

# Electronic Autocollimator

A versatile compact extremely accurate autocollimator



- Precise USB3.0 device combining the functionality of autocollimator with focusing feature for alignment
  - High resolution of down to 0.01 arc sec or 0.05  $\mu$ rad, with clear aperture of 36 mm.
  - Built-in computer controlled laser pointer for easy alignment.
- Built-in Pan & Tilt adjusting mechanics.

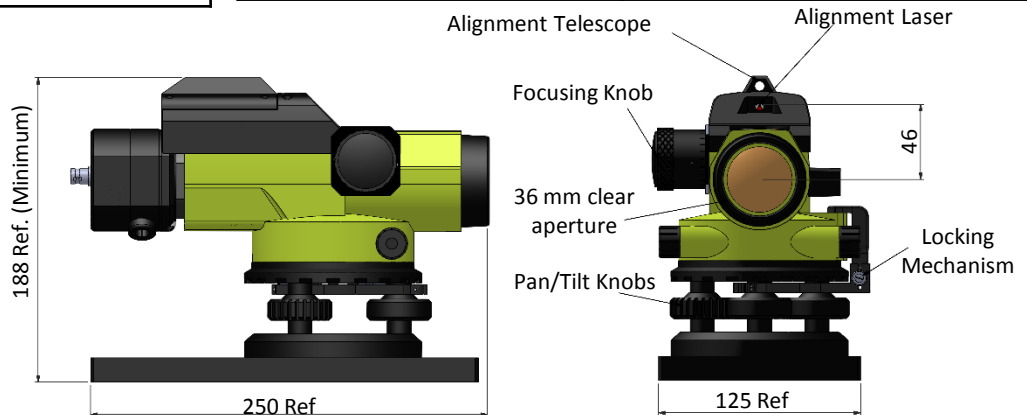
## Specifications

FoV Autocollimator	$\pm 25'$ (V) x $\pm 40'$ (H)
FoV Telescope & Beam Profiler	$\pm 50'$ (V) x $\pm 1^{\circ}20'$ (H)
Clear Aperture	36 mm
Autocollimator's Resolution	0.01 sec
Autocollimator's Accuracy	1.0 sec
Light Source	LED- 650, optional: 1060, RGB. Special order: 1310 nm
Retro-reflector for alignment	$\varnothing 64$ mm, N.W 280 g Thread $\varnothing 16$ mm, <5"
Line of Sight Retention as Function of Focusing	+/- 2.5 seconds
Min. Focusing Distance	Less than 17.5 cm

Built in coarse aiming Laser Pointer	638 nm power <1.0 mW Class 2 laser product, IEC60825-1
Spectral Response	350 - 1310 nm (Telescope Mode)
Resolution (H x V pixels)	1920 x 1200
Gain Control	x24
Dynamic Range	60 dB , 12 bit
Exposure Speed	39 $\mu$ sec to 20 sec
Frame Rate	40 fps (8 bit)
Sensor type	Proprietary CMOS
Pixel Size	5.86 $\mu$ m x 5.86 $\mu$ m
Pixel Bit Depth	8/12 bits
Background Subtraction	User activated
Trigger	<ul style="list-style-type: none"> <li>• Internal Software</li> <li>• Hardware Falling or Rising Edge</li> <li>• Trigger Delay 0.015ms - 4.0 sec</li> </ul>
Pan & Tilt knobs	Large Pan, Tilt $\pm 2.5^{\circ}$ ,
Power Requirements	$\sim 2$ Watt (Via USB 3.0 interface)
Dimensions (L x W x H) in mm	250 x 125 x 190
Weight (typical)	3 kg including cable
Min. Hardware Requirements	CPU i3 1.6 GHz, 4 GB RAM Min. Resolution 1366 x 766
Interface	USB 3.0, Windows 7/8/10 (32 & 64 bit)
Operating Temperature	0 $^{\circ}$ - 35 $^{\circ}$ C

## Ordering Information

**EAC-1012-19:** Complete system including a collimator unit with USB3.0 camera, software on CD and a retro-reflector for infinity adjustment.



Dimensions are in mm.

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