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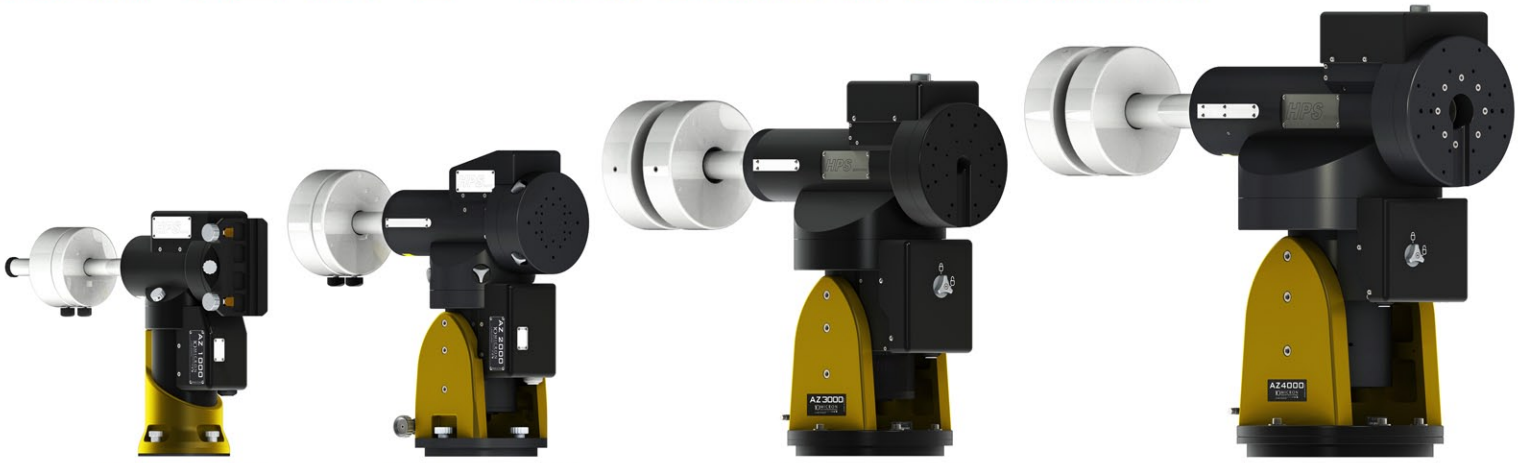
NEW AZ HPS - ALTAZIMUTHAL MOUNTS



AZ1000 HPS AZ2000 HPS AZ3000 HPS AZ4000 HPS

The AZ HPS series are very versatile research mounts, perfect for scientific activities such as satellite tracking, space debris monitoring, LiDaR laser applications, photometric and astrometric measurements, and so on.
They are also suitable for didactic applications. Due to the altazimuthal design, these special mounts aren't suitable for astrophotography and for most of the amateur activities. The standard version allows to assembly the optics to only a side of the mount and is supplied with a counterweight bar.
An option is available for a dual telescope configuration.

AZ4000 HPS DT with 17" and 24" optics

MAIN FEATURES

- HPS Technology with absolute encoders and high speed motors
- Altazimuthal configuration with optional double optics attachment
- Internal wiring - no external cables
- High precision worm-gear system, simple and reliable
- High payload capacity
- Stand alone operation - no PC required
- Professional graphic keypad
- Extremely accurate star modeling up to 100 stars
- Multiple models recordable for different optics setups
- Refraction and flexures automatic detection and correction
- Manual, automatic or GPS based time, leap seconds support for UT1-UTC correction
- Wide accessories selection
- Fully remote control
- Remote diagnostic assistance
- De-Rotator compatibility
- and much more....

DOUBLE TELESCOPE OPTION

This option allows to assemble a dual or multiple optics configuration; different sizes of dovetail plate are avaialbles in order to match with several brand od optics. Not availalbe for the AZ 1000 HPS mount.

