

## VHF EXPOSED DIPOLES



138-174 MHz

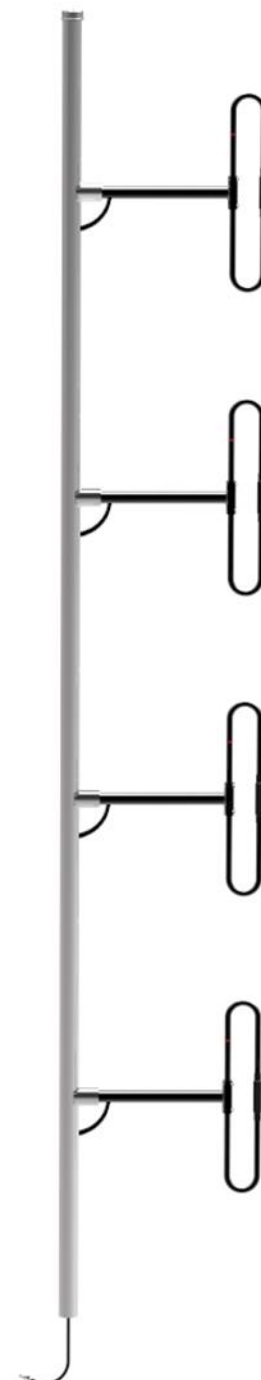
### F-33029D-SM-1/4

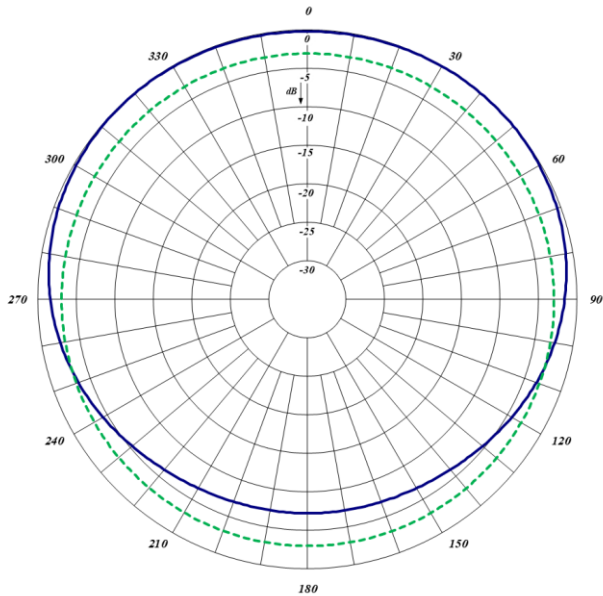
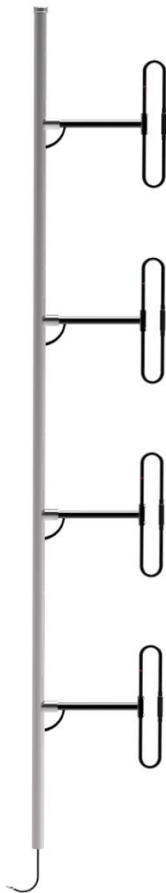
The F-33029D-SM-1/4 is a Wide Band Antenna with Black Anodized boom and dipoles. It is specifically designed for trunked Multicoupler such as X-pass systems. The 1/4 Wavelength dipole to mast spacing offers an offset radiation pattern. The antenna is made of Aluminium 6061-T6.

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-1/4 has internal cabling design and is not field adjustable.

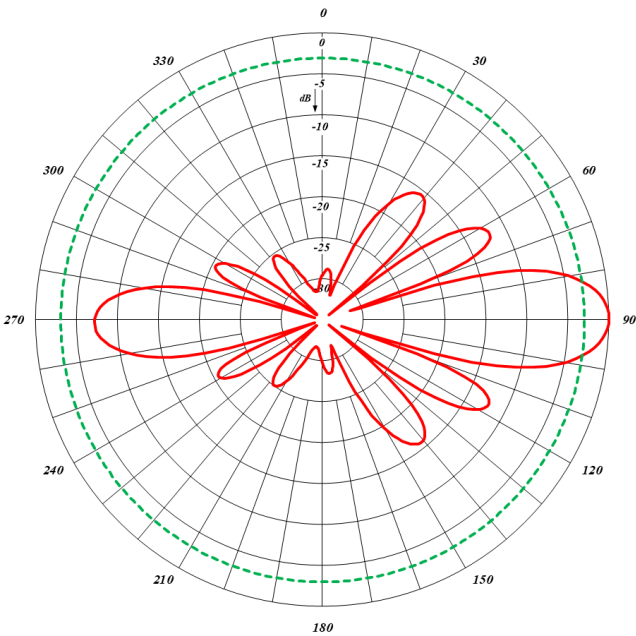
- 1/2 wavelength dipole-to-mast spacing is also available for bidirectional radiation pattern.
- 3/8 wavelength dipole-to-mast spacing is also available for a radiation pattern between the elliptic and the offset.

Electrical Specifications	F-33029D-SM-1/4
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	Offset
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-1/4
Length, in (mm)	222 (5639)
Width (1/4 Wave Spacing), in (mm)	24 (610)
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, ft <sup>2</sup> (m <sup>2</sup> )	7.92 (0.736)
Mounting Information	Mast 2.88" (73mm) 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)		