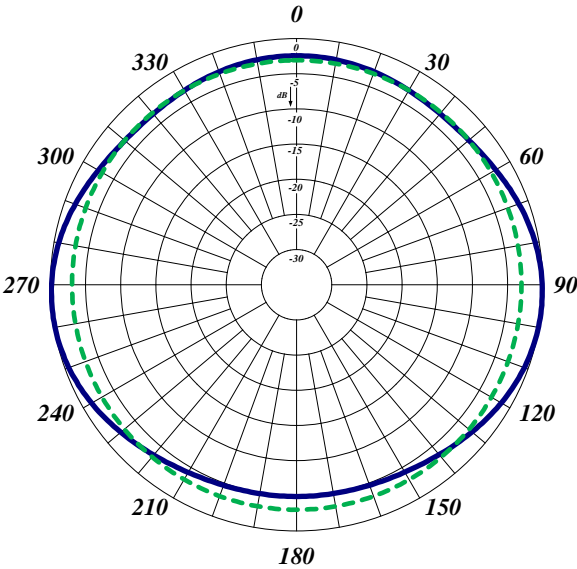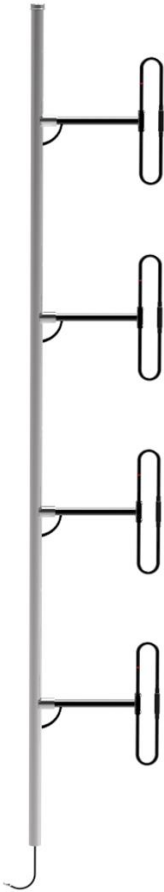
Horizontal (Azimuth) Radiation Pattern

Vertical (Elevation) Radiation Pattern

These mechanical specifications were obtained using the requirements of CAN/CSA-S37-01 Standard "Antenna, Towers and Antenna-Supporting Structures"	Wind zone………..…………………………………. Class D (1000 Pa) Ice Zone ………………………………………………… Class III (40 mm) Reliability ……………………………………. Class I (Importance factor 1)
Lateral thrust, torsional moment and bending moment are based on worst case conditions (non-factored loads)	

COMPROD