

ATPS-1200 ANTENNA TRACKING & POSITIONING SYSTEM

- Multi-Band Frequency Operation
- Available from 1.2 GHz to 4.5 GHz
- Available as standard system without TX/antenna
- Uplink Transmitter Options
- Rack Mounted or Weatherproof Controller

Application

- UAV tracking
- ENG Applications
- Research projects



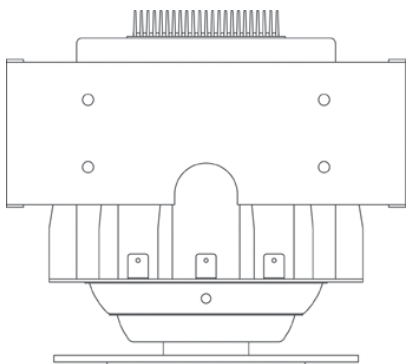
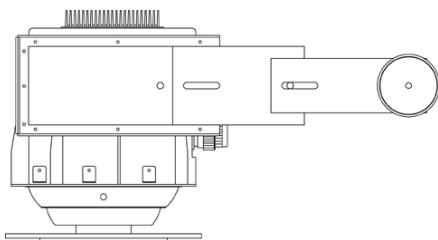
The ATPS-1200 Tracking & Positioning Antenna System comprises of the ATP-1200 AZ/EL antenna pedestal, IDT-1200 heavy duty tripod assembly, and the ATS-1200 pedestal controller. The rugged system was developed to be transported in a HMMWV shelter. The pedestal is removable from the folding tripod.

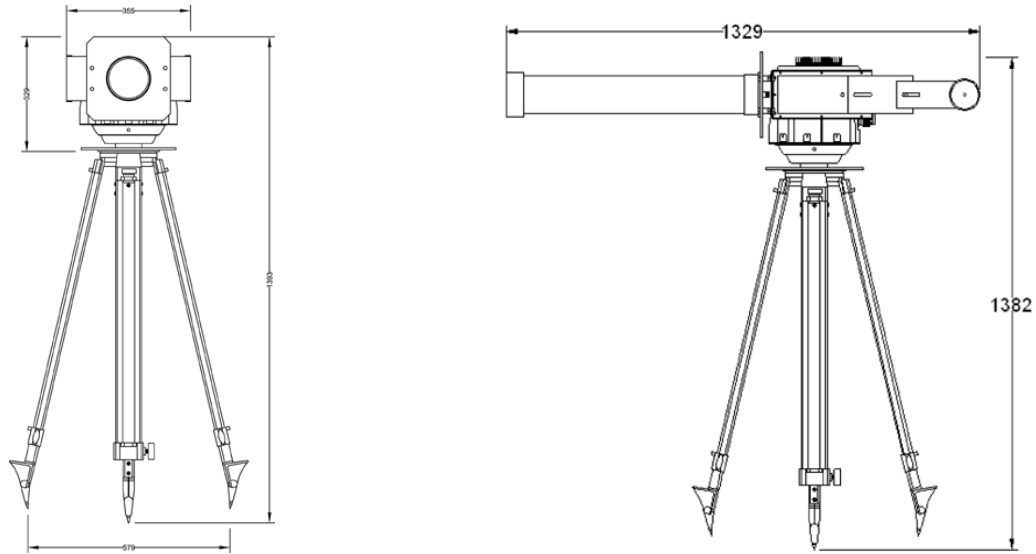
Eye bolts are provided for lifting, and a stow pin inhibits pedestal motion during transportation. The system can be provided with a receiver for data downlinks. Frequency bands from 1.2 GHz to 4.5 GHz can be accommodated. Multi-band operation is also available.

The ATP-1200 pedestal provides continuous 360° coverage in azimuth and -5 to +95 degrees in elevation. A Run/Safe switch is provided for safety. Synchro resolvers provide position feedback to the controller. The pedestal is rated for a 100% duty cycle.

The controller for the system can be either a 19" rack mounted ATS-1200 controller or a Weatherproof Receiver/ Controller enclosure assembly. Each controller provides front panel control and monitoring of the system, with remote control via serial port optional. The controllers can be used to manually point the antenna with a joystick, or can automatically follow the RF signal using monopulse tracking, or go to a pointing vector commanded by the remote serial link (GPS tracking) in the 'AutoTrack' mode. The system is provided with a ground display PC-based software package and laptop computer which provides aircraft track over GIS/GPS data interfaces.

Power for the ATPS-1200 system is provided by the controller. A receive RF cable and control/power cable are the only connections between the pedestal and the controller.





Specifications	
Antenna	Truncated 2' x 4' (61 x 122 cm.) dish or helical
Gain	14-20 dBi @ 1.2 GHz
Beamwidth	Azimuth = 14 , Elevation = 29 degrees @ 1.2 GHz
Azimuth Travel	360 Continuous Rotation
Elevation Travel	-5 to +95 degree
Pedestal Tracking Rate	Up to 20 degrees/sec. Az & E
Operating Temperature	20 to + 60 degrees C
Operating Wind Load	Up to 40 m.p.h.
Power Requirement	Provided by Controller (Typical 300W peak)
Pedestal Weight	18.5 Lb (8.5 Kg.) Including Uplink Transmitter, Ant, Feed and Counterweights
Tripod Weight	22 Lb.. (10 Kg.)
Options	Multi-Band frequency operation available from 1.2 GHz to 4.5 Ghz Uplink transmitters Rack Mounted/Weather proof controller