

Datasheet	PTP140	1.26.2021	 UAVOS
REV	DESCRIPTION	DATE	
		approved	

Pan Tilt Platform PTP140

Application

- Two-axes platform for balanced payloads up to 130 kg
- Payloads types: EO/IR, Antenna, Laser and similar systems

Supported control interfaces & protocols

- Ethernet (EtherCAT)
- CAN (CANopen, CANaerospace)
- RS422/485 (Modbus)
- Profile Position
- Profile Velocity

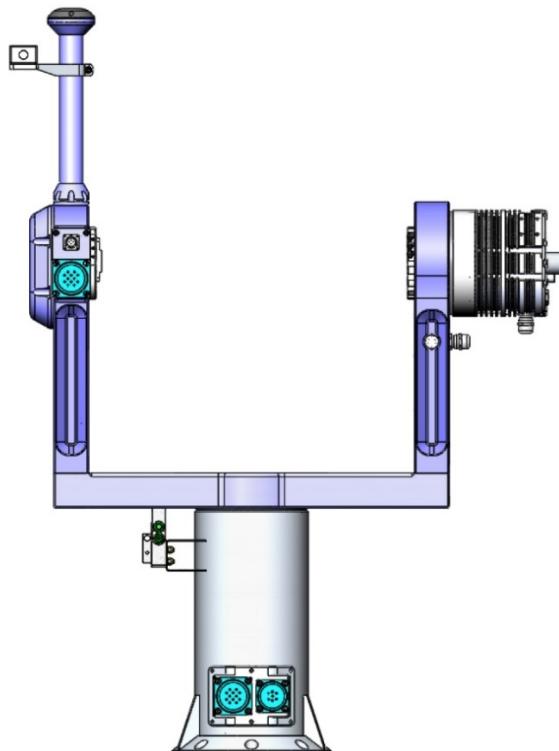
PTP140 telemetry data

- Position & speed & active current for each of the axes
- Bus voltage
- Motor & power stage temperature
- Humidity control

PTP140 features

- Hollow shaft for cables
- Electromagnetic brake for each of the axes
- Two-axes Gyro Stabilization (possible on request)
- GPS/GNSS True Heading (possible on request)

PTP140 drawing



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TECHNICAL PERFORMANCE

Supply Voltage (rated)	48 VDC
Absolute Supply Voltage Range	18 – 60 VDC
Standby Current at rated voltage	0,35 A
Rated Current at rated voltage	20 Arms for one axis
Peak Current at rated voltage	60 Arms for one axis
Rated Torque at rated speed	118 Nm
Average Torque	167 Nm
Peak Torque at rated voltage	304 Nm
Speed at rated torque	± 100 deg/sec
Acceleration	± 200 deg/sec (depends on the payload mass)
Angular freedom Azimuth / Elevation	continuous
Backlash (mechanical)	~0 deg
Final system accuracy	≤90 arcsec (0.25 mrad)
Feedback system	Absolute (from 17 bit to 20 bit singleturn and 15 bit multturn)
Storage Temperature Range	-40°C ... +90°C
Operating Temperature Range	-40°C ... +55°C
Protection	IP65
Platform weight	45 kg ± 10%
Size	990 mm x 740 mm x 340 mm
Holding Brake	Power-off electromagnetic brake for each of the axes
Payload weight ¹	130 kg centered, balanced
Command / Remote Control	via CAN (CANopen CiA-402 (4.0) compliant) or Ethernet (EtherCAT) or custom protocol over RS422/485 & CAN

¹The system can be delivered with special adaptation to customer's payload. Payload can be provided by the customer or by UAVOS and integrated at UAVOS facilities.