

VT-004Q™ Autotracking Antenna

The uniquely designed VT-004Q autotracking antenna is integrated into its own transport case. It is a high gain, ultra portable, light weight (~14kg) autotracking antenna that is self contained and is simple to setup and operate without the need for a separate case or a radome. The VT-004Q has a dual circular polarization head that can receive signals in the L band with 18dbi gain and S band with 20dbi gain. It tracks using a single channel monopulse autotracking technique with reception from directly overhead down to below the horizon with continuous rotation in azimuth. It is fitted with a integrated dual channel tracking receiver with data and clock outputs, integrated ACU, IMU and GPS.





Features

- Planer array simultaneous RHCP and LHCP antenna
- L and S Band Reception
- Monopulse Autotracking Technique
- Autonomous autotracking
- Multiple mode slave tracking
- Easy maintenance modular design
- DC Brushless overrated motors
- Absolute encoders in all rotating parts with better than 0.05° accuracy
- Boresite HD video with optical zoom

- Ethernet remote control and monitoring
- Integrated tracking receivers, IMU and GPS
- Good performance in adverse weather conditions without the need for a radome
- Light weight composite and corrosion resistant construction throughout
- Greatly reduced cabling
- Less weight ~14kg allows better portability as it requires no transport case or radome
- Windows 7 thru 10 Based ACU Software
- Human Language Based Remote Interface



The VuSoft software is used to provide the Antenna Control Unit (ACU) functions. This provides auto calibration, slaved "pointers", Program Tracking, Pre Tracking and Full Autotracking systems together with optional data acquisition and data storage. The VT-004Q is controlled via Ethernet that allows the antenna to be placed virtually anywhere that can be reached by a LAN making it possible to remote control or slave multiple antennas together even over exceptionally long distances.

Specifications

Operating Frequency 1435-2485 MHz Band Selectable

G/T Approx. -0.4 at S-Band

VSWR (Maximum) 1.5:1

Polarization Simultaneous LHCP and RHCP

Main Antenna Gain (Effective) 18.0 dBi @ 1435 MHz

20.0 dBi @ 2350 MHz

Sidelobes 2 dBp @ L-Band

3 dBp @ S-Band

3db Angle ±6.0° @ L-Band

±7.5°@ S-Band

Acquisition Angle ±12° @ L-Band

±15°@ S-Band

Velocity Up to 120°/sec Both Axis Simultaneous Acceleration Up to 100°/sec² Both Axis Simultaneous

Azimuth Travel Continuous Unlimited

Elevation Travel 90° to -15°

Temperature Non-Operating -40° C to +70° C

Temperature Operating -30° C (-40° C Option) to +65° C Plus Solar

Relative Humidity Up to 100% Including Condensation

Rain Up to 5-inches Per Hour With Optional Radome

Ice One-half Inch, Radial

Maximum Height 8000 Meters Unpressurised

WIND, Operating 112 KPH WIND, Survival 160 KPH Weight Approx 14 kg
Power Requirement 40 W

Voltage/Frequency 110/240 VAC, 50/60 Hz, 1 ø

Size Approx 56W x 42D x 21H cm

Interface Ethernet

IMU +/-90° Pitch and Roll with Electronic Compass
GPS Position and Height with Inbuilt Geodetic Model