

# Introducing the HIGH-RESOLUTION PLX ACT-HR ELECTRONIC AUTOCOLLIMATOR



**The ACT-HR performs high-precision reflection measurements from mirror surfaces, specializing in the detection of small angular displacements.**

Specification	Value
Field of View	
Autocollimator	20' (H) (1200 sec of arc)
Telescope	40' (H) (2400 sec of arc)
Resolution	0.01 sec of arc (0.05 $\mu$ Rad)
Accuracy	1 second
CCD camera	1/2" (1/3" Optional)
Light Source	LED
Interface	USB 2.0
Clear Aperture	62mm
Retro-reflector for alignment	$\varnothing$ 64mm, N.W. 280g
Thread	$\varnothing$ 16mm, <5"
Coarse alignment laser	638nm power <1.0 mW
Class 2 laser product	IEC60825-1
Weight	5.2 kg including cable
Pan and Tilt knobs	Tilt $\pm 2^\circ$ , Pan $\pm 2.5^\circ$

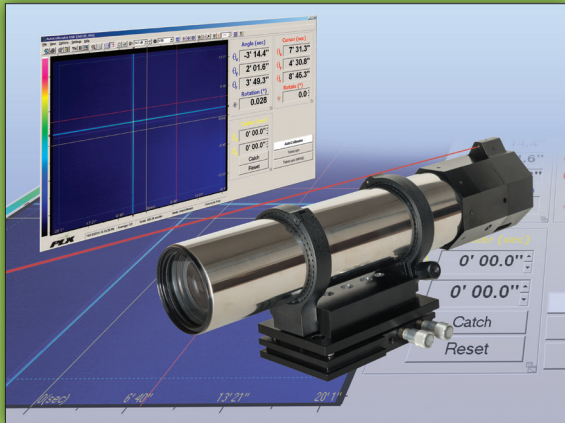
## Exceptional features.

- High-resolution measurement capability down to 0.01 arc second or 0.05  $\mu$ Rad and large 62mm clear aperture
- Real-time measurement of angular displacement
- Automatic angle deviation display
- Relative measurements
- Built-in pan and tilt adjustments
- Built-in coarse aiming laser
- Multiple results display
- Low Light - low reflection capability
- Reticle targets (single or multiple)
- Data logging with detailed statistics
- Software controlled electronic shutter & gain
- Data exporting to another computer via RS232 or TCP/IP
- Video with playback, snapshot files

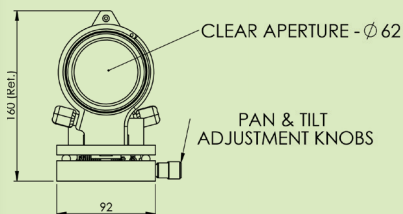
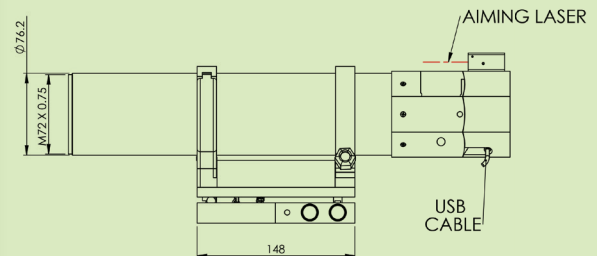
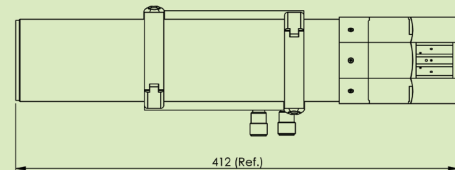
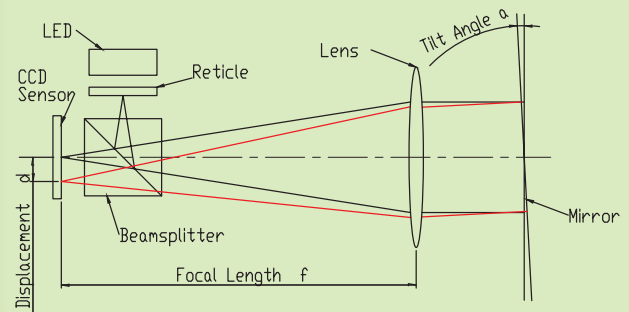
The complete ACT-HR system includes a collimator unit with USB2.0 CCD camera and a full function software suite.

### Application examples:

- Straightness measurement of linear stages
- Characterization of the rotary stages
- Measurement of wedge, prism and polygon angles
- Measurement of reflecting surface parallelism
- Measurement of surface flatness
- Alignment of optical setups including lasers
- Measurement of mirror angles
- Machine alignment
- CD/DVD-ROM alignment
- Thermal stability measurements
- Vibration analysis



The system measures small angular displacements for various optical setups and alignment tasks. It combines the functionality of an autocollimator and alignment telescope.



You'll find PLX instruments designed with our proprietary Monolithic Optical Structure Technology (M.O.S.T.™) in Military, Space/Aerospace and Commercial/Industrial applications as well as University Research and Science Labs around the world.

**PLX**  
INNOVATIVE OPTICAL SYSTEMS

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