

# **PAN TILT**

#### **TS-MPT-DUAL SERIES**

TS-MPT-DUAL Pan-Tilt positioner series are most powerful and dynamic member of Triyosys Pan-Tilt positioners family.

In DUAL Pan-Tilt series, two different motors used in the positioner unit, two different products can be controlled at different angles. Dual series also have top fixed shaft that can be used for additional positioner or other static payload up to 100 kg

#### **FEATURES**

- Have variable transmission ratio and this feature make them perfect.
- Can be used for almost all applications where needed high torque.



Payload Capacity up to 100 kg



Accuracy 0,02°



Repeatability 0,02°



Zero backlash



## TEHNICAL DATA / TS-MPT-DUAL SERIES

Product Code	TS-MPT-DUAL-1 TS-MPT-DUAL-2
Payload Capacity at Stationary Top Plate	50 kg
Payload Capacity at Tilt Axis	80 kg (40 kg each side)
Rated Torque at Tilt Axis	75 Nm
	Power Consumption
Max. Power Consumption	450 W 350 W
Standby Power Consumption	35 W
Heater Power	40 W
Operating Voltage Range	44-52 V
	Pan
Range of travel *	n × 360° (Continuous Rotation)
Max. Speed	48°/s
Min. Speed	0.005°/s
	Tilt
Range of travel *	180° (+90°/-90°)
Max. Speed	48 °/s
Min. Speed	0.005°/s
Movement of Tilt Arms	Independent Side Arms Interdependent Side Arms
	Position Accuracy and Repeatability
Position Accuracy	0.05°
Position Repeatability	0.05°
Backlash	None
	Rotation Limits
Software Limits	Available
Mechanical Limits	Available at Tilt Axis
	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  Construction
Exterior Finish	Powder Coat Black (Default), Special Finishes Available
Weight ***	60 kg
Dimensions ***	340.7x375x222 mm
Simonorio	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
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### TEHNICAL DATA / TS-MPT-DUAL SERIES

Control of Positioner Unit	
Command and Control	GUI-Joysitck-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	D38999/20WD35PNx2
Stationary Top Plate	D38999/20WD35SN
Tilt Connector	D38999/20WD35SN x2

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



<sup>\*</sup> 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.