



SYSTEM CONTROLS
Versatility is Reality

System Controls Technology Solutions Pvt Ltd

PAN & TILT UNIT

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 Pan & Tilt Unit gives accurate dynamic motion in both Azimuth & Elevation Axes. The elevation and azimuth axes movements are enabled through individual DC motors with precision gear mechanism. Zero backlash geared brush-less DC motor drives each axis. It provides high torque in compact assembly. An optical angle encoder on each motor shaft provides the position and velocity feedback to servo amplifier of the motor. This system is useful for tracking through remote control. Azimuth rotation can either be N x 360° continuous or non-continuous. If customer requires continuous rotation in azimuth axis, reliable slip rings are provided for control of data link, video link and power supply. Pan & Tilt Unit is mountable on Tripod, Mast, etc.



Azimuth Drive	Movement Control	: Closed loop position control	
	Scanning Velocity	: 0.1 deg/sec to 60 deg/sec	
	Range	: $\pm 60^\circ$ (If required N x 360° continuous rotation also can be provided)	
	Accuracy	: 0.05°	
	Resolution	: 0.1°	
	Elevation Drive	Movement Control	: Closed loop position control
Scanning Velocity		: 0.1 deg/sec to 60 deg/sec	
Range		: -15° to +45°	
Accuracy		: 0.05°	
Resolution		: 0.1°	
Brake requirement in elevation		: Available	
Others	Payload & Payload Mounting	: 75 kg max; Top Mount	
	Pedestal weight	: 70 kg max	
	Power input	: 48V DC, 15A max	
	Interface	: RS422 / Ethernet	
	Dimensions	: Compact	
	Finish	: Painting or Powder Coating as per customer requirement	
	Control Unit	: Hard Control Panel with Joystick or through Computer	
	Slip Ring (if required)	Optimum	
Operating Modes		: Position mode Rate mode Scanning mode	
Controls & Monitoring		: PC based GUI systems working on Windows / Linux	
Environmental	Conditions	Operating	Storage
	Temperature	-20°C to +55°C	-30°C to +70°C
	Humidity, Fungus, Salt Spray	MIL-STD-810G	
	Vibration, Shock	MIL-STD-167-1, MIL-STD-901D	
	Sealing	IP65	
Accessories	Heavy Duty Tripod (as per customer requirement)		