



TRIOPTICS

TRIOPTICS GMBH · OPTISCHE INSTRUMENTE

OptiSurf®

High Precision Non-Contact Measurement
of Air Spacing and Center Thicknesses of
Lenses and Optical Systems

New

OptiSurf Ultra Precision
with 0.15 μm
measurement accuracy



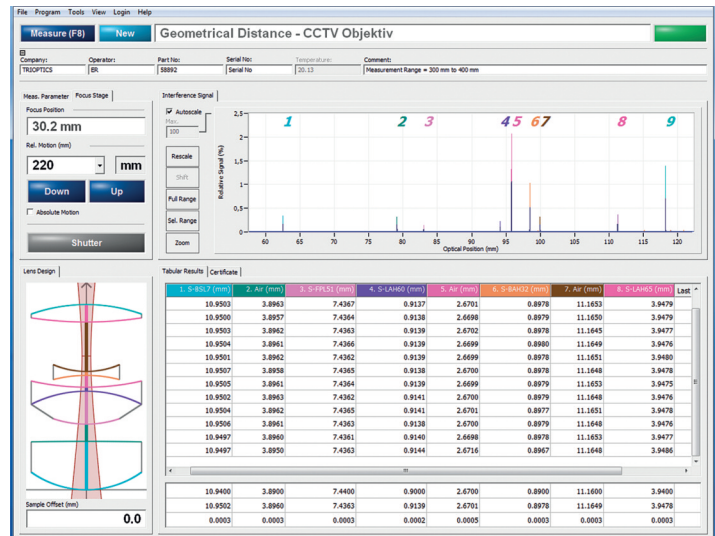
OptiSurf® is the ideal tool for non-contact center thickness and air gap measurements of single lenses, flat optics and within optical systems. The instrument is based on low coherent interferometry and measures all surface distances in an optical system with an accuracy up to 0.15 μm in one scan.

Especially the alignment of the sample with respect to the measurement axis has been greatly simplified compared to conventional systems: An innovative alignment tool together with the adjustable sample holder and the software allows even inexperienced operators to accurately align and measure lenses and optical systems. This time saving innovation qualifies OptiSurf® for use in production.

The OptiSurf® Professional Software

Perfect for the Analysis of Optical Systems

- Supports intuitive handling, alignment and measurement process
- Lens design input via OptiCentric® interface, directly from Zemax or via a lens design editor
- Automated surface identification for fast and precise measurements
- Comparison with design data and identification of deviations for use in quality control
- Statistical analysis of measurement results
- Two level user interface: for complex analysis routines in R&D phase and easy to handle operation in production



OptiSurf® Professional Software showing the measurement results

Technical Data OptiSurf®

	OptiSurf®	OptiSurf® Ultra Precision
Measurement accuracy	1 µm*	0.15 µm*
Repeatability	0.5	<0.075
Scanning Range	up to 800 mm optical distance, larger on request	
Measurement Cycle Time (per 100 mm scanning range)	14 sec. per 100mm	
Sensors for temperature and air pressure	optional	included
Computer Interface	USB	USB
Scope of delivery	<ul style="list-style-type: none"> • Measurement head with focal length adjustment via software • Integrated visible alignment laser beam • Motorized linear stage • Sample holder with tilt & translation table • OptiSurf® Professional Software 	

*According to 2σ criterion for measuring 100 mm air gap between optical flats