



# TRIOPTICS

See the Difference.

## OptiCentric® IR

Dual Band MWIR-VIS Centration Testing  
and Alignment of Optics



While visual light may be used for centration testing of single infrared lenses and concerning most requirements in the assembly of lens groups, the use of MWIR light becomes indispensable for evaluating centration errors of assembled IR lens systems. The perfect solution for this demand is now provided by OptiCentric® IR. The system is equipped with a dual band MWIR and VIS measurement head that allows the operator to conveniently choose the operation mode suitable for his particular application. The sample – VIS or IR – is analyzed by OptiCentric® IR using VIS light for as many parameters as possible providing fast, precise and comprehensible measurements. Subsequently, IR lens systems are automatically tested with the MWIR head for centration and alignment errors.

The highly precise measurement is supported by the OptiCentric® software. It controls the comprehensive testing and displays the measurement results in a way that is easy to understand. Evaluation of individual Pass/Fail criteria and communication to a data base allow easy and quick assessment and documentation of the measurement results.

### Key Features

- Combined MWIR and VIS instrument with automatic exchange of measuring heads
- Lens centering accuracy of  $\leq 0.1 \mu\text{m}$  for VIS and  $\leq 1 \mu\text{m}$  for MWIR



Motorized head lens revolver

### Technical Data

	OptiCentric® 100 IR
Measurement accuracy in VIS range	0.1 $\mu\text{m}$
Measurement accuracy in IR range	1.0 $\mu\text{m}$
Lens rotation	High precision air bearing
Sample diameter	0.5 mm ... 225 mm
Max. sample weight	20 kg
Number of measured surfaces	20 (VIS)
Linear stage	Motorized and PC-controlled
Measurement head	Electronic ACM VIS: 200 mm EFL, MWIR: 250 mm EFL
Light source – VIS	High power LED light source
Light source – MWIR	HeNe Laser 3.39 $\mu\text{m}$
Light source – LWIR (optional)	CO <sub>2</sub> Laser 10.3 $\mu\text{m}$ ... 10.8 $\mu\text{m}$
Integrated center thickness and air gap measurement (optional)	Integration of OptiSurf®/OptiSurf® IR