Laser Analyzing Electronic Autocollimator

Binding two technologies into one instrument Beam profiling & Autocollimation



Precise USB3.0 device combining the functionality of autocollimator with laser beam analyzing capability

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.

<u>Specifications</u>	
Laser Type	CW & Pulsed
FoV Autocollimator	±40' (H) x ±25' (V)
FoV Telescope & Beam Profiler	±1°20′ (H) x ±50′ (V)
Clear Aperture	36 mm
Autocollimator's Resolution	0.01 sec
Autocollimator's Accuracy	1.0 sec
Light Source	LED- 650, optional: 1060. Special order: 1310 nm
Retro-reflector for alignment	ø64 mm, N.W 280 g Thread ø16 mm, <5"
Beam Divergence Measurements	Down to 0.2 mRad or better
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
Beam width resolution	Better than 2.5 μrad

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Spectral Response	350 - 1310 nm (Telescope Mode) VIS 400-700 nm, NIR User specified
Resolution (H x V pixels)	1920 x 1200
Gain Control	x24
Dynamic Range	60 dB , 12 bit
Exposure Speed	39 μsec to 20 sec
Frame Rate	40 fps (8 bit) 30 fps (12 bit)
Beam divergence accuracy	±2%
Position resolution of laser beam	Better than 2.5 μrad
Pixel Size	5.86 μm x 5.86 μm
Background Subtraction	User activated
Trigger	Internal SoftwareHardware Falling or Rising EdgeTrigger Delay 0.015ms - 4.0 sec
Power Requirements	~2 Watt (Via USB 3.0 interface)
Dimensions (L x W x H)	240 x 154 x 190 mm
Weight (typical)	3 kg including cable
Interface	USB 3.0, Windows 10 (32 & 64 bit)
Operating Temperature	0° – 35° C
154 Ref	

Ordering Information

Model EAC-1012-L19: Complete system including a collimator unit with USB3.0 camera, built-in 5xND filters on a slider, software on Flash Drive, and a retro-reflector for infinity adjustment.

Pan/Tilt Knobs

Alignment Laser

Focusing Knob
36 mm clear aperture

Filter Slider

Locking Mechanism

Dimensions are in mm.

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