



VHF EXPOSED DIPOLES



138-174 MHz

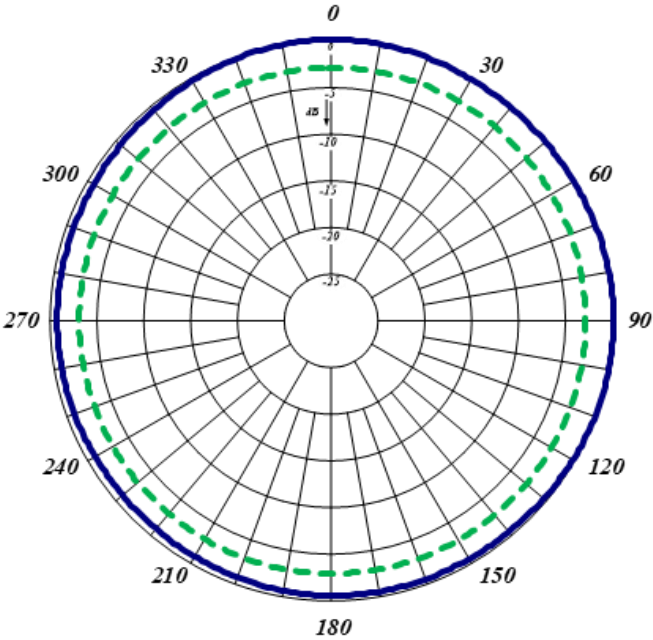
F-33030-D

The F-33030-D is a Wide Band Omnidirectional Antenna specifically designed for trunked multicoupled and X-pass systems applications. 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.

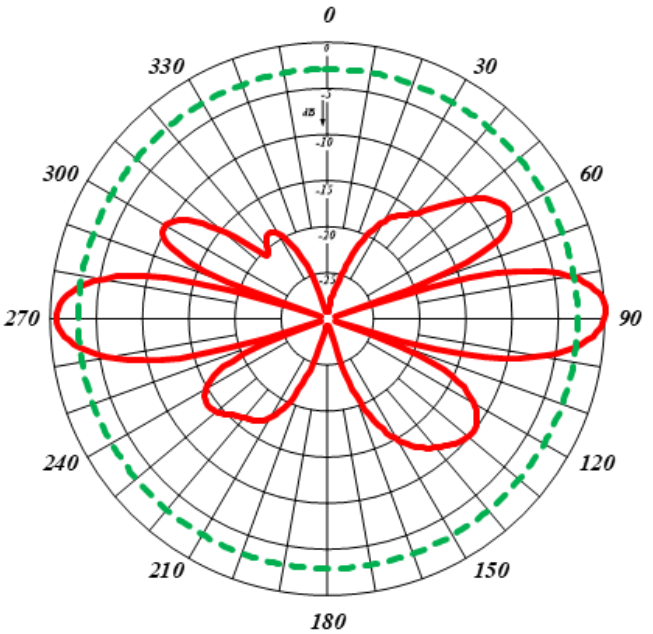
- The F-33030-D has internal cabling design and is not field adjustable.
- Passive Intermodulation Specification is measured in the third order intermodulation products, using two 20 watts (+43 dBm) Carriers.

Electrical Specifications	F-33030-D
Frequency Range, MHz	138-174
Nominal Gain, dBd	6
Number of Dipoles	8
Bandwidth 1.5:1 VSWR, MHz	36
Polarization	Vertical
Pattern	Omni
Power Rating, Watts	500
Nominal Impedance, Ohms	50
Lightning Protection	DC Ground
Passive Intermodulation	-107 dBm (-150 dBc)
Standard Termination	7/16 DIN male connector attached to end of 118 in (3000 mm) RG-214 Cable
Mechanical Specifications	F-33030-D
Length, in (mm)	246 (6248)
Width (1/2 Wave Spacing), in (mm)	30 (762)
Weight, lbs. (kg)	148 (67.1)
Weight with 1.57" (40 mm) ice, lbs (kg)	697 (316 kg)
Bending moment at top clamp lb-ft (N-m)	8521 (11563)
Lateral Thrust, lb (N)	1142 (5078)
Material	Aluminum 6061-T6
Projected Area, ft² (m²)	12,83 (1,193)
Mounting Information Mast O.D. (mm)	Mast 4,5" (114 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)		