



PAN TILT

TS-MPT I SERIES

The TS-MPT-I Series Pan & Tilt Unit is designed to perform precision positioning applications of various sensor units. It is designed for payloads up to 50 Kg.

TS-MPT-I Pan & Tilt units, designed according to military standards and having compact structure, are resistant to all kinds of harsh conditions.

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.



Payload Capacity
up to 50 kg



Rated Torque at Tilt Axis
64 Nm



Position Accuracy
0,02°



Position Repeatability
0,02°



Zero backlash

TEHNICAL DATA / TS-MPT-I SERIES

Product Code	TS-MPT-I-1	TS-MPT-I-2	TS-MPT-I-3
Payload Capacity	8 kg	30 kg	50 kg
Rated Torque at Tilt Axis	7 Nm	50 Nm	64 Nm
Power Consumption			
Max. Power Consumption	100 W	120 W	160 W
Standby Power Consumption	20 W	20 W	20 W
Operating Voltage Range *	44-52 V	44-52 V	44-52 V
Pan			
Range of travel *	n × 360° (Continuous Rotation)		
Max. Speed	180 °/s	60°/s	60°/s
Min. Speed	0.005°/s		
Tilt			
Range of travel *	180° (+90°/-90°)		
Max. Speed	60°/s	60°/s	60°/s
Min. Speed	0.005°/s		
Position Accuracy and Repeatability			
Position Accuracy	0.02°		
Position Repeatability	0.02°		
Backlash	None		
Rotation Limits			
Software Limits	Available		
Encoder Type and Position Feedback			
Encoder Type *	Absolute Encoder		
Position Feedback	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	4.5 kg	5.5 kg	7.5 kg
Dimensions	272x154x130 mm	288x160x132 mm	305x166x134 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		

TEHNIICAL DATA / TS-MPT-I SERIES

Control of Positioner Unit	
Command and Control	GUI-Joystick-Software
Protocol	TS-MPT Protocol and Pelco-D
Power Outputs to Payload *	
24 VDC - user on/off switchable	Optional
12 VDC - user on/off switchable	Optional
5 VDC - user on/off switchable	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.