



Automatic Goniometer G-03L



The goniometer G-03L is designed for precise dynamic (automatic) measurements of optical polygon and prism angles.

One measurement is considered as a measurement taken during 16 revolutions of the rotary table (approx. 30 sec of time).

Optical polygon/prism faces can be coated or not coated with reflection layer.

Random component of the measurement error (1σ)

0.03 arc-sec

Systematic component of the measurement error

0.1 arc-sec

The error of angle measurement between optical polygon/prism faces

0.3 arc-sec

Overall dimensions

355x355x420 mm

Weight

40 kg

Automatic Goniometer G-03L based on ring interferometer – new generation of fast digital angle-measuring systems.

Automatic Goniometer provide high precision angle measurement during short time interval.

Continuous rotation of the rotary table with the specimen provides fully automatic measurements with great efficiency.

Automatic Goniometer G-03L has different modification for:

- high precision measurements and certification of optical polygons and prisms manufactured of glass and glass ceramics;
- optical encoder calibration;
- refraction index measurements of different materials by measuring minimum beam deviation angles;
- non-contact measurement of object angular position and movements.

Application abilities of the G-03L:

- metrology and measuring technique:
high precision measurements and certification of angular sensors (optical encoders, regular/irregular polygons, inductosines, etc.);
- precision engineering:
calibration of rotary tables and test beds, measurement of tool way linearity and flatness of calibration plates;
- scientific research:
determination of angular position of mirrors, crystals and other elements of experimental hardware;
- navigational technic.