

1 Meter Telescope System

HIGH PERFORMANCE 1 METER TELESCOPE

PRECISION, VERSATILITY, RELIABILITY

Brashear's 1 m telescope system combines the highest quality optical performance with flexible design configurations that are adaptable to a wide variety of applications.

To ensure outstanding precision, flexibility and durability, they feature:

- Azimuth over elevation mount
- Rugged, field-proven construction
- Unguided autotracking or command guided
- All-reflective lens design for broad spectral coverage
- Accommodate wide variety of instrumentation at Cassegrain, Bent Cassegrain, Nasmyth and/or Coudé positions
- Compatible with adaptive optics and laser systems

FOR ASTRONOMICAL APPLICATION

The Brashear 1 m telescope system provides the optical performance and tracking capability to meet the demands of a wide range of astronomical and scientific functions:

- Near diffraction limited performance
- Tracking at sidereal rates to within 1 degree of zenith
- High rate tracking within 5 degrees of zenith

FOR HIGH TRACKING RATE APPLICATIONS

Direct drive DC motors and Inductosyn™ encoders ensure precision tracking and imaging of low earth orbit satellites and other objects under the most demanding requirements.

Optional features for special tracking applications include:

- Low jitter and wobble
- Coudé path designs
- Flexible control system



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SPECIFICATIONS

OPTICAL:

Primary f/#:	f/1.5 to f/2.0
System f/#:	f/8 to f/16
Wavefront Error:	0.125 λ rms @ 632.8 nm
Encircled Energy:	78% or more within .058 arc second @ 632.8 nm
Operational Wavelengths:	Suitable for operation from UV through mid-IR
Coatings:	Wide range available, including high durability

SYSTEM:

Azimuth Slew Rate:	20 degrees per second
Elevation Slew Rate:	10 degrees per second
Encoder Resolution	26 bit
LOS Jitter:	0.02 arc second
Absolute Pointing:	2 arc sec rms for stars between 30 and 89 degrees elevation
Open Loop Tracking Accuracy:	1 arc sec rms at sidereal rates

INTERFACE:

Graphical User Interface Features:

- Star calibration software
- Star or satellite tracking based on catalog, with user additions possible
- Ephemeris tracking of planets and minor planets
- Supports remote operation via Ethernet

OPTIONS:

- Optics for Cassegrain, Bent Cassegrain, Nasmyth and/or Coude Instrumentation
- Instrumentation rotators
- Refractive field correctors for wide field operation

DOMES:

Complete turn-key solutions are available tailored to meet the operational requirements and science objectives of the observatory.



Brashear

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communications

Brashear

L-3. Leading. Headquartered in New York City, L-3 Communications employs over 63,000 people worldwide and is a prime system contractor in aircraft modernization and maintenance, C3ISR (Command, Control, Communications, Intelligence, Surveillance and Reconnaissance) systems and government services. L-3 is also a leading provider of high technology products, systems and subsystems. The company reported 2006 sales of \$12.5 billion.

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Cleared by DOD/OFOISR for public release under OFOISR Case Number 05-S-1407 on June 6, 2005.

122007 rev 0