



ANTENNA EXPERTS

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Model # AH-850 700 – 990 MHz. 12 dBic. Gain

CIRCULAR POLARIZED LHCP/RHCP HELICAL ANTENNA

DESIGN FEATURES: The AH-850 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-850 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-850, 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-850 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.

ARRAY FORMATION: 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	700 - 990 MHz.
Gain - Typical	12 dBic.
Bandwidth	200 MHz.
Polarization	Circular - LHCP or RHCP
Input Impedance	50 Ohms.
Radiation Pattern	Directional
Horizontal Beam-width –Half Power Points	55 Degrees.
Horizontal Beam-width –Half Power Points	45 Degrees.
Front to Back Ratio	16 dB. Typical
VSWR – Better Than	1.5 : 1
RF Power Handling Capacity	250 Watts.
Input Termination	N-Female

MECHANICAL SPECIFICATIONS:

Mounting Hardware	Stainless Steel
Gross Weight – Less Than	3 Kgs.
Wind Rating	190 Km/Hr.
Overall Length	700 mm
Shipping Length	750 mm
Radiating Materials	High Quality Copper
Enclosure Materials	High Strength Fiber Glass
Enclosure diameter	110 mm
Maximum Mount Pipe Diameter	51 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 specified at center frequency of the band and subject to change without any prior notice. Customized mounting and customized color can also be supplied on request.

Please contact us for Radiation Patterns and Frequency Vs VSWR Graph