

**COMMANDER Omni Fiberglass Antenna, 160-169, 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 220 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	25-299.9 MHz
Horizontal Pattern	Omni Directional
Antenna Type	Fiberglass Omni
Electrical Down Tilt Option	Fixed
Gain, dBi (dBd)	7.4 (5.3)
Frequency Range, MHz	160-169
Connector Type	N Female
Connector Location	Bottom
Mounting Type	Fixed
Electrical Down Tilt, deg	0
Orientation	Upright
Mounting Hardware	46 Clamp Set
Rated Wind Speed, km/h (mph)	160 (100)
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)	5.94 (19.5)
Element Housing Length, m (ft)	5.3 (17.5)
Mounting Pipe Diameter, m (in)	0.07 (2.75)
Support Pipe Length, m (ft)	0.63 (2.08)
Weight, kg (lb)	10 (22)
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> )	0.204 (2.2)
Survival Wind Speed, km/h (mph)	200 (125)
Bend Mom @ Rated Wind 1" Below Top of Mt Pipe, N m (ft lbf)	1048 (773)
Wind Load - Side @ Rated Wind, N (lbf)	391 (88)
Shipping Weight, kg (lb)	25.9 (57)
Packing Dimensions, HxWxD mm (in)	6400 x 100 x 100 (264.17 X 3.94 X 3.94)
Packing Dimensions, HxWxD, m (ft)	6.4 x 0.1 x 0.1 (22 x 0.33 x 0.33)
Shipping Dimensions of Accessory, HxWxD, m (ft)	Packed with Antenna
Shipping Mode	Common Carrier

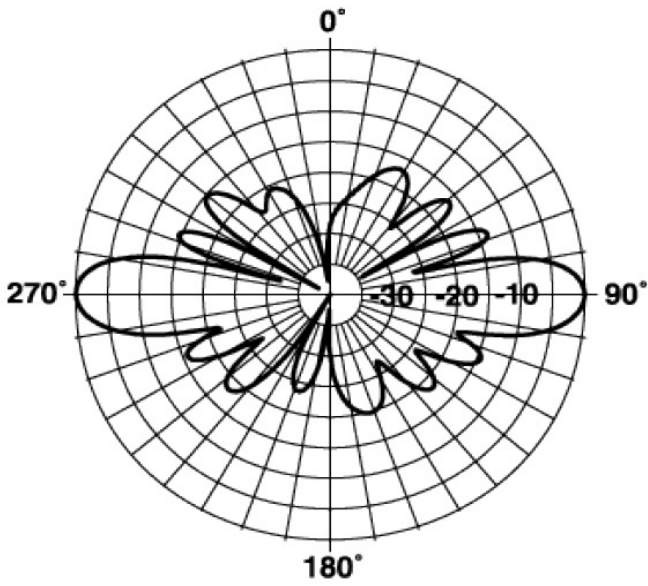
**Notes**

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

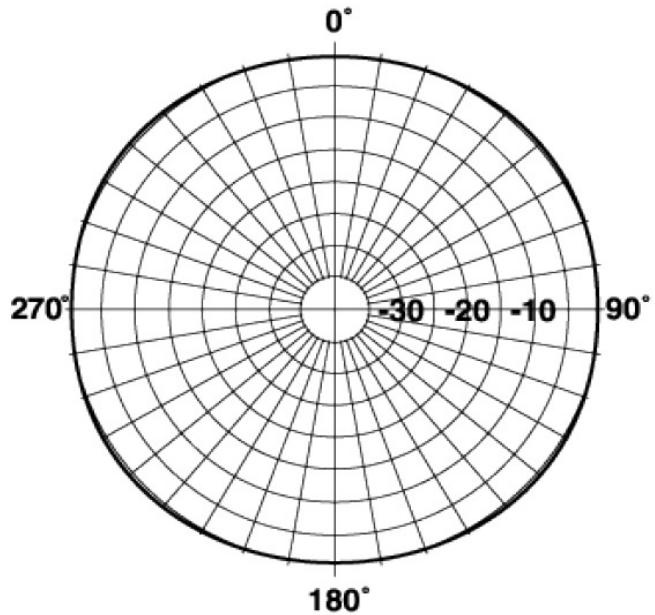
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Other Documentation



Vertical Pattern



Horizontal Pattern

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