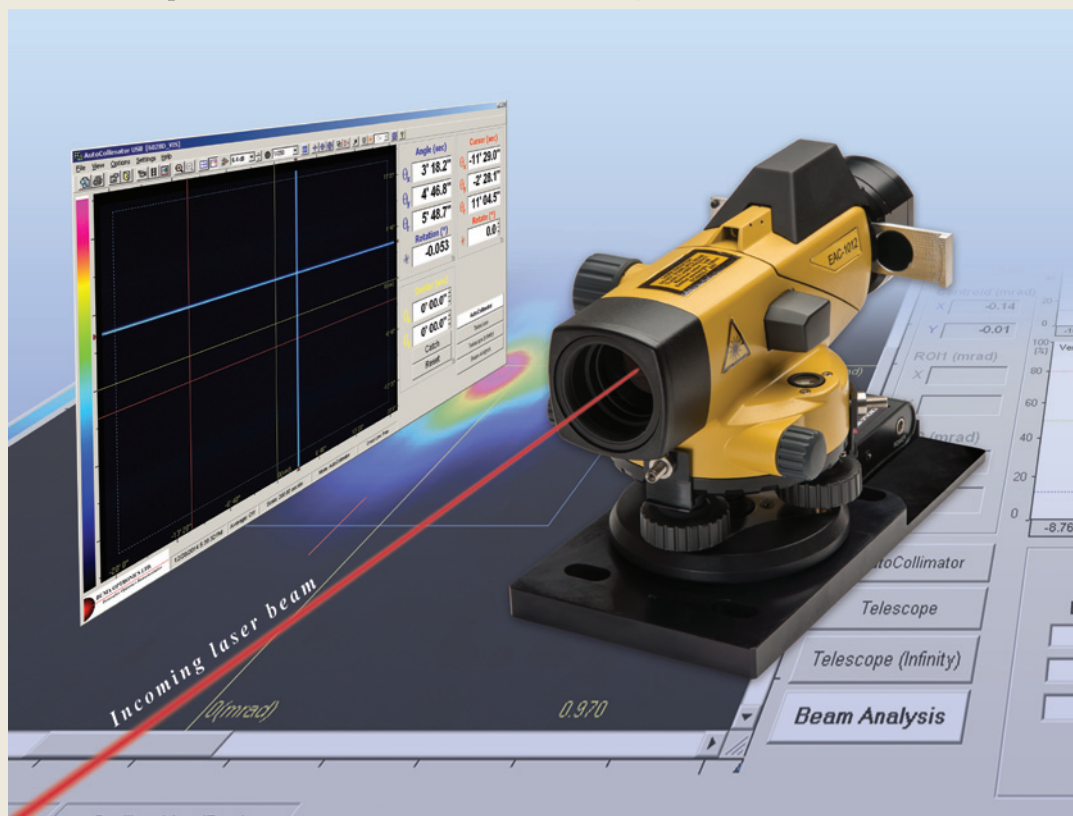


Laser Analyzing *E*lectronic Autocollimator

A precise USB 2.0 device combining the functionality of autocollimator and alignment telescope with laser beam profiling capability

The Laser Analyzing Autocollimator enables accurate laser orientation in respect to the autocollimator axis, as well as laser beam divergence analysis.

Our precise Electronic Autocollimator has built in adjustment features, such as: coarse alignment laser, leveling bubble, adjustment pan tilt knobs, enabling unprecedented alignment procedures (between the laser, the optical and mechanical axis of the device)



Main Applications

The Electronic Autocollimator's applications are mainly related to the detection and measurement of small angular displacements, while the beam analyzing functions enable intricate alignment of laser and optical sights, as well as live analysis of laser divergence. 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

