

# **Portable Tracking System**

# Model No JC-SC-PED21

Jisnu's PED 21 Series constitution 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 of 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 capabilities of this system enables user applications such as:

- 1) Object Tracking
- 2) Point to Point RF Communications.
- 3) Telemetry Applications.

These Portable tracking systems may be used for ground based or Ship-Based (with additional stabilization) applications.



# Features

- MIL-STD 461E, IP65 &JSS55555
- Dual axis Elevation Over Azimuth simultaneous
- Azimuth Continuous with Slip-ring& Rotary Joint
- Velocity & Acceleration: 30deg/sec & 30deg/sec2
- Built in ACU & Tracking Demod.
- Compass for True North







# **Specifications**

Elevation

Limits for Elevation

Pedestal Motion : 2 Axis - Elevation over Azimuth (simultaneous)

: Brush less Servo Motor Motors Azimuth

 Range : 360 deg Continuous

 Velocity : 30 deg/s Acceleration : 30deg/s2

 Range : -5 to +95 deg Velocity : 30 deg/s Acceleration : 30 deg /s2

 Software : Programmable within the EL Travel Range.

 Electrical : - 8 to + 98 deg Mechanical : -10 to + 110 deg Position Feedback : Absolute Encoder Position Resolution : + / - 0.01 deg Pointing Accuracy : + / - 0.1 deg

Built - In Modules : Motors, Drives, Encoders, Controller, GPS & Tracking

Demodulator

Slip Ring : 42 Channel with two 75 Ohm video interface lines

Rotary Joint : 2 Channel - up to 4 Ghz

Input / Output : Std. RF, Control & Power connectors suitable

for outdoor applications

Power Supply : 48 DC & 24V DC through Power Supply

: < 100 mm / Hrs

: Software & Electrical in El - UP & DN

Unit Payload Pedestal : < 45 Kgs Weight Dimensions : < 85 Kgs

### **Enviormental**

Rain

Operational Temp. : - 20 deg C to + 55 deg C Storage Temp. : - 25 deg C to + 60 deg C Humidity : 95% Wind Wind - Operational : < 60 Kmph Wind-Survival : < 90 Kmph

User friendly GUI for antenna control unit

## Antenna Control Unit (Built-In)

Operating Modes: Standby, Slew Mode, Manual Mode, Point • Built-in test (BIT) : Real time Monitoring of Pedestal

Parameters, Drives, Compass, Encoders Mode, Slave Mode, GPS Track, Auto Track, Sensors etc.

Search Mode, Configuration Mode **Data logging** 

: Logging of user defined data such as : 0.01 Deg. Az, EL angles, Time, Mode etc.

: Configurable servo parameters with Operating system : Windows

password protection Monitor & Control System: Standard PC or Laptop with application : Type II servo Loop

**Application Software** 

software loaded : User friendly GUI

Contact Us

Angle Readout

Limit Indication

**Parameters** 

System

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