

## SENSOR & SURVEILLANCE SYSTEMS : PAN & TILT POSITIONERS

# MPT-90

## PAN & TILT POSITIONER

The MPT Positioner Series leverages the strength and reliability of Quickset legacy products and is improved with an enhanced electronics package offering new advantages to mission critical applications.

MPT Positioners are equipped with an integrated Health and Usage Monitoring System (HUMS). This provides intelligence to users regarding the condition of payloads, allowing for preventative maintenance to extend the life of critical equipment. An embedded web server enables easy discovery and control of all positioners and integrated components on a network, thereby eliminating the need for 3rd party software.

Expanded velocity control offers the MPT finer resolution of speed and acceleration control, ultimately improving tracking and scaling applications. Users will enjoy the capacity of multiple configurable communication ports for convenient payload integration and communication.



### KEY FEATURES

#### CONTROL & CONFIGURABILITY

- Embedded web server
- Serial or Serial over IP control up to 99Hz
- Health and usage monitoring
- HD-SDI slip ring models available
- Continuous Rotation available
- Multiple payload communication ports: 4 configurable serial, 2 TTL and 1 IP port
- 10-bit linear response velocity control
- Standardized connectors
- GPS capability

#### ROBUST & RELIABLE MECHANICAL DESIGN

- Payload capacity up to 100 pounds
- Provides up to 90 foot pounds of elevation torque
- Versatile platform design for ease of customization
- Tabletop design accommodates a wide variety of payloads



# MPT-90 : SPECIFICATIONS

## SYSTEM PERFORMANCE

<b>Payload Capacity</b>	100 lb
<b>Payload Rated Load Torque (Elevation)</b>	90 lb-ft (122 N-m)
<b>Positioner Power Consumption</b>	
Max (simultaneous P&T move)	<5.0 A peak, <4.0 A continuous at 24 VDC
Standby (Idle, without heater)	650 mA.
<b>Heater Power (switchable)</b>	100 W
<b>Operating Voltage Range</b>	24 to 28 VDC Nominal (28 to 32 VDC via jumper setting)
<b>Azimuth - Pan</b>	
Range of Travel	Continuous, 435° models available
Speed (@ rated load, nominal voltage)	0.005°/s to 25°/s
<b>Elevation - Tilt</b>	
Range of Travel	180° (± 90° from horizon)
Speed	0.005°/s to 8°/s (90 lb-ft load)
<b>Minimum Incremental Move (Az and/or El)</b>	0.01°
<b>Rotation Limits</b>	
Software Adjustable Limits	Individually adjustable azimuth and elevation (all models)
Mechanically Adjustable Switches	Individually adjustable azimuth & elevation (435° model), Adjustable elevation (continuous rotation models)
<b>Position Feedback</b>	
9000 Line Encoder	Azimuth and Elevation
Resolution	0.01°
<b>Position Repeatability</b>	0.05°
<b>Environmental</b>	IP67
<b>Operating Temperature</b>	
Without heater	-15° to 55°C (5° to 131°F), 100% RH
With internal heater	-32° to 55°C (-25.6° to 131°F), 100% RH
<b>Storage Temperature</b>	-40° to 70°C (104° to 158°F)
<b>Construction</b>	Cast aluminum housing, stainless steel hardware
Drive system	1.8° stepper motors, hardened steel worm drive geartrain
Exterior finish	Powder coat white, special finishes available
<b>Weight</b>	HD-SDI model: 74 lb    Standard model: 71 lb
<b>Dimensions</b>	HD-SDI model: 19.59 in H x 18.07 in W x 9.57 in D (498 x 459 x 243 mm) Standard model: 16.42 in H x 18.07 in W x 9.57 in D (417 x 459 x 243 mm)
<b>Command and Control</b>	Integral web server
<b>Protocol</b>	Quickset PTZ Protocol,* Pelco D (Limited)
<b>Resolution of Velocity Commands</b>	10-bit, linear response
<b>Power Outputs to Payload</b>	
24 VDC - user on/off switchable	5 Amp Max.**
12 VDC - user on/off switchable	5 Amp Max.**
5 VDC - user on/off switchable	4.8 Amp Max.**
<b>Health Monitoring with Real Time Clock</b>	
Power On and Run Time Monitoring	Included
Voltage Monitoring	Input and User 24 V, 12 V & 5 V Outputs
Current Monitoring	User 24 V, 12 V & 5 V Outputs
<b>Communication Interfaces to Payload</b>	
Serial (RS232, RS422, RS485 configurable)	4
TTL	2
IP	1
<b>Connector to Positioner</b>	53 conductor D38999
<b>Connector to Payload</b>	53 conductor D38999 (x2)
<b>Duty Cycle</b>	This positioner is designed for periodic movement. For applications requiring constant motion, please contact our team for solutions tailored to your use case and environment.

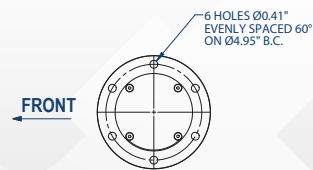
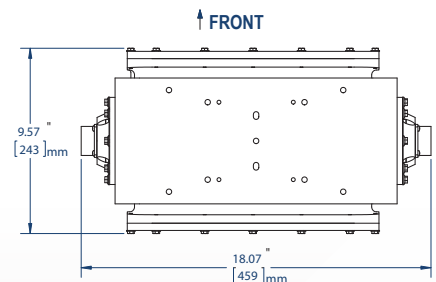
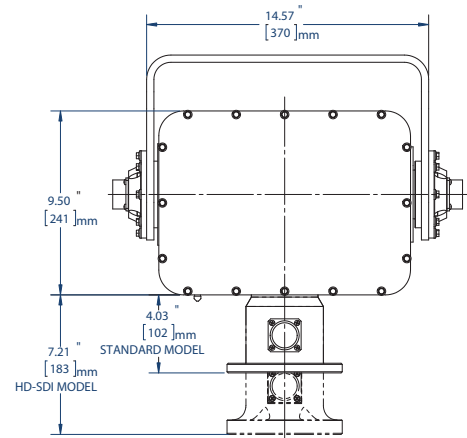
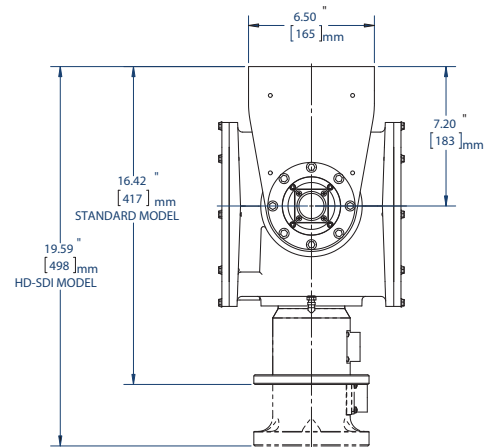
\* Backward compatible with PTCR-96

\*\*Total payload current limited to 8A, power may be increased with higher supply voltage.

Specifications subject to change.

MPT90 0126

## DIMENSIONS



BASE MOUNTING