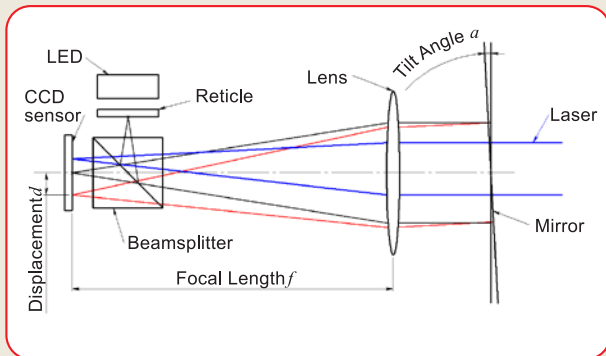


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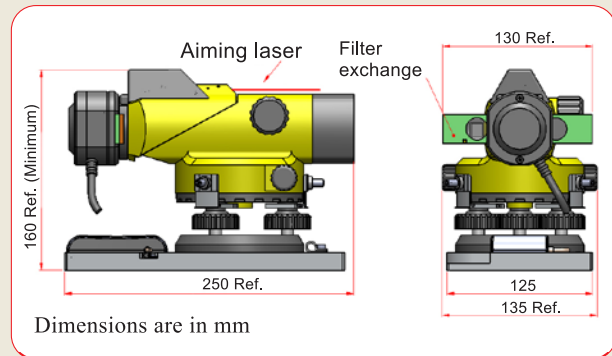
1st Hazait St., P.O.Box 3370 Neshar 3675018, Israel Tel:972-4-8200577 Fax: 972-4-8204190
Website: <http://www.duma.co.il> E-mail: sales@duma.co.il

Measurement Specifications

Concept

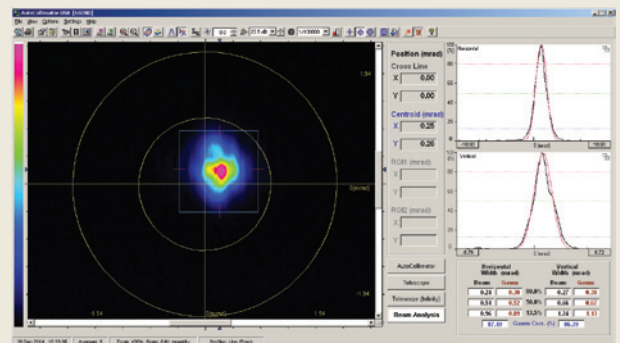
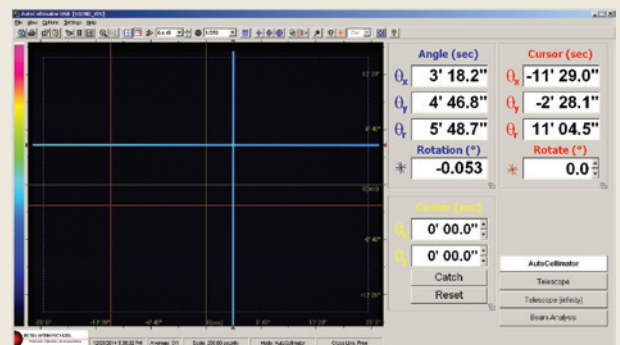


Mechanical Dimensions



Specifications

Bore-sighting accuracy	2sec /10μrad
Divergence measuring capability	0.4-20 mrad, (down to 0.25 mrad for 1/3" CCD option)
Maximum average power (laser in)	5mW
Field of view	
Autocollimator	40' (H) (2400 sec of arc)
Telescope	80' (H) (4800 sec of arc)
Resolution	0.1 sec
Accuracy	2.5 sec
CCD Camera	1/2" (1/3" Optional)
Light Source	LED
Interface	USB 2.0
Clear aperture	36mm
Built in focusing feature	
Focusing range	30cm to infinity
Bore sight retention	±5 sec
Objective aperture	36 mm
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	2.5 kg including cable



Software screens: top -Autocollimator mode
bottom -Beam Analysis mode

Features

- Real time measurement of laser beam divergence and angular displacement relative to the optical axis
- Built-in 4xND filters on a sliding ruler
- 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

Hardware Requirements

Pentium IV, 2.4GHz , 512MB RAM, 64 MB 24 bit color VGA card, 1 free High Speed USB2.0 port, Win XP/7/8.

Ordering Information

PN: EAC-1012-L Complete system including a collimator unit with USB2.0 CCD camera, built-in 4xND filters on a sliding ruler, software on CD disk, retro-reflector for infinity adjustment, carrying case.

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