



# PAN TILT

## TS-MPT HD SERIES

The HD series are precision positioner units with high torque. The positioner units have variable transmission ratio and this feature make them perfect. Thanks to the this feature, the positioner units can be used for almost all applications where needed high torque and high power.

### FEATURES

- It can be used in high frequency antennas applications with optional RF output.
- High duty cycle
- IP67 environment protection
- %100 CNC Machined from high strength 6000 series aluminium and stainless



Payload Capacity  
up to 120 kg



Rated Torque at Tilt Axis  
200 Nm



Position Accuracy  
0,02°



Position Repeatability  
0,08°



Zero backlash

# TECHNICAL DATA / TS-MPT HD SERIES

Product Code	TS-MPT-HD-1
Payload Capacity	120 kg
Rated Torque at Tilt Axis	200 Nm
<b>Power Consumption</b>	
Max. Power Consumption	750 W
Standby Power Consumption	80 W
Heater Power	60 W
Operating Voltage Range	44-52 V
<b>Pan</b>	
Range of travel *	n × 360° (Continuous Rotation)
Max. Speed	36 °/s
Min. Speed	0.005°/s
<b>Tilt</b>	
Range of travel *	180° (+90°/-90°)
Max. Speed	24 °/s
Min. Speed	0.005°/s
<b>Position Accuracy and Repeatability</b>	
Position Accuracy	0.08°
Position Repeatability	0.08°
Backlash	None
<b>Rotation Limits</b>	
Software Limits	Available
Mechanical Limits	Available at Tilt Axis
<b>Encoder Type and Position Feedback</b>	
Encoder Type *	Absolute Encoder
Position Feedback	0.005°
<b>Operating Temperature</b>	
Working Temperature	-32°C to +55°C
Storage Temperature	-40°C to +60°C
<b>Drive Systems</b>	
Drive System (Pan)	BLDC Motor
Drive System (Tilt)	BLDC Motor
Brake	Magnetic Brake
<b>Construction</b>	
Exterior Finish	Powder Coat Black (Default), Special Finishes Available
Weight ***	45 kg
Dimensions ***	465x440x250 mm
Payload Mounting Type	Top and Side Mount
<b>Ambient Conditions</b>	
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
Icing and Freezing Rain Resistance	MIL-STD-810G, Method 521.3 Procedure I
Protection / IP rating	IP67

# TECHNICAL DATA / TS-MPT HD 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 x2

\* 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.