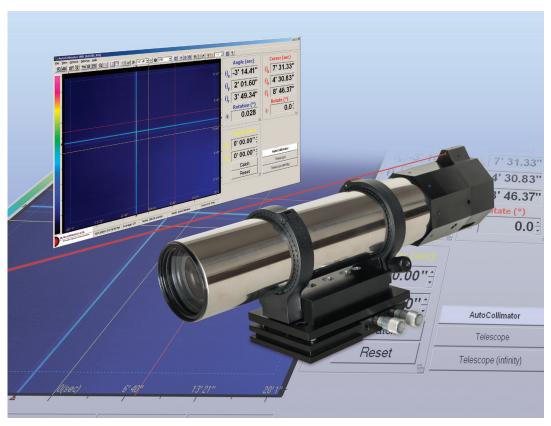
Flectronic Autocollimator HR High Resolution

A precise USB 2.0 device combining the functionality of autocollimator and alignment telescope

Our Electronic Autocollimator HR performs high precision measurement of reflection from a miror surface. The device offers high resolution measurement capability down to 0.01 arc sec or $0.05~\mu Rad$.



Main Applications

The Electronic Autocollimator's applications are mainly related to the detection and measurement of small angular displacements. Examples include:

- Straightness measurement of linear stages
- Characterization of rotation stage
- Measurement of wedge, prism and polygon angles
- Measurement of reflecting surface parallelism
- Measurement of surface flatness

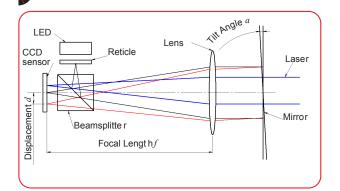
- Alignment of optical setups including lasers
- Measurement of mirror angle
- Machine alignment
- CD/DVD ROM alignment
- Thermal stability measurements
- Vibration analysis



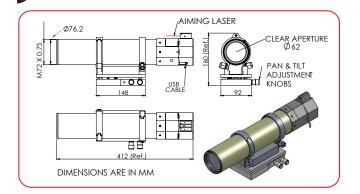
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Measurement Specifications

Concept



Mechanical Dimensions





Specifications

Field of view

 Autocollimator
 20' (H) (1200 sec of arc)

 Telescope
 40' (H) (2400 sec of arc)

 Resolution
 0.01 sec of arc (0.05 μRad)

Accuracy 1 sec

CCD Camera 1/2" (1/3" Optional)

Light SourceLEDInterfaceUSB 2.0Clear aperture62mm

Retro-reflector for alignment Ø64mm, N.W. 280g

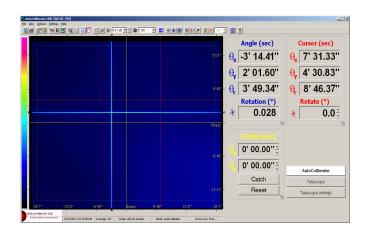
Thread Ø16mm, <5"

Coarse alignment laser 638nm power < 1.0 mW

Class 2 laser product,

IEC60825-1

Weight 5.2 kg including cable Pan & Tilt knobs Tilt ±2°, Pan ±2.5°



Built in pan & tilt adjustment Built in coarse aiming laser

Hardware Requirements

Pentium, 2.4GHz, 2GB RAM, 512 MB 24 bit color graphic adapter, 1 free High Speed USB2.0 port, Win XP/7/8.



PN: EAC-HR Complete system including a collimator unit with USB2.0 CCD camera, software on CD disk, retro-reflector for infinity adjustment, carrying case.

Features

- Real time measurement of angular displacement
- Automatic angle deviation display
- Relative measurements
- Multiple results display
- Low Light low reflection capability
- Reticule targets (single or multiple)
- Data logging with detailed statistics
- Software controlled electronic shutter & gain
- Data exporting to another computer via RS232 or TCP/IP
- Video with playback, snapshot files



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