



PAN TILT

TS-MPT D SERIES

D Series Pan Tilt TS-MPT-D engineered for precision, durability, and versatility, this advanced system is designed to meet the rigorous demands of various industries.

- High Payload Capacity: 50 Nm for handling substantial equipment.
- Precision Movement: 0.02° accuracy and repeatability for high-precision tasks.
- Wide Range of Motion: Full 360° pan range and $\pm 90^\circ$ tilt range.

FEATURES

- Robust and compact design.
- High torque and performance.
- Precise positioning.
- High duty cycles.
- Suitable for fixed and mobile environments.
- 100% CNC Machined from high strength 6000 series aluminium and stainless steel.
- Weather Resistance: Complies with IP67 standards, ensuring optimal performance in harsh environmental conditions.
- MIL-STD Compliant: Built to withstand electromagnetic interference, thermal shock, vibration, moisture, rain, dust, and sand.



Payload Capacity
up to 30 kg



Rated Torque at Tilt Axis
50 Nm



Position Accuracy
0,02°



Position Repeatability
0,02°



Zero backlash

TECHNICAL DATA / TS-MPT-D SERIES

Product Code	TS-MPT-D-1	TS-MPT-D-2
Payload Capacity	8 kg	30 kg
Rated Torque at Tilt Axis	7 Nm	50 Nm
Power Consumption		
Max. Power Consumption	100 W	120 W
Standby Power Consumption	20 W	20 W
Operating Voltage Range *	20-32 V	20-32 V
Pan		
Range of travel *	n x 360° (Continuous Rotation)	
Max. Speed	180 °/s	60°/s
Min. Speed	0.005°/s	0.005°/s
Tilt		
Range of travel *	120° (+90°/-30°)	
Max. Speed	60°/s	60°/s
Min. Speed	0.005°/s	0.005°/s
Position Accuracy and Repeatability		
Position Accuracy	0.02°	
Position Repeatability	0.02°	
Backlash	None	
Rotation Limits		
Software Limits	Available	Available
Encoder Type and Position Feedback		
Encoder Type *	Absolute Encoder	
Position Feedback	0.005°	0.005°
Operating Temperature		
Working Temperature	-32°C to +55°C	
Storage Temperature	-40°C to +60°C	
Drive Systems		
Drive System (Pan)	BLDC Motor	
Drive System (Tilt)	BLDC Motor	
Brake	Magnetic Brake	
Construction		
Exterior Finish	Powder Coat Black (Default), Special Finishes Available	
Weight	4,3 kg	5.6 kg
Dimensions	180x232x182 mm	184x247x185 mm
Payload Mounting Type	Top and Side Mount	
Ambient Conditions and EMI/EMC Compatibility		
Electromagnetic Compatibility	MIL-STD-461G (CE102, CS101, CS114, CS115, CS116, CS118, RE102 and RS103)	
Min. Operating and Storage Temperature	MIL-STD-810G, Method 502.6 Procedure II and Procedure I	
Max Operating and Storage Temperature	MIL-STD-810G, Method 501.6 Procedure II and Procedure I	
Thermal Shock	MIL-STD 810G, Method 503.6 Procedure I-C	
Moisture Resistance	MIL-STD 810G, Method 507.6 Procedure II	
Rain Resistance	MIL-STD-810G, Method 506.6 Procedure I	
Dust and Sand Resistance	MIL-STD-810G, Method 510.6 Procedure I and Procedure II	
Vibration Compatibility	MIL-STD-810G, Method 514.7 Procedure I	
Shock Compatibility	MIL-STD-810G, Method 516.6 Procedure IV	
Icing and Freezing Rain Resistance	MIL-STD-810G, Method 521.3 Procedure I	
Protection / IP rating	IP67	

TECHNICAL DATA / TS-MPT-D SERIES

Control of Positioner Unit	
Command and Control	GUI-Joystick-Software
Protocol	TS-MPT Protocol and Pelco-D
Power Outputs to Payload *	
24 VDC - 2.4A	Optional
12 VDC - 2.4A	Optional
5 VDC - 2.4A	Optional
Instantly Monitoring	
Power On and Run Time Monitoring	Available
Voltage Monitoring	Available
Current Monitoring	Available
Communication Interfaces to Payload *	
Serial	RS232, RS422, RS485 (2 Channel Configurable)
TTL	1 Channel
IP	1 Channel Gigabit Ethernet
Communication Interfaces to Pantilt**	
Serial	RS232 or RS422/RS485
IP	Optional
Connectors *	
Main Connector	D38999/20WD35PN
Payload Connector	D38999/20WD35SN

* If you have other requirements or need further assistance, please reach out to us.

** Configuration is available for particular lines including RF, SDI, HD-SDI, Fiber, etc.

*** The specified values apply to top mount setups.

Please note: Accessories such as cables and power supplies are not included in the package.