

Electronic Autocollimator XR

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 0.005 arcsec, with clear aperture of 36 mm.
- Built-in computer controlled laser pointer for easy alignment.
- Built-in Pan & Tilt adjusting mechanics.
- Hybrid autocollimator fusing together alignment & beam analysis.

Specifications

FoV Autocollimator	$\pm 26'$ (H) x $\pm 19.5'$ (V)
FoV Telescope & Beam Profiler	$\pm 52'$ (H) x $\pm 39'$ (V)
Clear Aperture	36 mm
Autocollimator's Resolution	0.005 sec
Autocollimator's Accuracy	1.0 sec
SWIR IR Version	1300 nm
Retro-reflector for alignment	$\varnothing 38$ 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 - 1100 nm (Telescope Mode)

Resolution (H x V pixels)	2000 x 1500 sensor can be divided into multiple active areas, working in parallel for up to 400 sectors (NEW)
Gain Control	x24
Dynamic Range	60 dB , 12 bit
Exposure Speed	24 μ sec up to 30 sec
Frame Rate	57 fps (12 bit) – up to 550 fps@ fast mode (NEW)
Sensor type	Proprietary CMOS
Pixel Bit Depth	12 bits
Background Subtraction	User activated
Trigger	<ul style="list-style-type: none">• Internal Software• Hardware Falling or Rising Edge• Trigger Delay 0.015ms - 4.0 sec
Pan & Tilt knobs	Large Pan, Tilt $\pm 2.5^\circ$,
Power Requirements	~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 768
Interface	USB 3.0, Windows 10/11 (32 & 64 bit)
Operating Temperature	0° – 35° C

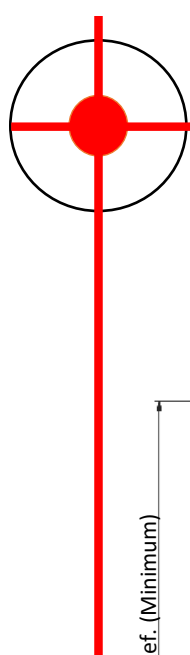
DUMA OPTRONICS LTD.

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

E-mail: sales@duma.co.il

July 2025

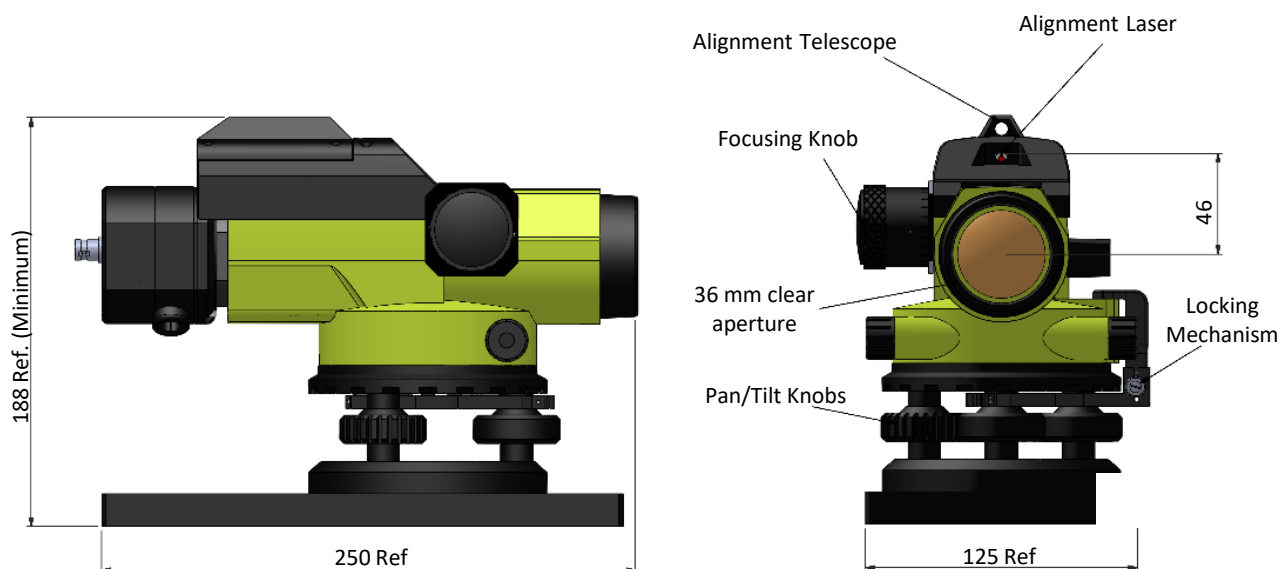




Electronic Autocollimator XR

NEW

A versatile compact extremely accurate autocollimator



Dimensions are in mm.

Ordering Information

EAC-1012-19-XR:

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

EAC-1012-19-XR/SWIR-IR:

Complete system including SWIR/IR capability 1300 nm and a retroreflector, USB3.0 camera, software on CD and a retro-reflector for infinity adjustment.

DUMA OPTRONICS LTD.

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

E-mail: sales@duma.co.il

July 2025

