Circular Polarized High Gain High Power Quad Stacked helical Antenna

**DESIGN FEATURES:** The AHQ-1417-21 quad stacked helical antenna uses extended stubs to provide the greater gain while maintaining the wider beam-width and designed to provide wideband directional transmission/reception of radio signals from 1400-1700 MHz bands. The AHQ-1417-21 quad stacked helical antenna is highly suitable to provide the uninterrupted communications in the tunnels. 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 AHQ-1417-21 Helical Antenna is heavy duty, broadband and rugged helical antennas, supplied with fiberglass radome to protect the antenna from environment. The radiating element of high power helical antenna is made of high quality high strength enameled coated copper wire and winding is secure alongside wall of fiber glass enclosure/hosing/radome to keep the helical winding/radiating element to its appropriate location to prevent RF inter-modulation. The antenna is designed as per MIL-STD-810G standards. Quad Stacked Helical Antenna is supplied with power splitter/combiner, phasing harness cables, stacking pipe and mounting hardware to mount the dual stacked helical antenna on tower/mast.

**ELECTRICAL SPECIFICATIONS:**
- **Frequency Range:** 1400 - 1700 MHz.
- **Gain – Typical @ Cf:** 21 dBiC.
- **Bandwidth:** 1.4 – 1.7 GHz.
- **Polarization:** Circular – LHCP or RHCP
- **Input Impedance:** 50 Ohms.
- **Radiation Pattern:** Directional
- **Horizontal Beam-width –Half Power Points:** 14+/−2 Degrees Typical
- **Vertical Beam-width –Half Power Points:** 14+/−2 Degrees Typical
- **Front to Back Ratio:** 35 +/-2 dB. Typical
- **VSWR – Better Than:** 2 : 1
- **RF Power Handling Capacity:** 300 Watts.
- **Input Termination:** N-Female

**MECHANICAL SPECIFICATIONS:**
- **Mounting Hardware:** Marine Grade Stainless Steel
- **Gross Weight:** 15 Kgs.
- **Wind Rating:** 180 Km/Hr.
- **Overall Length – Single Antenna:** 1200 mm
- **Shipping Length – Single Antenna:** 1250 mm
- **Radiating Materials:** High Quality Copper
- **Enclosure Materials:** High Strength ABS
- **Reflector Materials:** 6063T6 Aluminum Alloy
- **Enclosure Length – Single Antenna:** 1100 mm
- **Maximum Mount Pipe Diameter:** 52 mm (2 Inches)
- **Elevation Tilt Mechanism:** 0-90 Degrees
- **Final Color / Finish:** Olive Green

**ENVIRONMENTAL SPECIFICATIONS:**
- **Operating Temperature:** (-) 30 to +70 Degrees Celsius
- **Storage Temperature:** (-) 40 to +80 Degrees Celsius
- **Humidity:** 0 to 95% RH

Please contact us for detailed pictures, VSWR Chart, Gain Chart, Radiation Pattern and Accessories.
Note: All information contained in the datasheet is subject to change without any prior notice.