



ANTENNA EXPERTS

E-mail: info@antennaexperts.in Website: www.antennaexperts.in

Model # HL-225-400

225 – 400 MHz.

10 dBic. Gain

UHF AVIATION BAND CIRCULAR POLARIZED HELICAL ANTENNA

DESIGN FEATURES: The HL-225-400 UHF Aeronautical Band helical antenna uses extended stubs to provide the greater gain while maintaining the wider beam-width. This high-gain antenna 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 HL-225-400 helical antenna is smaller than conventional yagi antenna. The HL-225-400 Helical Antenna can be 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 HL-225-400 UHF aviation band helical antenna, 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 HL-225-400 UHF Aero Band 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	225 -400 MHz.
Gain	10 dBic. Typical
Bandwidth	Entire Band
Polarization	Circular - LHCP or RHCP
Input Impedance	50 Ohms.
Radiation Pattern	Directional
Horizontal Beam-width –Half Power Points	50 Degrees.
Vertical Beam-width –Half Power Points	50 Degrees.
Front to Back Ratio	16 dB.
VSWR – Better than	2.5:1
RF Power Handling Capacity	500 Watts.
Input Termination	N-Female

MECHANICAL SPECIFICATIONS:

Mounting Hardware	Stainless Steel
Weight	14 Kgs.
Wind Rating	200 Km/Hr.
Overall Length	1300 mm
Shipping Length	1400 mm
Radiating Materials	Copper
Enclosure Materials	Fiber Glass
Enclosure diameter	260 mm
Mast Diameter	52 mm
Reflector Materials	6061T6 Aluminum Alloy
Reflector Size	400 x 400 mm

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.