

# PrismMaster®150

# Compact Goniometer for laboratories and production



Since 1998 TRIOPTICS PrismMaster series sets the standards for high precision goniometers. The new PrismMaster® 150 rounds off the PrismMaster series and is ideal for optical workshops as well as receiving and final inspection in production environment. It is available as a fully automated or as a manual goniometer.

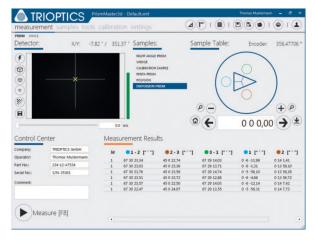
The new PrismMaster series boosts a numbrer of new features including a user-friendly new software. The overall concept follows a simple philosophy: Providing an instrument with high accuracy which also is easy to use.



## **Measuring Process**

There is no easier way of achieving immediate and ultra-accurate angle value of plano optic components. The new software provides fully automated measurement of standard prisms and polygons for PrismMaster® 150 HR:

- 1. SELECT a standard measurement program
- 2. PLACE the sample on the measurement table
- Press MEASURE and the fully automatic measurement process begins. Without any operator intervention the PrismMaster will deliver the precise angle values of the sample.



#### Software PrismMaster 3D

- Prism Configurator for the easy definition of non-standard and compound prisms
- Three different user levels incl. workshop mode for simple routine measurements
- Input window and import/export function for sample design files
- Automated ray tracing, for:
  - reconstruction of the sample geometry
  - classification and selection of the de tected images, incl automatic detection of internal reflections, e.g. in 90° prisms
  - refractive index calculation
  - virtual transmission measurement of deflection angles
- Input of tolerance ranges and pass/fail classifications
- Evaluation, display and recording of the measurement results according to ISO

### **Specifications**

Single measurement	± 1.0 arcsec (PrismMaster 150 HR)	±1.2 arcsec (PrismMaster 150 MAN)
Pyramidal angle measurement*	$\pm$ 3.0 arcsec / $\pm$ 5.0 arcsec	
Resolution of the electronic autocollimator	0.1 arcsec	
Measuring aperture of the autocollimator	30 mm	
Autocollimator field of view	4000 x 3200 arcsec	
Diameter of sample table	100mm	
Maximum sample size	dia. 120 mm	
Minimum sample size	1.0 mm <sup>2</sup>	
Maximum payload	3 kg	
Dimensions	550 x 330 x 198 mm (PM 150 HR)	410 x 240 x 181mm (PM 150 MAN)

<sup>\*</sup>according to DIN 10110

