



VT-008™ Autotracking Antenna

The VT-008 is a high gain portable autotracking antenna. It is self contained, simple to setup and can operate upright or inverted making it ideal for aircraft installation. The VT-008 has a dual polarization head that can receive signals in the L band with 18dbi gain, S band with 21dbi gain and optionally in the C band with 23dbi gain. Autotracking is achieved using the JDA flight proven single channel monopulse autotracking electronics with an integrated tracking receiver positioned within the antenna head assembly and offers continuous rotation in the azimuth.



Features

- Simultaneous RHCP and LHCP reception
- L and S Band Reception (optional C Band)
- Single Channel Monopulse
- Autonomous autotracking
- Multiple mode slave tracking
- Easy maintenance modular design
- DC Brushless stepper motors
- Absolute encoders in all rotating parts with better than 0.05° accuracy
- 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 XP, 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-008 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 (plus C Band Option) Plus User Specified Special Frequencies
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 21.0 dBi @ 2350 MHz
Sidelobes	2 dBp @ L-Band 3 dBp @ S-Band
3db Angle	$\pm 6.0^\circ$ @ L-Band $\pm 7.5^\circ$ @ S-Band
Acquisition Angle	$\pm 12^\circ$ @ L-Band $\pm 15^\circ$ @ S-Band
Velocity	Up to $60^\circ/\text{sec}$
Acceleration	Up to $120^\circ/\text{sec}^2$
Azimuth Travel	Continuous Unlimited
Elevation Travel	User Settable to +5 to +50 degrees
Temperature Non-Operating	-40° C to $+85^\circ \text{ C}$
Temperature Operating	-30° C to $+70^\circ \text{ C}$ (with heater option)
Relative Humidity	Up to 100% Including Condensation
Rain	Up to 5-inches Per Hour
Ice	One-half Inch, Radial
Maximum Height	8000 Meters Unpressurised
WIND, Operating	112 KPH
WIND, Survival	160 KPH
Weight Approx	18 kg
Power Requirement	100 W
Voltage/Frequency	110to250 VAC, 50/60 Hz, 1 ϕ
Size Approx	60Wx 31D x 59H cm
Interface	Ethernet
Optional Flux Gate	$\pm 45^\circ$ Pitch and Roll with Electronic Compass $\pm 0.1^\circ$
Optional GPS	Position and Height with Inbuilt Geodetic Model