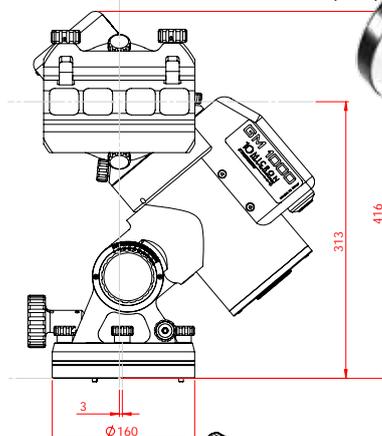


GM 1000 HPS

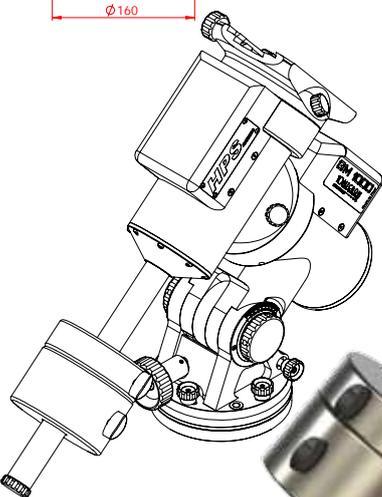
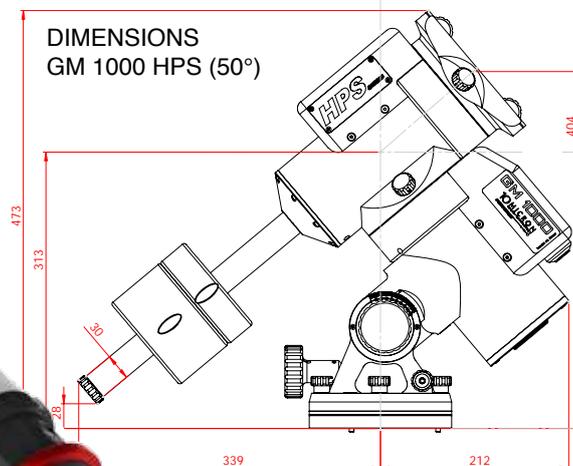
TRUE PRECISION - FOR YOUR ASTRONOMICAL FUTURE

DIMENSIONS GM 1000 HPS (50°)



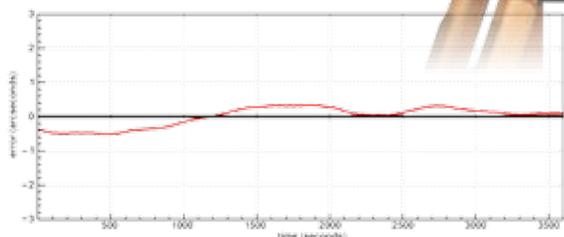
GM1000 HPS w.
TEC 110FL and
SBIG STL-11000

DIMENSIONS
GM 1000 HPS (50°)



Dual Dovetail
Clamp:
3" (Losmandy)
and 44 mm
(Celestron/Vixen)

Worm geared
polar adjustment



3600 sec. tracking error log HPS 1000 (R.A.-axis)
– verified by external absolute encoder –



NGC 4565 w. Vixen VMC200L, 8x6000 sec. without
guiding control. Image: Giuseppe Pasera

10Micron workshops



Want to know more?



Visit 10Micron.de

Technical datasheet

April 2012

CONTROLLER	10Micron QCI control system V.2 with built in Linux based industrial computer. External PC not required – all mount functions available through Hand Control Unit.
CONNECTORS	LAN, RS232, power jack for remote switch, autoguider ST-4 port, GPS port, special AUX I/O connector for future applications
ENERGY SOURCE	24V/ 3A min. stabilized power supply
CONSTRUCTION	All CNC machined aluminum barstock, stainless steel, bronze; all fasteners stainless steel
DRIVE	10Micron proprietary electronic drive system with AC servo brushless motors with 4000 ppr encoders on board
ABSOLUTE ON-AXIS-ENCODERS	HiRes absolute on axis encoders in RA and Dec, absolute resolution >10 million increments (hermetically sealed inside the mount for permanent protection against dust, insects and moisture)
POINTING ACCURACY	< 20" – based on 25 stars alignment acc to detailed pointing model instructions
TRACKING ACCURACY	< 1" RMS in 15 minutes (at sidereal speed)
POSITIONING SPEED	(GOTO speed) max. 15°/sec.
TRACKING SPEEDS	Up to 15° / sec. – (theoretical) – tested at about 1.5°/sec. (ISS – International Space Station speed)
THRUST BEARINGS R.A.& DEC.	85 mm diameter
WORM GEAR	R.A. & Dec. material/polish: diameter 20 mm, lapped and tempered alloy steel with double bearing support: two leading thrust bearings plus two radial bearings
WORM WHEEL	RA. & Dec. material/polish: diameter 125 mm, 250 teeth, lapped bronze with double bearing support: leading thrust bearing – plus on axis roller bearing
OBJECT CATALOGUES	Messier, NGC, IC, PGC, UGC, SAO, BSC, HIP, HD, PPM, ADS, GCVS, Planets, Asteroids, Comets, Satellites, custom coordinates, alt-az coordinates
RA.& DEC. AXIS DIAMETER	30 mm
AXIAL BEARINGS IN RA. & DEC.	Both axes supported by two preloaded tapered roller bearings and six cup-springs for thermal compensation
LATITUDE RANGE	0 to 82 degrees (0 to 90° latitude block available optionally)
AZIMUTH ROTATION / POLAR HEIGHT ADJUSTMENT	Controlled rotation in AZ: approx. 15 degrees (+/- 7,5 degrees). Worm geared polar height adjustment.
COUNTERWEIGHT SHAFT	30 mm diameter x 290 mm useable length, weight 1,5 kg
WEIGHT OF MOUNT	Total 18 kg – without cw-bar and base plate
INSTRUMENT LOADING CAPACITY	Approximately 20 kg photographic payload / 25 kg max. payload (not including counterweights)
DUAL DOVETAIL ADAPTER PLATE	Integrated clamps to fit 3" (Losmandy) and 44 mm (Celestron / Vixen) dovetails. Two knobbed brass clamps
PIER/TRIPOD ADAPTER BASE	Diameter 160 mm, drilled for Baader AHT Hardwood-tripod and 10Micron 30H100 Italian tripod

QCI V.2 HPS SOFTWARE

additional features included:

- Satellite pointing and precise tracking with „learning function“
- Dual Axis tracking (for simultaneous tracking in both axes compensating refraction, drift and flexions)
- Follow objects routine (for non-stellar object tracking)
- Automatic meridian flip / alternative meridian security lock
- Electronic Balancing
- Up to 25 stars per alignment model – for precise modeling
- Up to 10 pointing model database recall
- GPS automatic data setting reader
- Software assist for precise polar alignment
- Refraction, humidity and air pressure correction
- Visible Objects filter for Satellites, Comets and Asteroids
- Upgradable database for Satellites, Comets and Asteroids
- Multi language database
- Upgradable mount firmware
- ASCOM compatible via LX200 or AP protocols
- Baader Domes control implemented
- Virtual Keypad by 10Micron for remote mount control via customer PC
- Remote diagnostics assist option – for remote assistance and remote readout of all mount parameters



Authorised 10Micron Dealer: