## **VHF EXPOSED DIPOLES**











138-174 MHz

## F-33031-D

The F-33031-D is a Wide Band Heavy Duty 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-33031-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-33031-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-33031-D	

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Length, in (mm)	246 (6248)	
Width (1/2 Wave Spacing), in (mm)	30 (762)	
Weight, lbs. (kg)	97 (44)	
Weight with 1,57" (40mm) ice, lbs (kg)	604 (274)	
Lateral Thrust Ib (N)	665 (2955)	
Bending moment at top clamp lb-ft (N-m)	4891 (6637)	
Material	Aluminum 6061-T6	
Projected Area, ft² (m²)	11,1 (1,032)	
Mounting Information Mast O.D. (mm)	Mast 3,5" (89 mm) O.D.	

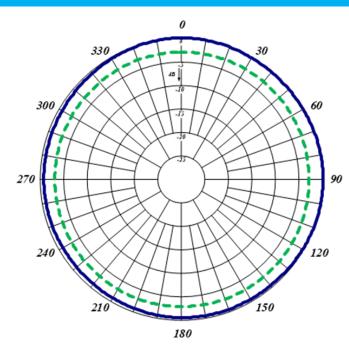




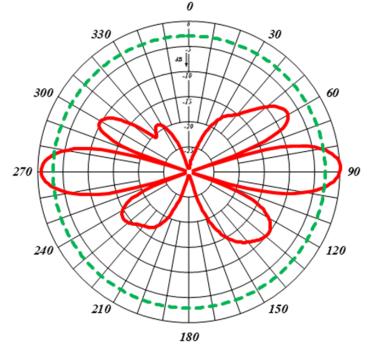
*Tel:* US 1.877.825.2007 / CAN 1.800.603.1454

## **VHF EXPOSED DIPOLE**





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 III (40 mm)
Lateral thrust, torsional moment and bending moment are based on worst case conditions (non-factored loads)		



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