



# ANTENNA EXPERTS

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Model # QHA-2023                      2000 – 2300 MHz.                      2 dBi Gain

## Quadrifilar Helix RHCP Omni or LHCP Omni High Power Antenna

**DESIGN FEATURES:** QHA-2023 broadband omni-directional LHCP omni quadrifilar helix or RHCP omni 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 LHCP or RHCP omni-directional quadrifilar helix antenna allows easy handling, shipping and highly suitable for receiving, transmitting, scanning, monitoring, surveillance and jamming applications 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-2023 LHCP omni or RHCP quadrifilar helix omni 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 2dBi. gain over the entire 2000-2300 MHz. 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	2000 -2300 MHz.
Gain	2 dBi. Typical
Bandwidth	2.0-2.3 GHz
Polarization	Circular – RHCP or LHCP
Input Impedance	50 Ohms
Radiation Pattern - Typical	Omni-directional
Elevation Radiation Pattern - Typical	Equivalent to Half Wave Dipole
Vertical Beam-width –Half Power Points.	120 Degrees
VSWR – Better Than	2:1
RF Power Handling Capacity	500 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	130 mm
Shipping Length	150 mm
Mounting Type	Nato Flange, Man-pack or Pole Mt
Enclosure Material	UV Resistant ABS
Enclosure Outer Diameter	75 mm
Gross Weight	< 1 Kg.

### ENVIRONMENTAL SPECIFICATIONS:

Operating Temperature	(-) 35 to +70 Degrees Celsius
Storage Temperature	(-) 40 to +80 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.