

# Single Axis Pedestal—Aslesha

## SERVICES

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



### **PRODUCTS**

- Electro-Optic Stabilized
   Platforms
- Radar Sub Systems
- Laser Applications
- \* Gimbals
- \* Pedestals
- Motion Control Systems
- Test Benches



## **Application Areas**

- Surveillance Scanner
- Automatic Tracking System
- Ground Based Surveillance System

- System Controls offers the lightweight and compact size Rugged Azimuth Scanner, designed to rotate 360 degrees continuously with payloads weighing up to 110 kilograms. The Azimuth Scanner is designed and built with new technology for efficiency, simplicity, cost effectiveness and ease of maintenance.
- \* A powerful BLDC motor through proper electronics circuit to give a controlled programmable, rotation, position etc provides the rotation of the Azimuth Scanner. The Azimuth Scanner has hollow shaft at slew center for routing of cables between rotating and non-rotating portion. The Azimuth Scanner is driven through hollow shaft harmonic drive capable of necessary torque and power to overcome the wind load on the payload.
- \* The entire arrangement is housed in a precision-machined aircraft quality aluminum alloy having aesthetically designed and pleasingly coated outer surface. The Azimuth Scanner is EMI/EMC compliant.
- \* The Azimuth Scanner is a Micro controller based having RS422 serial interface for host control. The Azimuth Scanner has built in ON-LINE and OFF-LINE diagnostics facility in addition to the Power on self-test. The azimuth Scanner comes with a Desktop based Test software for stand-alone testing.

# **SYSTEM CONTROLS**

TECHNOLOGY SOLUTIONS PRIVATE LIMITED



## **Technical Specifications**

**Drive Specification** 

Azimuth  $: N \times 360^{\circ}$  Payload  $: Max \ 110 \ Kg$  Continuous torque at 80 Kmph  $: 40Nm \ at \ 25 \ rpm$  Azimuth Scanner Weight\*  $: Less \ Than \ 25 \ KG$ 

 $\begin{array}{ll} \mbox{Angular Accuracy} & : \pm \ 0.1 \\ \mbox{Readout accuracy} & : \pm \ 0.001 \end{array}$ 

Speed : 25 RPM rate settable from 1 to 25 RPM in steps of 0.5 RPM with a

tolerance of maximum 2%.

**Environmental specifications** 

Temperature

(Operational) : -30°C to 55°C (Storage) : -40°C to 70°C

Wind condition

(Operational) : Up to 80 Kmph (Survival) : Up to 120 Kmph

Humidity : 95% RH EMI : MIL std 461E

Environment : L3 class JSS 55555 tests including driving rain test.

Thermal Shocks  $: -20^{\circ}$  to  $+70^{\circ}$  as a sudden change

Rain, Salt, Fog, Fungus : As per MIL STD 810F

Solar Radiation : As per JSS55555 L2 category

Sand & Dust : Velocity 8.9 m/s Temp. 23°C to 70°C Duration= 6 hours each

**General Specifications** 

Power Supply : 24VDC input voltage.

Total power consumption : 250W
Interface Type : RS-422
Input Type : DC Input

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