JISNU

Portable Tracking System

Model No JC-SC-PED21

Land Air Marine

Jisnu's PED 21 Series consists of a portable compact solution for field based applications that require high accurate tracking solutions such as Telemetry, UAV and Point to Point RF Communication. Elevations over Azimuth tracking solution delivers high performance even in the most demanding operating conditions. This system is suitable for Antenna sizes up to 1.2M.

The highlights of the system are that the ACU, Tracking Demod and Tracking Receiver are all integrated within the pedestal. The system can be quickly modified to meet customer specified requirements with field proven building blocks. The system tracking is capable upto C-Band depending on the requirements. Monopulse technique used for auto track to deliver highly accurate tracking of fast flying objects, while maintaining a constant link of the entire test period.

Applications

The high accurate tracking capability of this system enables user applications such as

- Object Tracking
- Point to Point RF Communications
- Telemetry Applications

These Portable Tracking Systems will be used for ground based or ship based (with optional stabilization)

Features

- Dual axis Elevation Over Azimuth simultaneous
- Azimuth Continuous with Slip-ring & Rotary Joint
- Built in ACU & Tracking Demod
- Compass for True North

MADE IN INDIA

Technical Specifications

Functional		
A. Pedestal		
Pedestal Motion	2 Axis - Elevation over Azimuth (simultaneous)	
Motors	Brushless Servo Motor	
	Azimuth	**Elevation**
Range	360 deg Continuous	-5 to +95 deg
Velocity	30 deg/s	30 deg/s
Acceleration	30 deg/sec²	30 deg/sec²
Limits for Elevation Software Electrical Mechanical	 Programmable within the EL Travel Range -8 to +98 deg -10 to +110 deg	
Position Feedback	Absolute Encoder	
Position Resolution	+/- 0.01 deg	
Pointing Accuracy	+/- 0.1 deg	
Auto Tracking	Single channel Monopulse	
Built-in Modules	Motors, Drivers, Encoders, Controller, GPS Tracking Demodulator	
Slip Ring	42 Channel	
Rotary Joint	2 Channel	
Input/Output	Std. RF, Control & Power connectors suitable for Outdoor applications	
Payload	< 45 kgs	
Optional	Inbuilt GPS & Compass	
B. Antenna Control Unit		
Operating Modes	Standby, Slew, Manual, Point, Slave, GPS Track, Auto Track, Search, Configuration	
Angle Readout	0.01 Deg	
Limit Indication	Software & Electrical in EI-UP & DN	
Built in Test (BIT)	Real time Monitoring of Pedestal Parameters, Drivers, Compass, Encoders, Sensors etc	
Operating System	Windows	
Monitor & Control System	Standard PC or Laptop with application software	
Application Software	User friendly GUI	
Electrical		
Input	230V±15V AC, 1 Phase, 50 Hz	
Power supply Output	48V DC & 24V ±4V DC	
Mechanical		
Dimensions (Pedestal)	W 525mm X H 1165mm X D 425mm, Weight: < 85kg	
Dimensions (ACU)	W 482.6mm X H 356mm X D 160mm, Weight: < 30kg	
Environmental		
Operational Temp	-20° C to +55° C	
Storage Temp	-25° C to +60° C	
Humidity	90% RH Non-Condensing	
Wing - Operational	< 60 Kmph	
Wind - Survival	< 90 Kmph	
Rain	< 100 mm/Hrs	

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