QLA-360MPT-41

AUTO ACQUISITION and PROGRAM TRACKING FOR SATELLITES





The QLA-360MPT-41 is designed from the ground up to automatically point directional antennas for satellite communications.

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 which allows easy tracking of satellites in low or medium earth orbit. QPAR also has a command line interface available for customers that want to add our solution into a larger system.

The QLA-360MPT-41 is typically paired with 3-6 ft antennas, payloads up to 160 lbs (72.6 kg), and offers 360° of azimuth and ±95° of elevation range. Optional cross elevation accessory available to eliminate keyhole effect for overhead passes. Download the Interface Control Drawing (ICDN900607) for more details.

TECHNICAL SPECIFICATIONS - QLA-360MPT-41	
Power	
Power Over Ethernet (PoE)	50-57Vdc, 4 Pair PoE, PoH (Indoor Rated 54Vdc Supply Included)
Standby / Maximum Power Draw	<16W / 95W
Optional DC Input	20-60V
External Material / Finish	Aluminum with stainless steel hardware / Hard coat anodize
Positioner Travel	
Azimuth	480° (+/-240°)
Elevation	190° Configurable to (+180°/-5°) or (+95°/-95°)
Positioner Drive Rate	
Azimuth	Variable, up to 3°/sec
Elevation	Variable, up to 3°/sec max load
Temperature	
Operational ⁽¹⁾	-10 to 140°F (-23 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	
Operational (EI) (2)(3)	100 ft-lbs (136 Nm) or 160 ft-lbs (216.9 Nm) with Included Counterweights
Holding Non-Powered (EI)	34 ft-lbs (47 Nm)
Payload (Including Counterweights) (3)	160 lbs (72.6 kg)
Dimensions (Not Including Counterweights)	Height: 21.38" (54.3 cm), Width: 11.50" (29.2 cm), Depth: 17.32" (44.0 cm)
Weight (Including Counterweights)	99 lbs (44.9 kg) or 159 lbs (72.1 kg) with 60 lbs of Counterweights
Mounting Interface	See ICD for details
Antenna Mount Options	See ICD for details
Communication Interface	
User Interfaces	Web based hosted internal to unit or proprietary command protocol
Ethernet Pass Thru	1000 Mbps / 1 Gbps @ 100 MHz (Cat5e)
Signal Pass Thru	(2) 10 Pin, 24 AWG, 39" (100 cm) wire (60 Vac/75Vdc, 2A)
RF Pass Thru	(2) DC-3 GHz N Type RF, 35" (90cm)
Optional Serial	RS-232 (See Supplemental ICD)
Other	Satellite Modem and LoS Radio SNMP Interfaces for Acquisition and Peaking

⁽¹⁾ Minimum temperature specified at no load

Specifications subject to change without notice

⁽²⁾ Maximum operating torque may be reduced at temperatures below -8°C and/or with use of peripheral devices

 $^{^{(3)}}$ Effort should be made to balance elevation payload as much as possible using (6) 10lb counterweights

⁽⁴⁾ Contact QPAR for alternate configuration