

QPT-200/500 SERIES PAN & TILT POSITIONERS



The QPT-200 and QPT-500 Series of pan & tilt positioners are designed to be rugged and durable enough for virtually any environment. These positioners can handle payloads up to 750 lbs., with 200 or 500 lb-ft. of torque respectively, making each suitable for a wide range of sensors. Multiple models are available to fit your needs such as RF/SATCOM, telemetry or integrated multi-sensor platforms. Integrated

Control (IC) units can communicate via networked PC or separate controller and include stepper motors for higher accuracy and speed control.

AVAILABLE FEATURES

- Payloads requiring up to 500 lb-ft. (678 Nm)
- Analog driven or digital integrated controller (IC) models
- Internal wire table top for pass-through or IC sensor wiring on certain models
- Fixed, inverted or mobile installations
- Mil-Spec connectors
- Rigid aluminum housing and hardened steel gearing for durability in harsh environments
- Marine configuration that meets IP67 standards

SENSOR INTEGRATION

- Multi-Spectrum cameras (Visible / NIR / SWIR / MWIR / LWIR)
- IR and visible illuminators
- Laser range finders
- Communication antennas
- Acoustic devices



QPT-200 AND QPT-500 SERIES

PERFORMANCE

Features	Model 7-4100B	Model 7-4500B	Model 7-45000	Model 7-46000	Model 7-60056
Payload capacity	350 lbs.	750 lbs.			500 lbs.
Payload torque	200 lb-ft. (271 Nm)	500 lb-ft. (678 Nm)			500 lb-ft. (678 Nm)
Pan range of motion	420°			Continuous	350°
Pan speed range	0.005°-20°/s				0°-10°/s
Tilt range of motion	180° (±90°)				
Tilt speed range	0.01°-4°/s				0°-3°/s
Repeatability	0.1°				N/A
Positioning resolution	0.01°				N/A
Position feedback	Optical Encoders				Potentiometers
Hard limits (Mechanically adj.)	Pan & Tilt			Tilt Only	Pan & Tilt
Soft limits (Software adj.)	Pan & Tilt			Pan & Tilt	N/A
Duty cycle	These positioners are designed for periodic movement. For applications requiring constant motion, please contact our team for solutions tailored to your use case and environment.				

POWER

Features	Model 7-4100B	Model 7-4500B	Model 7-45000	Model 7-46000	Model 7-60056
Operating voltage	24 VDC (± 2 VDC)	48 VDC (±4 VDC)			0-115 VDC
Power consumption (Approx) *Simultaneous pan & tilt move, fully loaded, without payload power	Idle	38 watts (0.8A)	38 watts (0.8A)		0 watts (0A)
	*Continuous	350 watts (7.3A)	255 watts (5.3A)		400 watts (3.4A) dependent on payload and controller used
	*Peak	542 watts (11.3A)	384 watts (8A)		
	Heaters	106 watts (4.4A)	175 watts (3.6A)		450 watts (3.75A)
Regulated power to payload	1.25A @ 12 VDC	1.5A @ 12 VDC			Not an applicable specification for this product
Pass through power to payload	4 conductors, 8A ea. max.				

COMMUNICATION

Features	Model 7-4100B	Model 7-4500B	Model 7-45000	Model 7-46000	Model 7-60056
Communication method to positioner	RS232/422 or Ethernet 10/100 Base-T				
Protocol	PTCR-96 or Pelco D (limited)				
Communication to payload	RS232/422 (Tunneling)		2 x RS232/422 (Tunneling)		
Other pass through from base connector: (TP = twisted pair)	4 TP, signal ground		2 x 2 TP, signal ground		
Video connection	1 SD Video		4 SD Video		

Not an applicable specification for this product

PHYSICAL PROPERTIES

Features	Model 7-4100B	Model 7-4500B	Model 7-45000	Model 7-46000	Model 7-60056
Weight (w/o payload)	120 lbs. (54.5KG)	175 lbs. (79KG)	190 lbs. (86.3KG)		120 lbs. (54.5KG)
Dimensions	20.2" W x 18.1" H x 12.4" D	22.1" W x 19.4" H x 13.1" D	21.3" W x 19.9" H x 13.1" D		17.5" W x 17.3" H x 12.3" D
Drive system	Stepper motors, hardened steel worm gear drive				PM Brush Motors, hardened steel worm gear drive(19KG)

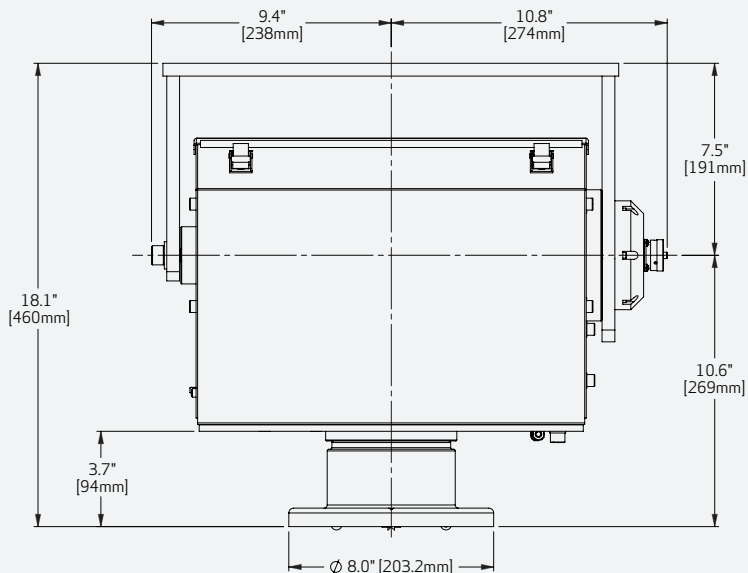
CONSTRUCTION

Features	Model 7-4100B	Model 7-4500B	Model 7-45000	Model 7-46000	Model 7-60056
Material	Aluminum 6061-T6 plate, stainless steel hardware, permanently sealed radial ball bearings.	Aluminum 6061-T6 weldment, permanently sealed radial ball bearings.			Aluminum 6061-T6 plate, stainless steel hardware, permanently sealed radial ball bearings.
Exterior finish	Powder coat paint (STD.), customer specified color				

ENVIRONMENTAL

Features	Model 7-4100B	Model 7-4500B	Model 7-45000	Model 7-46000	Model 7-60056
Operational temperature	-15°C to 55°C (5°F to 131°F) without heater				Not Rated
	-30°C to 55°C (-22°F to 131°F) with heater				
Environmental classification	Not Rated	IP66/67			Not Rated

ARCHITECTURAL AND DIMENSIONAL DRAWING



LOCATIONS

Argentina	India	South Africa
Australia	Ireland	South Korea
Austria	Italy	Spain
Brazil	Japan	Sweden
Canada	Luxembourg	Switzerland
Finland	The Netherlands	United Arab Emirates
France	Norway	United Kingdom
Germany	Philippines	United States
	Singapore	

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