



Single Axis Pedestal—Bharani

SERVICES

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

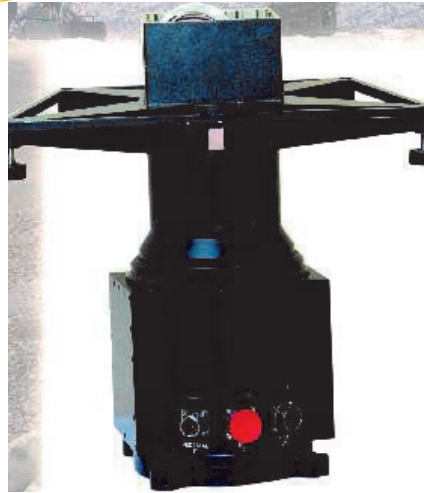


PRODUCTS

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



Versatility is Reality



Application Areas

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

System Controls offers the lightweight and compact size Azimuth Positioner, designed to rotate 360 degrees continuously with payloads weighing up to 50 kilograms. The Azimuth Positioner 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 Positioner. The Azimuth Positioner has hollow shaft at slew center for routing of cables between rotating and non-rotating portion (optional Rotary joints and slip rings) The Azimuth Positioner is driven through an 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 Positioner is EMI/EMC compliant. The Azimuth Positioner is a Micro controller based having RS422 serial interface for host control. The Azimuth Positioner has built in ON-LINE and OFF-LINE diagnostics facility in addition to the Power on self-test. The Azimuth Positioner comes with a Desktop based Test software for stand-alone testing.

System Controls prides itself on developing specialist electro-mechanical servo control system Equipment using state of the art technologies that meet the stringent demands and specifications that are required in today's competitive international environment.

SYSTEM CONTROLS

TECHNOLOGY SOLUTIONS PRIVATE LIMITED



Technical Specifications

Drive Specification

Azimuth	: Continuous
Payload	: 50Kg
Continuous torque at 80 Kmph	: 120Nm at 20 rpm
Azimuth Scanner Weight*	: Less Than 30 KG
Angular Accuracy	: ± 0.1
Readout accuracy	: ± 0.001
Speed	: 20 RPM rate settable from 1 to 20 RPM in steps of 0.5 RPM with a tolerance of maximum 2%.

Electrical and Interface Specifications:

Power Supply : 24VDC input voltage.
Total power consumption : 200W
RS-422 interface
DC Input
Signals

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 ⁰ to +70 ⁰ 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 ⁰ C to 70 ⁰ C Duration= 6 hours each

119, 3rd Main
East of NGEF Layout
Kasturi Nagar
Bengaluru 560 043

Phone:
+91 80 408 20 400

Fax:
+91 80 408 20 426

Email:
sales@system-controls.com
projects@system-controls.com
presales@system-controls.com

www.system-controls.com