AZ3000 HPS standard version and Double telescope version

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AZ HPS MOUNTS
TECHNICAL SPECIFICATIONS

SPECIFICATIONS	AZ1000 HPS	AZ2000 HPS	AZ3000 HPS	AZ4000 HPS
Type	Altazimuth German Mount			
Weight (default config)	19.5 kg	33 kg	65 kg	125 kg
Instrument payload capacity	25 Kg (55 lbs)	50 kg (110 lbs) for standard single telescope configuration; 50 + 35 kg (110 + 77 lbs) for optional dual telescope configuration	100 kg (220 lbs) for standard single telescope config.; 100 + 65 kg (220 + 143 lbs) for optional dual telescope configuration	150 kg (330 lbs) for standard single telescope config.; 150 + 100 kg (330 + 220 lbs) for optional dual telescope configuration
Azimuth fine adjustment range (for initial orientation)	+/- 10°			
Counterweight shaft	30mm stainless s.	40mm stainless s.	50mm stainless s.	60mm stainless s.
Axes	30mm diameter, Alloy steel	50mm diameter, Alloy steel	80mm / 50mm diameter, alloy steel	85mm / 80mm diameter, alloy steel
Bearings	Pre-loaded tapered roller bearings			
Worm wheels	250 teeth, 125mm diam., B14 bronze	215 teeth, 172mm diam., B14 bronze	315 teeth, 244mm diam / 250 teeth, 192mm diam., B14 bronze	430 teeth, 330mm diam / 315 teeth, 244 mm diam., B14 bronze
Worm gears	diameter 20mm, tempered alloy steel, grinded and lapped	diameter 24mm, tempered alloy steel, grinded and lapped	diameter 32mm/24mm , tempered alloy steel, grinded and lapped	diameter 32mm, tempered alloy steel, grinded and lapped
Transmission system	Backlash-free system with timing belt and automatic backlash recovery			
Motors	2 axes servo brushless			
Power supply	24 V DC	24 V DC (48V DC as special option)	24 V DC (48V DC as special option)	24 V DC (48V DC as special option)
Power consumption	~ 0,5 A at sidereal speed ~ 3 A at maximum speed ~ 4 A peak	~ 0,7 A at sidereal speed ~ 3 A at maximum speed ~ 5 A peak	~ 1 A at sidereal speed ~ 3 A at maximum speed ~ 5 A peak	~ 1,5 A at sidereal speed ~ 5 A at maximum speed ~ 6 A peak
Go-To speed	Adjustable from 2°/s to 15°/s	Adjust. 2°/s to 20°/s. Special version 48V: until 35°/sec	Adjust. 2°/s to 12°/s Special version 48V until 20°/s	Adjust. 2°/s to 8°/s Special version 48V until 15°/s
Pointing accuracy (typical)	< 20" with internal multiple-stars software mapping			
Average tracking accuracy	< +/– 1" typical for 15 minutes (< 0.7" RMS) with internal multiple-stars software mapping and compensation of flexure and polar alignment errors			
Security stop	+/– 150° in AZ (software) +/– 155° in AZ (mechanical) +/– 95° in Alt (software) +/– 100° in Alt (mechanical)			
Operational temperature range (standard)	- 15° C to + 35° C + 05° F to + 95° F			
Special operational temperature range (optional)	N.A.	- 35° C to + 35° C - 31° F to + 95° F		
Communication ports	RS–232 port; GPS port; autoguide ST-4 protocol port; Ethernet port			
Database	Stars: by name, Bayer designation, Flamsteed designation, Bright Star Catalogue, SAO, HIP, HD, PPM, ADS, GCVS. Deep-sky: M, NGC, IC, PGC, UGC limited up to mV = 16. Solar system: Sun, Moon, planets, asteroids, comets, artificial satellites. Equatorial and altazimuth coordinates. User defined objects, fast slewing positions.			
Firmware main features	User defined mount parking position, 2-stars and 3-stars alignment function, up to 100 alignment stars for modeling, correction of polar alignment and orthogonality errors, estimate of average pointing error, storage of multiple pointing models, sidereal, solar and lunar tracking speed adjustable on both axes, declination-based autoguide speed correction, adjustable horizon height limit, pointing and tracking past meridian,, assisted balance adjustment, manual or GPS based time and coordinates setting, dome control via RS-232, configurable atmospheric refraction, network settings, comets and asteroids filter, multi-language interface. Remote Assist via Internet connection.			
PC control	Remote control via RS-232 or Ethernet; proprietary ASCOM driver or Meade compatible protocol; update of firmware and orbital elements of comets, asteroids and artificial satellites via RS-232 or Ethernet; virtual control panel via RS-232 or Ethernet. Wi-Fi included to control the mount via Tablet, Smartphone etc.			

Specifications are subject to change without prior notice