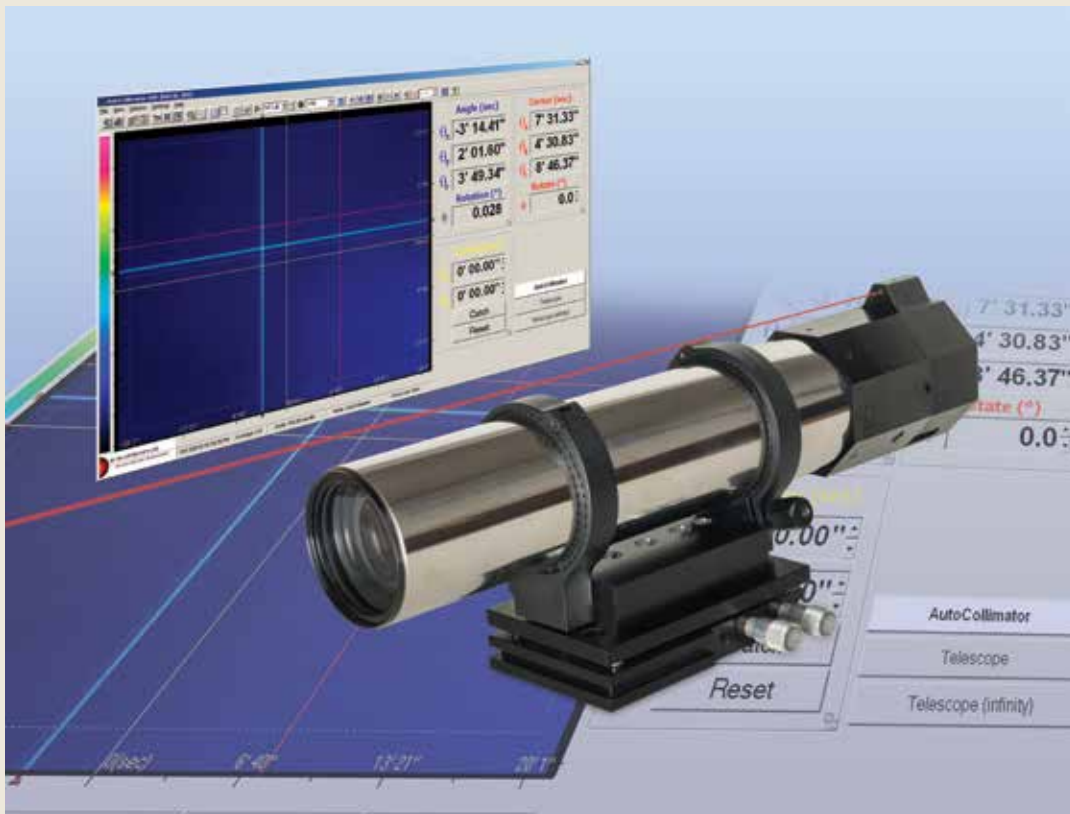


Electronic Autocollimator HR

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 mirror surface. The device offers high resolution measurement capability down to 0.01 arc sec or 0.05 μ 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

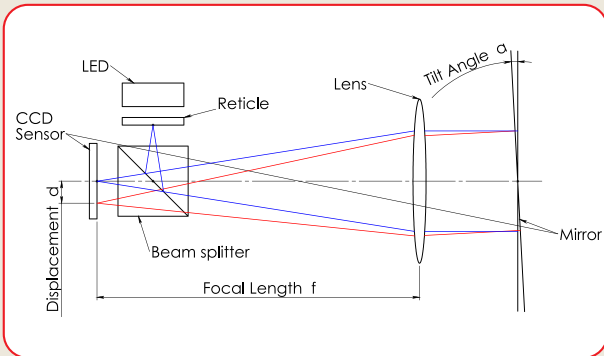


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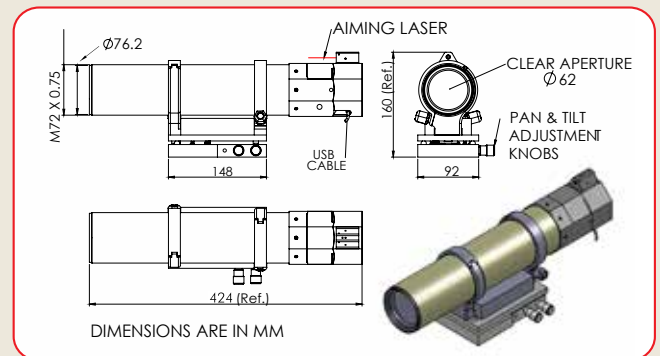
1st Hazait St., P.O.Box 3370 Neshar 3675018, Israel Tel:972-4-8200577 Fax: 972-4-8204190
Website: <http://www.duma.co.il> E-mail: sales@duma.co.il

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 μ Rad)

Accuracy

1 sec

CCD Camera

1/2"

Light Source

LED 630nm

Interface

USB 2.0

Clear aperture

62mm

Retro-reflector for alignment

Ø64mm, N.W. 280g
Thread Ø16mm, <5"

Coarse alignment laser

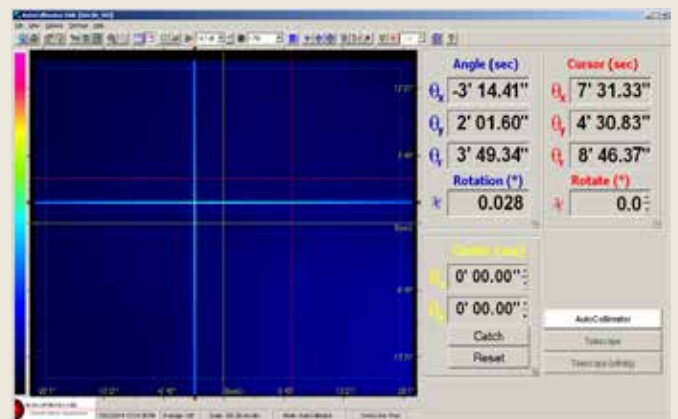
638nm power <1.0 mW
Class 2 laser product,
IEC60825-1

Weight

5.2 kg including cable

Pan & Tilt knobs

Tilt $\pm 2^\circ$, Pan $\pm 2.5^\circ$



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/7/8/10.

Ordering Information

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.

Other customized source IR wavelengths available. such as:

EAC-HR-1060 (for 1060mm range)

EAC-HR-1310 (for 1310mm range)

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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