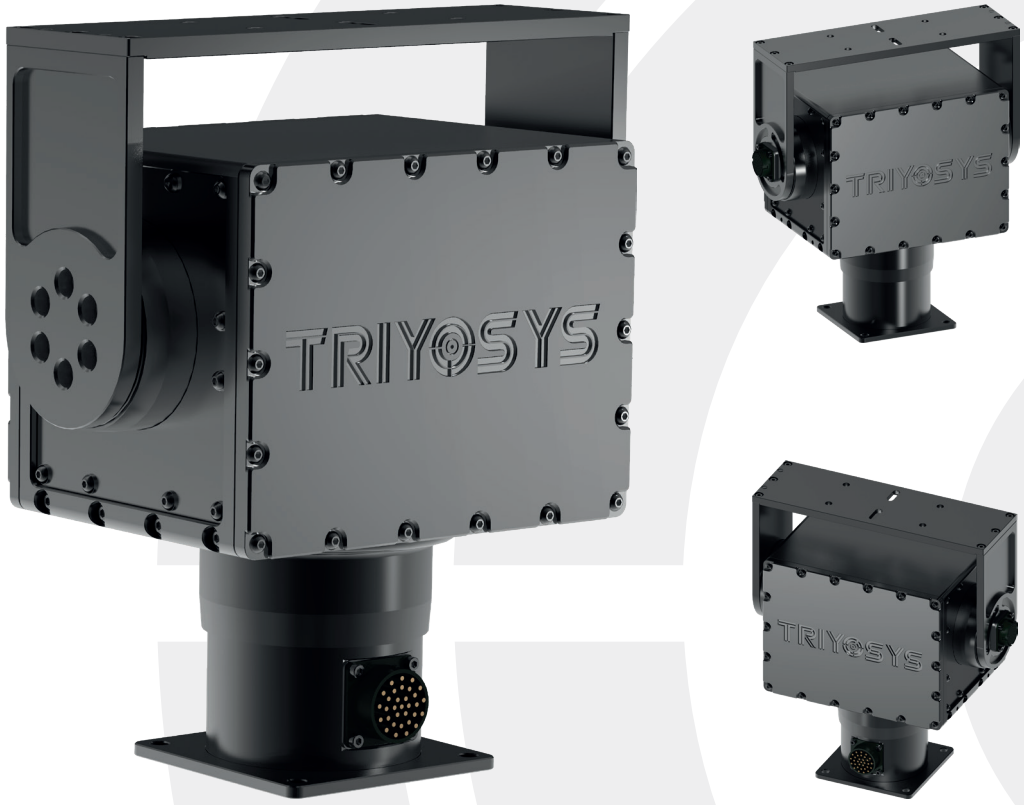
TRIYOSYS

PAN & TILT UNITS

MPT H412 SERIES



The MPT H412 Series Pan & Tilt Unit is designed to perform precision positioning applications of various sensor units.

It is designed for payloads up to 21 Kg.

MPT H412 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.
- Zero backlash.
- High duty cycles.
- Suitable for fixed and mobile environments.
- 100% CNC Machined from high strength 6000 series aluminium and stainless steel.

Product Number		TS-MPT-H412-1	TS-MPT-H412-2	TS-MPT-H412-3
Payload Capacity		Max. 21 Kg	Max. 21 Kg	Max. 21 Kg
Rated Load Torque		35 Nm	35 Nm	35 Nm
Power Consumption	Max. (Pan-Tilt in Motion)	100 W	100 W	100 W
	Standby	2 W	2 W	2 W
	Heater Power	100 W	100 W	100 W
	Operating Voltage Range	18-32 V	18-32 V	18-32 V
Pan	Range of travel	n × 360° (Continuous Rotation)	n × 360° (Continuous Rotation)	n × 360° (Continuous Rotation)
	Speed	Max. 8 rpm (48°/s)	Max. 8 rpm (48°/s)	Max. 8 rpm (48°/s)
Tilt	Range of travel	180° (±90°)	180° (±90°)	180° (±90°)
	Speed	Max. 2.7 rpm (16.2°/s)	Max. 2.7 rpm (16.2°/s)	Max. 2.7 rpm (16.2°/s)
Accuracy		0.02°	0.02°	0.02°
Repeatability		0.01°	0.01°	0.01°
Backlash		None	None	None
Rotation Limits	Software Limits	Available	Available	Available
	Mechanical Limits	Available	Available	Available
Position Feedback		0.0048° (Magnetic Encoder)	0.0048° (Magnetic Encoder)	0.0048° (Magnetic Encoder)
Protection / IP rating		IP67	IP67	IP67
Operating Temperature	With internal heater	-32°C to +55°C	-32°C to +55°C	-32°C to +55°C
	Without heater	-10°C to +55°C	-10°C to +55°C	-10°C to +55°C
Storage Temperature		-40°C to +60°C	-40°C to +60°C	-40°C to +60°C
Construction	Drive System (Pan and Tilt)	Stepper Motor	Stepper Motor	Stepper Motor
	Exterior Finish	Powder Coat Black (Default), Special Finishes Available	Powder Coat Black (Default), Special Finishes Available	Powder Coat Black (Default), Special Finishes Available
	Weight	Max. 7,5 Kg	Max. 7,5 Kg	Max. 7,5 Kg
	Dimensions	257x283.7x153 mm (10.12x11.17x6.02 inch)	257x283.7x153 mm (10.12x11.17x6.02 inch)	257x283.7x153 mm (10.12x11.17x6.02 inch)
Ambient Conditions and EMI/ EMC Compatibility	Electromagnetic Compatibility	MIL-STD-461E	MIL-STD-461E	MIL-STD-461E
	Vibration Compatibility	MIL-STD-810G Method 514.6	MIL-STD-810G Method 514.6	MIL-STD-810G Method 514.6
	Maximum Operating Temperature	MIL-STD-810G Method 501.5	MIL-STD-810G Method 501.5	MIL-STD-810G Method 501.5
	Minimum Operating Temperature	MIL-STD-810G Method 502.5	MIL-STD-810G Method 502.5	MIL-STD-810G Method 502.5
	Moisture Resistance	MIL-STD-810G Method 507.5	MIL-STD-810G Method 507.5	MIL-STD-810G Method 507.5
Command and Control		GUI-Joystick-Software	GUI-Joystick-Software	GUI-Joystick-Software
Protocol		TS-MPT Protocol	TS-MPT Protocol	TS-MPT Protocol
Power Outputs to Payload	24 VDC	Optional 2A (8A on Slipring)	Optional 2A (8A on Slipring)	Optional 2A (8A on Slipring)
	12 VDC	Optional 2A	Optional 2A	Optional 2A
	5 VDC	Optional 2A	Optional 2A	Optional 2A
Instantly Monitoring	Power On and Run Time Monitoring	Available	Available	Available
	Voltage Monitoring	Available	Available	Available
	Current Monitoring	Available	Available	Available
Communication Interfaces to Payload	Serial	RS232, RS422, RS485	RS232, RS422, RS485	RS232, RS422, RS485
	TTL	1 Channel	1 Channel	1 Channel
	IP	1 Channel	None	1 Channel
Input Connector		D38999 / MS3112E18-32P	D38999 / MS3112E18-32P and RF Connector	D38999 / MS3112E18-32P and RF Connector
Output Connector		D38999 / MS27499E16B35S	D38999 / MS27499E16B35S and RF Connector	D38999 / MS27499E16B35S and RF Connector