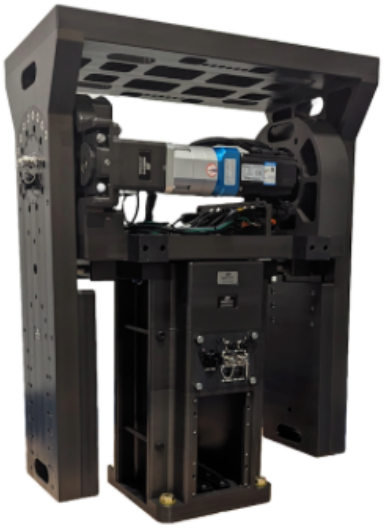
QLA-360MPT-90

AUTO ACQUISITION and PROGRAM TRACKING FOR SATELLITES



The QLA-360MPT-90 is a modular positioner designed for Low Earth Orbiting (LEO) tracking satellite applications. The modular construction consists of eight sub-assemblies (not including counterweights) with the heaviest sub-assembly weighing less than 130 lbs. The positioner can be fully assembled with two people in less than 2 hours.

The embedded antenna controller with built in GPS and digital compass has a full featured web based user interface which provides rapid and accurate antenna pointing. The user interface includes manual control and status along with a stored satellite database and two line element set program track capability allowing for easy tracking of satellites in low or medium earth orbit. QPAR also has a command line interface for customers that want to add our solution into a larger system.

The QLA-360MPT-90 is typically paired with 1.2 to 2.4 meter antennas, payloads up to 1500 lbs (680 kg) including counterweights, and offers 360° of azimuth and ±90° (180°) of elevation range. Optional cross elevation accessory available to eliminate keyhole effect for overhead passes. Download the Interface Control Drawing (ICDN901531) for more details.

TECHNICAL SPECIFICATIONS - QLA-360MPT-90	
Power	
DC Input	48Vdc, 1000W (Indoor Rated Supply Included)
Standby / Maximum Power Draw	<18W / ~600W
External Material / Finish	Aluminum with stainless steel hardware / Hard coat anodize
Positioner Travel	
Azimuth	600° (+/-300°)
Elevation	180° (+/-90°)
Positioner Drive Rate	
Azimuth / Elevation	Variable, up to 9.5°/sec max load
Temperature	
Operational [1]	-22 to 140°F (-30 to 60°C)
Non-Operational	-40 to 158°F (-40 to 70°C)
Feedback Resolution	0.01°
Backlash (Az/El)	less than 0.1°
Torque	
Net Operational (El) [2]	750 ft-lbs (1016 Nm) or 1650 ft-lbs (2237 Nm) max with Included Counterweights
Payload (Including Counterweights) [3]	1500 lbs (680 kg)
Dimensions (Not Including Counterweights)	Height: 39.65" (100.7 cm), Width: 30.00" (76.2 cm), Depth: 16.24" (41.3 cm)
Weight (Including Counterweights)	821 lbs (372 kg) including 300 lbs (136 kg) of counterweights
Mounting Interface	Table top mount (See ICD for details)
Antenna Mount Options	1/2-13 & 5/8-11 threaded holes (See ICD for details)
Communication Interface	
User Interfaces	Web based hosted internal to unit or QPAR proprietary command protocol
Ethernet Pass Thru	100M/1000M BaseT (Gigabit Ethernet)
Signal Pass Thru	10 Pin, 24 AWG wire (60 Vac/75Vdc, 2A) (See ICD for details)
RF Pass Thru	DC-5.8 GHz N Type RF (See ICD for details)
Serial	RS-232
Extended I/O	Up to 4 configurable digital inputs and 4 configurable digital outputs (See ICD for details)
Anemometer	Provides Automated Postioner Stow at User Specified Wind Speed
Safety	Fail Safe Motor Brakes with Manual Release, Stow Pins & Emergency Stop Button
Other	Satellite Modem and LoS Radio SNMP Interfaces for Acquisition and Peaking

[1] Minimum temperature specified at no load

[2] Effort should be made to balance elevation payload as much as possible using (12) 25lb counterweights

[3] Contact QPAR for alternate configuration

Specifications subject to change without notice

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