



# 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 200 kg



Accuracy  
0,02°



Repeatability  
0,02°

# TEHNICAL DATA / TS-MPT HD SERIES

|  |   |
|--|---|
| Product Code                           | TS-MPT-HS-1   |
| Payload Capacity                       | 120 kg  |
| Rated Torque at Tilt Axis              | 200 Nm  |
| Power Consumption                      |   |
| Max. Power Consumption                 | 750 W   |
| Standby Power Consumption              | 80 W  |
| Heater Power                           | 60 W  |
| Operating Voltage Range                | 44-52 V   |
| Pan                                    |   |
| Range of travel *                      | n × 360° (Continuous Rotation)                          |
| Max. Speed                             | 36 °/s  |
| Min. Speed                             | 0.005°/s  |
| Tilt                                   |   |
| Range of travel *                      | 180° (+90°/-90°)  |
| Max. Speed                             | 24 °/s  |
| Min. Speed                             | 0.005°/s  |
| Position Accuracy and Repeatability    |   |
| Position Accuracy                      | 0.08°   |
| Position Repeatability                 | 0.08°   |
| 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  |
| Brake                                  | Magnetic Brake  |
| Construction                           |   |
| Exterior Finish                        | Powder Coat Black (Default), Special Finishes Available |
| Weight ***                             | 45 kg   |
| Dimensions ***                         | 340.7x375x222 mm  |
| Payload Mounting Type                  | Top and Side Mount                                      |
| Ambient Conditions                     |   |
| 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  |

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| 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                         | D38999/20WD35PN                              |
| 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.