

# 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  $\mu$ rad, with clear aperture of 36 mm.
- Built-in computer controlled laser pointer for easy alignment.
- Built-in Pan & Tilt adjusting mechanics.

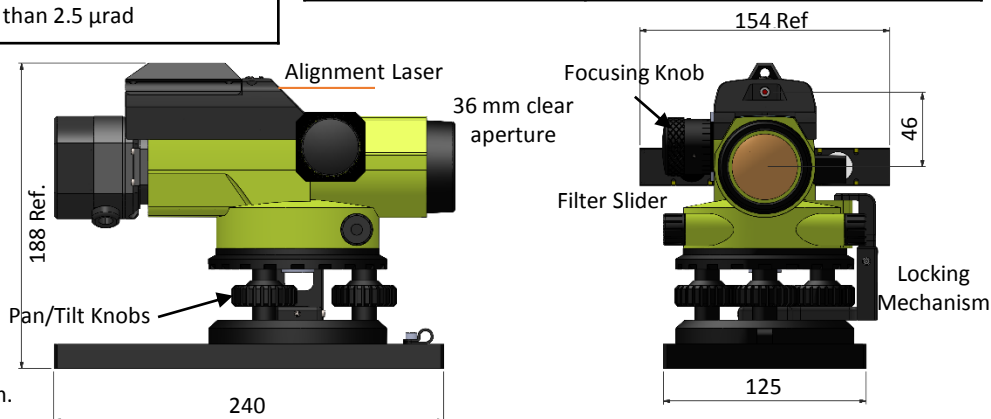
## Specifications

Laser Type	CW & Pulsed
FoV Autocollimator	$\pm 40'$ (H) x $\pm 25'$ (V)
FoV Telescope & Beam Profiler	$\pm 1^{\circ}20'$ (H) x $\pm 50'$ (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	$\varnothing 64$ mm, N.W 280 g Thread $\varnothing 16$ 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 $\mu$ rad

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 $\mu$ sec to 20 sec
Frame Rate	40 fps (8 bit) 30 fps (12 bit)
Beam divergence accuracy	$\pm 2\%$
Position resolution of laser beam	Better than 2.5 $\mu$ rad
Pixel Size	5.86 $\mu$ m x 5.86 $\mu$ m
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>
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 $^{\circ}$ - 35 $^{\circ}$ C

## 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.



Dimensions are in mm.

## DUMA OPTRONICS LTD.



海纳光学有限公司  
HIGHLIGHT OPTICS CO., LTD.

Tel: 0755-84870203

www.highlightoptics.com

E-mail: sales@highlightoptics.com