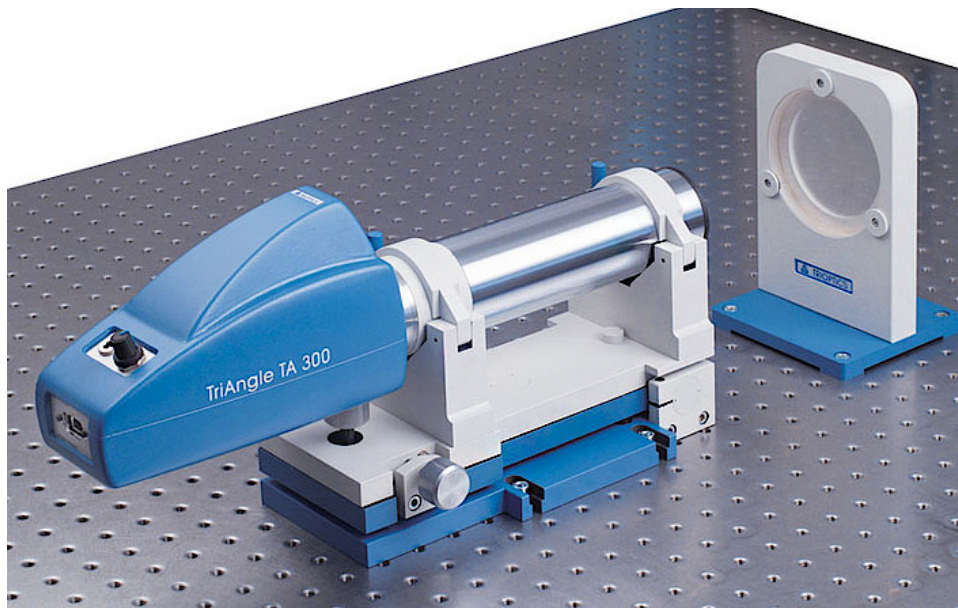


TriAngle UltraSpec 300-57 (USB 3.0)



Product Main Features

Thermally optimized electronic Autocollimator mounted in mechanically and thermally optimized stable aluminium cast metal housing with a low-noise digital sensor, integrated LED illumination, and special reticle pattern. Power supply of sensor and illumination provided by one cable with standard USB 3.0

- Installation position in any direction
- Compatible with PC or Laptop (available as accessory)
- Focal length 300 mm
- Tube diameter 57 mm
- Clear aperture 45 mm
- High Power LED illumination at 525 nm
- Resolution* 0.005 arcsec
- Repeatability* ± 0.03 arcsec
- Accuracy* ± 0.05 arcsec (within measuring range of 10 arcsec)
- Accuracy* ± 0.10 arcsec (within measuring range of 20 arcsec)
- Accuracy* ± 0.25 arcsec (within full measuring range)
- Measuring range in autocollimation 3000x1920 arcsec (hor. x vert.)
- Measuring rate 15 Hz (higher rates on request)

- Calibration based on masters certified by PTB (German National Metrology Institute)
*with averaging over multiple measurements under reproducible conditions

System Components

- Electronic Autocollimator with low distortion optics, high resolution digital sensor, integrated LED illumination, special cross hair reticle
- PCI express x1 card with 4x USB 3.0 slots
- connection cable for PC, USB 3.0 (3 meters)
- Software protection dongle
- Operation Manual

Adjustable Holder

- Resolution 1 arcsec in both directions
- Height of optical axis 120mm
- Adjustable range horizontally $\pm 1,5^\circ$, vertically $\pm 4^\circ$

Laser-Alignment Tool D57

- Tool to align optical path to the optical center of the autocollimator
- Is positioned at the apex of the autocollimator
- Mounted through magnetic force
- Fixed Mirror (x2)
- Required for Straightness, Parallelism, Squareness and Flatness measurement
- Height of optical Axis 120mm
- Clear Aperture 60mm
- L-brackets for reference guiding
- Mounted on baseplate with three reference surfaces

Pentaprism

- Required for Straightness, Parallelism, Squareness and Flatness measurement
- Clear aperture 48 mm
- Surface quality $\lambda/4$
- Accuracy of face positions $90^\circ \pm 1$ arcmin
- Calibrated deflection angle with accuracy < 1.0 arcsec
- Mounted on baseplate with three reference surfaces
- L-brackets for reference guiding

- Working height: 120 mm

OptiLevel Software

- OptiLevel Software for the measurement and alignment of machine geometries
- Software unlocked for measurement of: Straightness, Parallelism, Squareness, Flatness
- Save and load function
- Exportation of measurement certificate

Laptop with ordered software installed and tested with electronic Autocollimator TriAngle

- Processor: Intel® Core™ i5-4210M
- RAM: 8 GB
- Storage: HDD 500 GB
- Interfaces: USB 2.0 x 2, USB 3.0 x 2, 1 x 10/100/100-BaseT Ethernet, 1 x Mini-DisplayPort, 1 x VGA,
- Dimensions / Weight: 376.6 x 248.1 x 29.5 mm / 2.5 Kg

Hard-shell transportation case

- Robust casing out of hardened plastic
- Wheels for facilitated transportation
- Designed for TriAngle 300-57 and 500-57
- Cut-outs for TriAngle Tools (i.e. Mirrors, Pentaprism, Holder, Polygona and Laptop)