

ETA - Electronic Theodolite Autocollimator

A versatile extremely accurate autocollimator theodolite



- Specially designed to serve the optics and photonics industry.
- Has a built-in Autocollimator with resolution better than 0.005 arcsec
- Pan/Tilt of Autocollimator is based on Theodolite frame
- Pan/Tilt Accuracy – better than 2 seconds of arc
- Built-in capability of parallel measurement of laser beam's attitude and their divergence angle

Specifications

FoV Autocollimator	±26' (H) x ±19.5' (V)
FoV Telescope & Beam Profiler	±52' (H) x ±39' (V)
Clear Aperture	45 mm
Autocollimator's Resolution	0.005 sec
Autocollimator's Accuracy	Better than 1 sec
Light Source	LED: 670 nm
Panning	360° - 2 seconds accuracy
Tilt	-90° / +45°
Level Compensating Range	+/- 3 Minutes
Automatic Level Correction	+/- 2 Seconds

Resolution (H x V pixels)	2056 x 1542 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 µsec up to 30 sec
Frame Rate	57 fps (12 bit) – up to 550 fps@ fast mode (NEW)
Sensor type	Proprietary CMOS
Pixel Bit Depth	16 bits
Background Subtraction	User activated
Power Requirements	~2 Watt (Via USB 3.0 interface)
Dimensions (L x W x H) in mm	120 x 160 x 330
Weight (typical)	6.5 kg including cable
Min. Hardware Requirements	CPU i3 1.6 GHz, 4 GB RAM Min. Resolution 1366 x 768
Interface	USB 3.0, Windows 7/8/10/11
Operating Temperature	0° – 35° C

Preliminary Ordering Information

ETA-Electronic-Theodolite

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