

Autofocusing Electronic Autocollimator



- 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 μ rad, 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

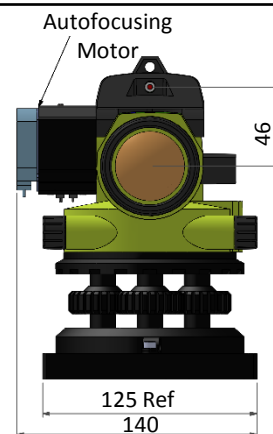
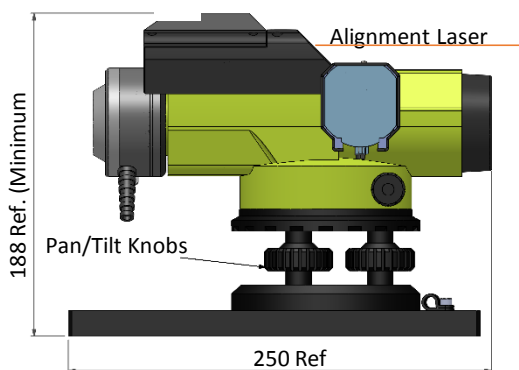
Specifications

FoV Autocollimator	$\pm 25'$ (H) x $\pm 20'$ (V)
FoV Telescope & Beam Profiler	$\pm 50'$ (H) x $\pm 40'$ (V)
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)	1.3 MegaPixels, 10 bit
Gain Control	x4
Dynamic Range	60 dB
Exposure Speed	9 μ sec to 16 msec
Frame Rate	50 fps, a few hundreds on AOI mode
Pixel Size	5.3 μ m x 5.3 μ m
Pixel Bit Depth	8/10 bits
Background Subtraction	User activated
Trigger	<ul style="list-style-type: none"> Internal Software Hardware Falling or Rising Edge Trigger Delay 0.015ms - 1.0 sec
Pan & Tilt knobs	Large Pan, Tilt $\pm 2.5^\circ$,
Power Requirements	~2.5 Watt (Via USB 2.0 interface)
Dimensions (L x W x H) in mm	250 x 140 x 190
Weight (typical)	3.2 kg including cable
Min. Hardware Requirements	CPU i3 1.6 GHz, 4 GB RAM Min. Resolution 1366 x 766
Interface	USB 2.0, Windows 7/8/10 (32 & 64 bit)
Operating Temperature	0° – 35° C

Ordering Information

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



Dimensions are in mm.

DUMA OPTRONICS LTD.

Website: <http://www.dumaoptronics.com>

E-mail: sales@duma.co.il

January 2020