

**COMMANDER Omni Fiberglass Antenna, 157-166, 7.4dBi, N Female**

Please visit us on the internet at <http://www.commandertech.com>

**Product Description**

Commander VHF base Station Antennas incorporate the design features of 9 MHz broadband capability, improved lightning protection and true omnidirectional gain in excess of 5 dBd

Note: Below 150 MHz, rated gain is 4.8 dBd due to length constraints. Side mounting hardware is available for the 620 to achieve special radiation patterns.


**220 Series**
**Features/Benefits**

Fiberglass construction protects radiating elements in corrosive environments. DC grounded - affords lightning protection

Copper radiating elements minimize possibility of intermod generation

**Technical Specifications**

Frequency Band	157 - 164
Horizontal Pattern	Omni Directional
Antenna Type	Fiberglass Omni
Electrical Down Tilt Option	Fixed
Gain, dBi (dBd)	7.4 (5.3)
Frequency Range, MHz	157 - 164
Connector Type	N Female
Connector Location	Bottom
Mounting Type	Fixed
Electrical Down Tilt, deg	0
Orientation	Upright
Mounting Hardware	346 Clamp Set
Rated Wind Speed, km/h (mph)	175 (282)
Gain (Omni), dBi (dBd)	7.39 (5.25)
VSWR	< 1.6 : 1
Vertical Beamwidth, deg	18
Polarization	Vertical
Maximum Power Input, W	500
Lightning Protection	Direct Ground
3rd Order IMP @ 2 x 43 dBm, dBc	-130
Impedance, Ohms	50
Overall Length, m (ft)	6.33 (20.8)
Element Housing Length, m (ft)	5.47 (18.0)
Mounting Pipe Diameter, m (in)	0.09 (3.5)
Support Pipe Length, m (ft)	0.86 (2.83)
Weight, kg (lb)	24.1 (53)
Radiating Element Material	Copper
Element Housing Material	Fiberglass
Support Pipe Material	Aluminum Alloy
Max Wind Loading Area m <sup>2</sup> (ft <sup>2</sup> )	0.231 (2.49)
Survival Wind Speed, km/h (mph)	200 (125)
Bend Mom @ Rated Wind 1" Below Top of Mt Pipe, N m (ft lbf)	1041 (1412)
Wind Load - Side @ Rated Wind, N (lbf)	443 (100)
Shipping Weight, kg (lb)	34 (75)
Packing Dimensions, HxWxD mm (in)	6400 x 100 x 100 (251.96 X 3.94 X 3.94)
Packing Dimensions, HxWxD, m (ft)	6.4 x 0.1 x 0.1 (21 x 0.33 x 0.33)
Shipping Dimensions of Accessory, HxWxD, m (ft)	Packed with Antenna
Shipping Mode	Common Carrier

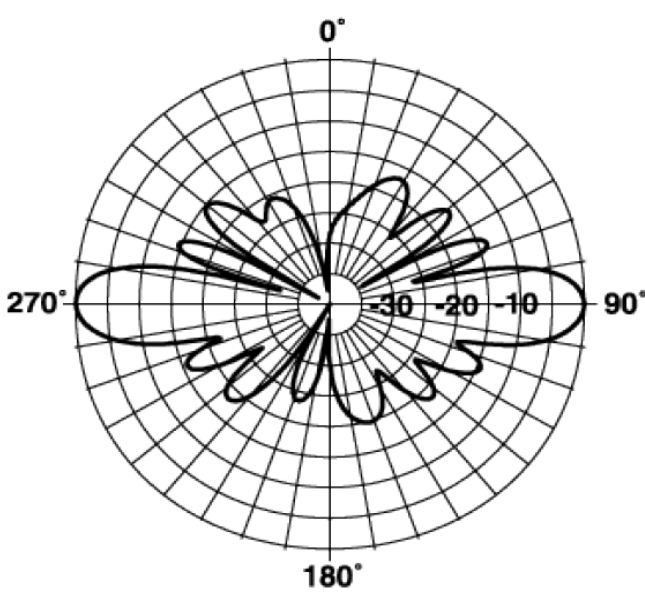
**Notes**

All information contained in this datasheet is subject to confirmation at time of ordering

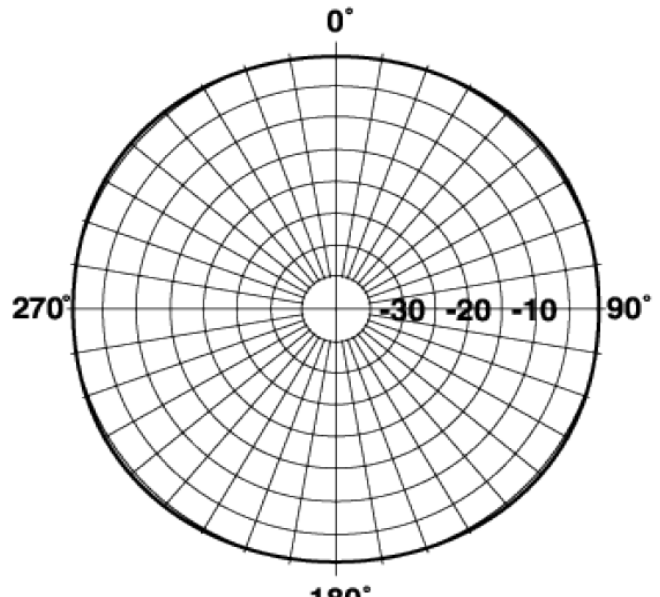
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Other Documentation



Vertical Pattern  
**180°**  
Vertical Pattern



Horizontal Pattern  
**180°**  
Horizontal Pattern

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