



SYSTEM CONTROLS
Versatility is Reality

System Controls Technology Solutions Pvt Ltd

LASER POINTING SYSTEM (LPS)



Products:

- Stabilized Platforms
- Gimbals
- Positioners
- Pointing Systems
- Pan Tilt Units
- Radar Subsystems
- Electro-Optical Systems
- Opto-Mechanical Systems
- Motion Controls Systems
- Test Benches

Services:

- Engineering Design & Development
- Electronic Testing & Assembly
- CNC Machining & Manufacturing
- System Integration

The Laser Pointing System (LPS) is responsible for the pointing/aiming the laser beam on to the target. The entire laser module integrated with the Beam Delivery System, Laser Aiming Devices and Target Viewing System will be mounted on a 2-Axis Pedestal system for carrying out the surveillance of field and pointing and focusing the high power laser. It is a two axes platform with custom-built adopter to mount BDOC. Platform consists of two rotational drive systems elevation and azimuth, which are mutually perpendicular to each other. Zero backlash geared brush-less DC motor drives each axis. The gear system used is high efficiency unique backlash free precision gear mechanism. It provides the required torque in a compact assembly. An optical angle encoder on each motor shaft provides the position and velocity feedback to servo amplifier of the motor. The top surface of the LPS has mounting provisions for BDOC and the bottom surface gets mounted to the top plate of a Heavy Duty Tripod. Suitable stopping, braking and locking mechanisms have been provided. Usage of appropriate gaskets and seals ensure the LPS to be water and dust proof. The Unit is most suitable for all payloads like Antenna, Electro-optic, Sensor etc.



Azimuth Drive

Movement Control	: Closed loop position control
Field of Regard	: $\pm 30^\circ$
Resolution	: 30 μ rad
Pointing Accuracy	: Better than 50 μ rad

Elevation Drive

Movement Control	: Closed loop position control
Field of Regard	: $\pm 15^\circ$
Resolution	: 30 μ rad
Pointing Accuracy	: Better than 50 μ rad

Others

Payload & Payload Mounting	: 10 kg; Top Mount
Pedestal weight	: ≤ 5 kg
Power input	: 24 /28V DC
Position Locking	: provided
Interface	: RS232 / RS422
Dimensions	: L - 280 mm; B - 170 mm; H - 295 mm
Finish	: Painting, Shade OG

Environmental**

Conditions	Operating	Storage
Temperature	-20°C to +55°C	-20°C to +70°C
Storage RH	100% at 25°C	
Operating RH	80 - 90% at 25°C	
Ingress Protection	IP54	

Accessories

Heavy Duty Tripod (as per customer requirement)

**** Designed to meet the specifications**