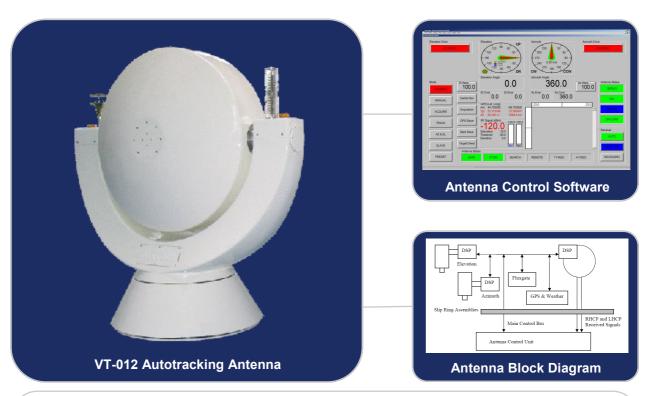


VT-012™ Autotracking Antenna

The VT-012 is a dual axis 1.2m parabolic reflector autotracking antenna, it is self contained and is simple to setup and operate. The VT-012 has a dual polarization head that can receive signals with gains of L band 24dB, S band 26dB, C band 28dB and track using a digital rotary scan autotracking technique with continuous rotation in both azimuth and elevation via slip ring assemblies with dual channel rotary joints.



Features

- Simultaneous RHCP/LHCP or Vertical/ Horizontal parabolic reflector antenna
- L, S & C Band Reception
- Digital Rotary Scan Head
- Autonomous autotracking
- Multiple mode slave tracking
- Easy maintenance modular design
- · DC Brushless overrated motors
- Absolute encoders in all rotating parts with better than 0.002° accuracy
- Optional on bore site video camera

- Bus based internal communication
- · Ethernet remote control and monitoring
- No special ACU hardware needed
- Fully integrated auto-calibration system
- Simultaneous receive and optional transmit
- Optional acquisition aid antenna
- Light weight carbon fiber, composite and corrosion resistant construction throughout
- Greatly reduced cabling
- · Less weight and better portability
- Windows 7, 8, 10 Based ACU Software



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-012 is controlled via an Ethernet link that allows the antenna to be placed virtually anywhere that can be reached by a satellite link or WAN making it possible to remote control or slave multiple antennas together even over exceptionally long distances.

Specifications

Operating Frequencies 1435.5-1540.5 & 2185.0-2485.0 & 5090.0-5250.0 MHz

G/T Approx 6.0 at S-Band

Polarization Simultaneous dual polarization reception

Main Antenna Gain (Minimum) 24.0 dBi @ 1435 MHz

26.0 dBi @ 2350 MHz 28.0 dBi @ 5150 MHz

Sidelobes Min -20 dB Under Main Beam @ S-Band

Beam Width ±4.0°@ L-Band

±3.5°@ S-Band

Acquisition Angle ±8° @ L-Band

±7°@ S-Band

VSWR (Maximum in band) 2:1

Velocity Up to 42°/sec Azimuth & 32°/sec Elevation

(Higher speeds availbale with optional gearboxes)

Acceleration Up to 110°/sec²

Azimuth Travel Continuous Unlimited
Elevation Travel Continuous Unlimited
Temperature Non-Operating -40° C to +70° C

Temperature Operating -30° C (with optional heating) to +65° C Plus Solar

Relative Humidity Up to 100% Including Condensation

Rain Up to 5-inches Per Hour Ice One-half Inch, Radial

WIND, Operating 110 KPH WIND, Survival 200 KPH Weight Approx 255 kg

Power Requirement 290 W Typical, 460 W Peak Voltage/Frequency 110/220 VAC, 50/60 Hz, 1 ø

Control Interface Ethernet

Camera On Axis Fully Integrated Color High Resolution CCD

Stabilization 9 axis INU

GPS Position and Height with Inbuilt Geodetic Model

Optional Acquisition Aid Dual channel L&S band monopulse, 15dBi, ±11° BW in S-Band

Optional Safety Ion Shedding Lightning Protection