



VT-009™ Autotracking Antenna

The VT-009 is a high gain portable autotracking antenna, it is self contained and is simple to setup and operate. The VT-009 has a dual polarization head that can receive signals from L thru C band with full data recovery and autotracking using a unique JDA Systems developed autotracking technique. It can point from directly overhead down to the horizon with unlimited rotation in azimuth. The recovered combined data and clock signal outputs from the inbuilt bit synchronizers are provided from the integrated dual channel tracking receiver within the VT-009, along with the dual amplified RF feeds, so It is possible to operate the VT-009 stand alone without the need for an external data receiver if required.



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Features

- Parabolic reflector with radome
- Simultaneous Vertical and Horizontal or RHCP and LHCP polarization
- L & S & C Band Reception
- Dual channel tracking receiver
- Cavity filters to reject out of band signals, even in extreme interference conditions
- Autonomous autotracking
- Multiple mode slave tracking
- Easy maintenance modular design
- DC Brushless overrated motors
- Dual Bit Sync Data & Clock outputs
- Bus based internal communication
- Ethernet remote control
- Fully integrated auto-calibration system
- Simultaneous receive and transmit option
- Good performance in adverse weather conditions
- Light weight 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, Slaved Tracking and Full Autotracking systems together with optional data acquisition and data storage. The VT-009 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 Frequencies	1435.5-1540.5 & 2185.0-2485.0 & 5090.0-5250.0 MHz (User specific bands available on request)
First Stage Filter	Dual Triband Cavity Filters
First Stage Amplifier	17dB Gain 0.5dB Noise
G/T	Approx. -0.54 dB/K at S-Band
Polarization	Simultaneous dual polarization reception
Main Antenna Gain (Minimum)	20.0 dBi @ 1435 MHz 24.0 dBi @ 2350 MHz 30.0 dBi @ 5150 MHz
Sidelobes	Min -20 dB Under Main Beam @ S-Band
Beam Width	±7.7° @ L-Band ±4.8° @ S-Band ±2.1° @ C-Band
Acquisition Angle (Max)	±13° @ L-Band ±8° @ S-Band ±4° @ C-Band
VSWR (Maximum in band)	Better than 2:1
Velocity	Up to 90°/sec Azimuth & 90°/sec Elevation (Simultaneous)
Acceleration	Up to 110°/sec ²
Azimuth Travel	Unlimited (Slip Rings and Rotary Joints Fitted)
Elevation Travel	0° to +110° (Horizon to more than straight up)
Temperature Non-Operating	-40° C to +70° C
Temperature Operating	-40° 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	32 kg with the radome installed
Power Requirement	120 W Typical, 200 W Peak
Voltage/Frequency	100/245 VAC, 50/60 Hz, 1 ø
Control Interface	Ethernet
Stabilization	9 axis INU
GPS	Position and Height with Inbuilt Geodetic Model
Size Approx	110W x 110D x 110H cm