Autofocusing Electronic Autocollimator - E   UPGRADED

- A Precise USB3.0 device combining the functionality of an autocollimator with motorized feature for focusing at finite distances.
- High resolution of down to 0.01 arc sec or 0.05 μrad, with clear aperture of 36 mm.
- Built-in computer controlled laser pointer for easy alignment.
- Built-in Pan & Tilt adjusting mechanics.
- Far Field & Near Field Optical Measurements

Specifications

FoV Autocollimator	±25' (H) x ± 20' (V)
FoV of Beam Profiler	±50' (H) x ± 40' (V)
Clear Aperture	36 mm
Autocollimator's Resolution	0.005 sec
Autocollimator's Accuracy	1.0 sec
Light Source	LED: RGB Optional: 870, 1060 nm
Retro-reflector for Alignment	⌀35 mm, N.W 160 g, <5"
Line of Sight Retention as Function of Focusing	±2.5 seconds
Focusing Distance	Calibrated from 18 cm to infinity
Built-in Coarse Aiming Laser Pointer	650 nm power <1.0 mW Class 2 laser product, IEC60825-1
Power Requirements	External power supply provided

Spectral Response	350 - 1100 nm
Resolution (H x V pixels)	3000 x 2000
Gain Control	x510
Exposure Speed	32 μsec to 2 sec
Frame Rate	50 fps, a few hundreds on ROI mode
Pixel Size	2.4 μm x 2.4 μm
Pixel Bit Depth	8/16 bits
Background Subtraction	User activated
Trigger	Internal Software
Fast Mode Measurement	Up to 1,000 fps for partial ROI
Beam Analysis	
Laser Beam Orientation	±50' (H) x ± 40' (V) ±14 mrad (H) x ± 11 mrad (V)
Laser Beam Divergence Measurement	Down to 0.1 mrad
Resolution of Beam Divergence	Better than ±5 μrad
Multiple Beams Measurement in Parallel	Standard – up to 400.
Wavelength	350 - 1100 nm
Fast Mode Measurement	Up to 1,000 fps for partial ROI
Straightness Measurement	
Lateral Measurement on Object Plane	With micron accuracy dependent on object distance
Virtual Image Creation*	-2.5 [m] to -Infinity
Cooperative Cross Target	Automatic display of lateral deviation along 250 [mm] to Infinity

Ordering Information

EAC-1012-19-FO-E: Complete system including a collimator unit with USB3.0 camera, focusing mechanism, software on Flash Drive and a retro-reflector for infinity adjustment.

* Typical Application - Adjustment of projected laser beam to certain distance as dictated by the virtual image setting
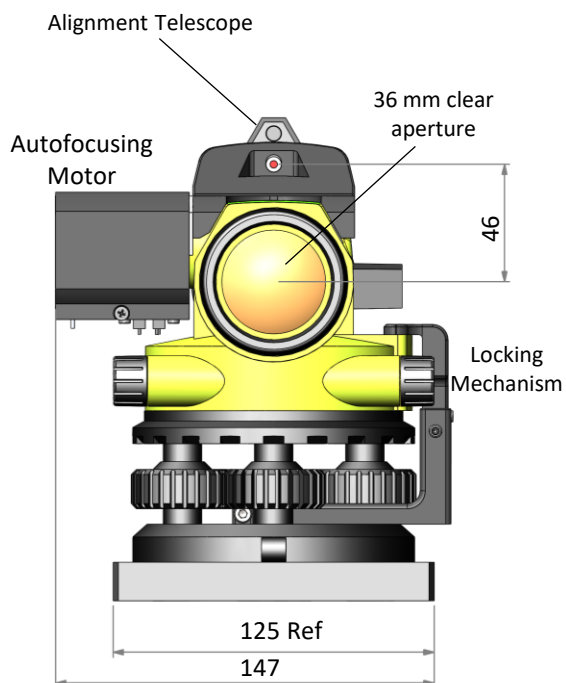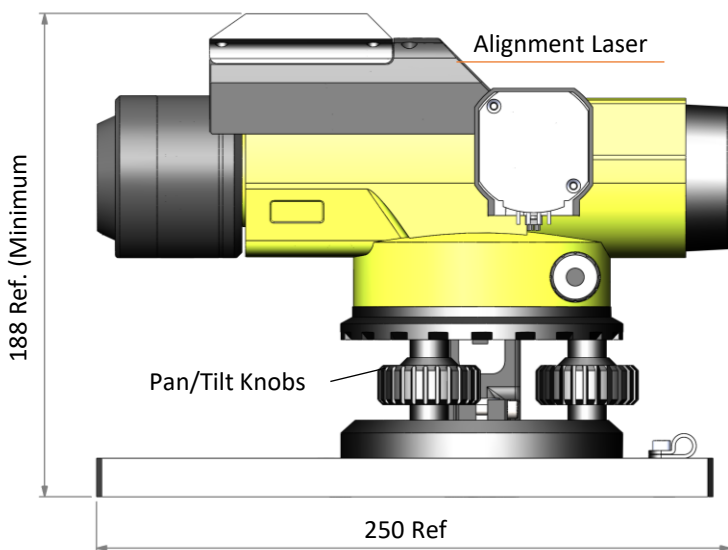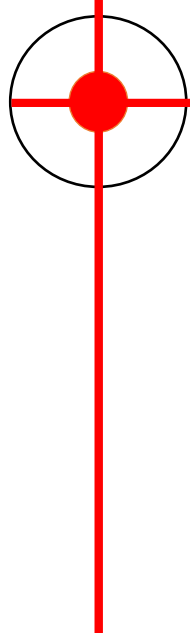
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Alignment Laser

188 Ref. (Minimum

Pan/Tilt Knobs

250 Ref

Alignment Telescope

36 mm clear aperture

Autofocusing Motor

46

Locking Mechanism

125 Ref

147

Dimensions are in mm.

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