



# ANTENNA EXPERTS

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Model AH-1800 1700 – 1990 MHz. 12 dBic. Gain

## CIRCULAR POLARIZED LHCP or RHCP HELICAL ANTENNA

**DESIGN FEATURES:** The AH-1800 uses extended stubs to provide the greater gain while maintaining the wider beam-width. This high-gain 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 AH-1800 Helical Antenna is supplied with a specially designed mounting arrangement for steering the antenna in both planes, over 360 Degrees in Azimuth and 90 Degrees in Elevation for terrestrial and satellite links.

**CONSTRUCTIONS:** The AH-1800, 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 AH-1800 Helical Antenna is light weight, broadband and rugged helical antennas, supplied with fiberglass 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 - 1990 MHz.
Gain - Typical	12 dBic.
Bandwidth	Entire Band
Polarization	Circular LHCP or RHCP
Input Impedance	50 Ohms.
Radiation Pattern	Directional
Horizontal Beam-width –Half Power Points	55 Degrees.
Front to Back Ratio	18 dB.
VSWR – Better Than	1.5 : 1
RF Power Handling Capacity	250 Watts.
Input Termination	N-Female

### MECHANICAL SPECIFICATIONS:

Mounting Hardware	Marine Grade Stainless Steel
Wind Rating	200 Km/Hr.
Gross Weight – Less Than	2 Kgs.
Overall Length	0.50 Meter.
Shipping Length	0.55 Meter.
Radiating Materials	High Quality Copper
Enclosure Materials	High Strength Fiber Glass
Enclosure Diameters	62 mm
Maximum Mount Pipe Diameter	52 mm (2 Inches)

### 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 & color can also be supplied on request. [Please contact us for Radiation Patterns and Frequency Vs VSWR Graph](#)