



ANTENNA EXPERTS

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Model # QHA-850 700 – 1000 MHz. 3 dBic Gain

Quadrifilar Helix RHCP Omni or LHCP Omni High Power Antenna

DESIGN FEATURES: QHA-850 broadband LHCP omni-directional or RHCP omni-directional quadrifilar helix antenna is rugged all weather model, enclosed in a ABS radome, uses high class copper alloy and does not require any field tuning or adjustments. The compact size of RHCP omni-directional quadrifilar helix antenna allows easy handling, shipping and highly suitable for receiving, transmitting, scanning, monitoring, surveillance and jamming applications including GSM & CDMA bands without having the requirement of multiple antennas. The antenna is also highly suitable for Ground to Air communication/jamming application due to its wide elevation beamwidth with omni-directional properties. Antenna termination fitted just below the NATO mounting flange for complete weather protection. Other type of mounting hardware / configuration can be supplied on request.

CONSTRUCTIONS: The QHA-850 RHCP omni quadrifilar helix or LHCP omni quadrifilar helix antenna is consisting of two pair vertical loop radiating elements at right angles to each other, twisted into a helix turns vertically and enclosed in ABS radome. The special “Teflon Dielectric Transmission Line” technique is used to handle high power handling capacity allowing smooth VSWR and typical 3dBi. gain over the entire 700-1000MHz frequency band. The UV resistant ABS enclosure has excellent transparency for RF signals and enough strength to withstand specified wind loads. The stainless steel mounting hardware is supplied with the antenna. Cylindrical shell/enclosure is used for low wind loading and for minimal effect of ice formation on the antenna operation as well as providing an aesthetically pleasing appearance.



ELECTRICAL SPECIFICATIONS:

Frequency Range	700 -1000 MHz.
Gain	3 dBi. Typical
Bandwidth	700-1000 MHz
Polarization	Circular – RHCP or LHCP
Input Impedance	50 Ohms
Azimuth Radiation Pattern - Typical	Omni-directional
Elevation Radiation Pattern - Typical	Equivalent to Half Wave Dipole
Vertical Beam-width –Half Power Points.	120 Degrees Typical
VSWR – Better Than	2:1 Typical
RF Power Handling Capacity	1000 Watts
Input Termination	N-Female

MECHANICAL SPECIFICATIONS:

Materials	6063T6 Aluminum, Copper & ABS
Mounting Hardware -Materials	Marine Grade Stainless Steel
Wind Rating	200 Km/Hr.
Overall Length	240 mm
Shipping Length	250 mm
Mounting Type	NATO 4 Holes or Pole Mount
Enclosure Material	UV Resistant ABS
Enclosure Outer Diameter	160 mm
Gross Weight	2 Kgs.

ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature	(-) 30 to +60 Degrees Celsius
Storage Temperature	(-) 40 to +70 Degrees Celsius
Humidity	0 to 95% RH

Please contact us for further information like radiation patterns & VSWR graph etc.

Note: All information contained in the datasheet is subject to change without any prior notice.