



# ANTENNA EXPERTS

E-mail: [info@antennaexperts.in](mailto:info@antennaexperts.in) Website: [www.antennaexperts.in](http://www.antennaexperts.in)

Model AH-1800-16 1700 – 2000 MHz. 16 dBic. Gain

## EXTENDED RANGE CIRCULAR POLARIZED LHCP/RHCP HELICAL ANTENNA

**DESIGN FEATURES:** The AH-1800-16 uses extended stubs to provide the greater gain while maintaining the wider beam-width. This low-profile antennas use Circular Polarization Antenna Technology - which delivers better penetration through obstruction and interference. This commercial grade antenna provides superior performance as compare to significantly larger and more expensive products. Our AH series helical antennas are smaller than conventional yagi antenna. The extended range AH-1800-16 helical antenna is supplied with a specially designed mounting arrangement for steering the antenna over 360 Degrees in Azimuth direction and 90 degrees in elevation.

**CONSTRUCTIONS:** The extended range AH-1800-16, like all our AH series helical antennas, utilizes circular polarization to minimize the effects of multipath interference. Both Right Hand Circular Polarized (RHCP) and Left Hand Circular Polarized (LHCP) helical antenna models are available. The extended range AH-1800-16 Helical Antenna is light weight, broadband and rugged helical antennas, supplied with ABS radome to protect the antenna from environment. Cylindrical enclosure is used for low wind loading and for minimal effect of ice formation on the helical antenna operation as well as providing an aesthetically pleasing appearance. For higher gain requirement, the Helical antenna can be supplied in DUAL stacked or QUAD stacked arrays with suitable power splitter/combiner cable harness.

### ELECTRICAL SPECIFICATIONS:

Frequency Range	1700 - 2000 MHz.
Gain - Typical	16 dBic.
Bandwidth	1.7 – 2.0 GHz.
Polarization	Circular - LHCP or RHCP
Input Impedance	50 Ohms.
Radiation Pattern	Directional
Horizontal Beam-width –Half Power Points	25+/-2 Degrees Typical
Vertical Beam-width –Half Power Points	25+/-2 Degrees Typical
Front to Back Ratio	30+/-2 dB. Typical
VSWR – Better Than	1.5 : 1
RF Power Handling Capacity	200 Watts.
Input Termination	N-Female

### MECHANICAL SPECIFICATIONS:

Antenna Materials	ABS, Copper, Aluminum
Mounting Hardware	Marine Grade Stainless Steel
Gross Weight – Less Than	1.5 Kg.
Wind Rating	180 Km/Hr.
Overall Length	900 mm
Shipping Length	1000 mm
Radiating Materials	High Quality Copper
Enclosure Materials	High Strength ABS
Enclosure Length	800 mm
Maximum Mount Pipe Diameter	52 mm (2 Inches)
Final Finish/Color	Olive Green

### ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature	(-) 30 to +70 Degrees Celsius
Storage Temperature	(-) 40 to +80 Degrees Celsius
Humidity	0 to 95% RH

Note: All information contained in the datasheet is subject to change without any prior notice.  
Customized mounting and customized color can also be supplied on request.

Please contact us for Photographs and Frequency Vs VSWR Graph