

ASTRO



PHYSICS

"Sweet 16"

1600GTO

GERMAN EQUATORIAL

"Trust Your Nights to Astro-Physics"

Absolute Encoder Option:

- Completely Error-free tracking
- Software Readable Absolute Position
- Homing and Customizable Limit Functions

Features:

- Image Past the Meridian (up to the full 6 hours)
- Modular Design Philosophy
- Through-the-Mount Cabling
- Transportable (R.A. & DEC. Axes Separate)
- 0° to 78° Latitude Range
- Keypad and/or Computer Control
- ASCOM Compatible with Fully Supported Driver
- Operate with 12V Battery
- Astro-Physics Reliability and Support
- Ideal for Refractors up to 250mm, or 18-20" Cassegrains, Ritchey-Chrétiens and CDKs



"Thirty plus years of mount building expertise has been employed to engineer and build our new 1600GTO mount into the most robust, high precision mount in its class. We have enhanced its design and utility by incorporating additional optional features like absolute encoders, sophisticated control systems and a new precision polar scope to exceed the needs of even the most demanding astro-imager or visual enthusiast."

Roland Christen, President & Owner of Astro-Physics, Inc.

Absolute Encoders "Pinnacle of Precision!"

Computer Control

Included Software:

- **AP V2 ASCOM**
- **PemPro™**
by Ray Gralak
- **Pulseguide™**
by Ray Gralak

Compatible Software:

- **Astro-Physics Command Center (APCC)**
- **ACP™**
by DC-3 Dreams
- **CCD AutoPilot™**
by CCDWare
- **Starry Night Pro™**
by Simulation Curriculum Corp.
- **Equinox Pro™**
by Microprojects
- **TheSky™ & TPoint™**
by Software Bisque
- **Any ASCOM Compliant Software**

Specifications

Construction:

Finishing & Assembly:
Worm wheel-R.A. & Dec.:
Worm gear-R.A. & Dec.:
Axis shaft-R.A. & Dec.:
Shaft axis bearing-
R.A. & Dec.:
Periodic error (native):
Counterweight shaft:

All CNC aluminum bar stock, stainless steel, brass, stainless steel fasteners

Every part is hand finished and inspected; all assembly is done by hand

10.3" (262 mm) 225 tooth aluminum

1.22" (31 mm) diameter brass

3.74" (95 mm) diameter

5.71" (145 mm) diameter

< 5 arcseconds (2.5 arcseconds)

1.875" (47.6 mm) diameter, 18.5" (469.9 mm) usable length, stainless steel,
removable with safety stop. Optional 9" (229 mm) shaft extension available.

Latitude range:

0 to 78 degrees

Azimuth adjustment:

13 degrees (± 6.5 degrees from center)

Motors:

High-torque, zero-cogging Swiss DC servo motors

Slew rate:

0.25x to 1200x Sidereal (max. 5 degrees per second)

Power consumption:

< 0.5A - tracking; < 1.5 Amp - both axes slewing (no load)

Power supply:

12V DC at 5 Amp (acceptable range 11.5V - 16V)

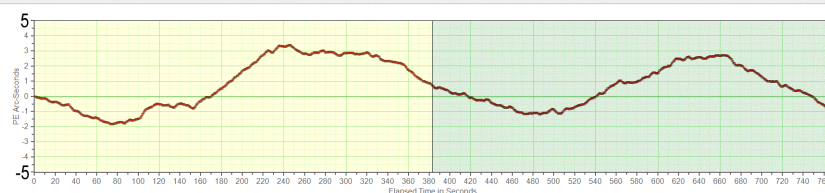
Weight of mount:

Total: 115.5 lbs. (52.5 kg); R.A. axis: 58.5 lbs. (26.6 kg); Dec. axis: 40.5 lbs. (19.5 kg); Dec. Top Plate 2.5 lb. (1.1 kg); Counterweight shaft: 14 lbs. (6.4 kg)

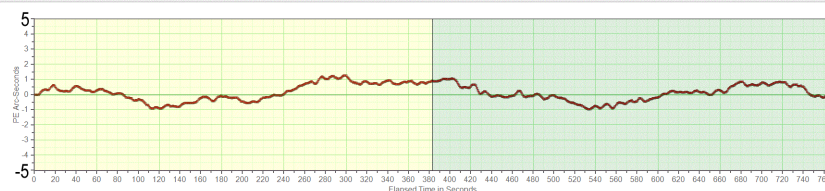
Capacity of mount:

220 lbs. (100 kg) approximately, scope & accessories only, dependant on scope length

1600GTO - Raw PE = 4.56 arc-secs Sine Fit



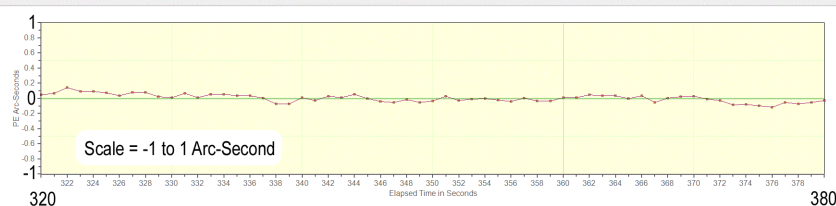
1600GTO - PEM-ON = 1.39 arc-secs Sine Fit



1600GTO - Encoder-ON = 0.22 arc-secs Sine Fit



1600GTO - Encoder-ON = 0.22 arc-secs - 60 second Detail



astro-physics.com

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