

## GL GONIOPHOTOMETER

### GLG A 50-1800

The GLG A 50-1800 is Type A goniometer system compliant with the CIE 121-1996 and IESNA LM-75-01 standards regulating far-field photometric and colorimetric measurement systems. It is designed for the testing of light sources specific to automotive, railway or similar industries basing on regulations specified by UN/ECE and U.S. Department of Transportation.

This goniophotometer system can handle samples of up to 50 kg weight and 1800 mm width. Robust construction, high precision gear and wide sample alignment adjustability allow for fast and trouble free adaptation for variety of uses.



#### Features:

- Far Field Type A goniometer
- H, V axis and X, Y, Z direction movement with servo motors
- Angular resolution of 0.002°
- Universal mounting stage size with position adjustability in three axis.
- 10 inch LCD touch screen and digital manipulator
- Compatible to work with photometer, spectroradiometer, colorimeter and retroreflectometer
- Reduced weight for easier transport and installation
- Designed for safety and convenience of operation

#### GL OPTIC Polska Sp. z o.o. Sp.k

ul. Poznańska 70, 62-040 Puszczykowo, Poland  
Phone: +48 61 819 40 03 | E-mail: office@gloptic.com  
[www.gloptic.com](http://www.gloptic.com)



Light quality control

# Technical Sheet

## GL GONIOPHOTOMETER GLG A 50-1800

### APPLICATION

Conformance testing of lamps and signals to UN/ECE and SAE /FMVSS Regulations. These are type A systems compliant with the CIE 121-1996 and IESNA LM-75-01 standards for far-field photometric and colorimetric measurement systems.

### TECHNICAL DATA SHEET

|                          |   |
|--------------------------|---|
| CIE Goniometer type      | <ul style="list-style-type: none"><li>Far Field Type A with H, V axis and x,y,z direction movement</li><li>DUT moving x,y mechanical table</li><li>5 axis servo motors with absolute position encoders</li></ul>  |
| H axis movement          | Angular range $\pm 100^\circ$ . Nominal torque 555 Nm. Speed up to 10°/s  |
| H axis resolution        | 0.002°  |
| H axis reproducibility   | 0.05° * (*at nominal load)  |
| V axis movement          | Angular range $\pm 180^\circ$ . Nominal torque 98 Nm. Speed up to 50°/s   |
| V axis resolution        | 0.002°  |
| V axis reproducibility   | 0.05° * (*at nominal load)  |
| Z axis movement          | Linear range 0-600 mm. Lifting capability up to 1500 N  |
| Z axis reproducibility   | 70 $\mu$ m  |
| X axis movement          | Linear range $\pm 300$ mm. Speed up to 40 mm/s  |
| Y axis movement          | Linear range $\pm 150$ mm. Speed up to 40 mm/s  |
| X,Y axis reproducibility | 70 $\mu$ m  |
| DUT mounting plate       | Square 500x500 mm. T-slot array 5x5 in the Bosch Rexroth system   |
| Maximum DUT dimensions   | $\leq 1800$ mm (symmetrically positioned)   |
| Goniometer dimensions    | 2120(L) x 1780(H) x 800(W) mm   |
| Optical axis height      | 1500 mm   |
| Minimum room height      | 2600 mm   |
| Minimum room width       | 4000 mm   |
| Maximum load             | 50 kg   |
| Goniometer weight        | 1000 kg   |
| Power supply             | AC 110-230V, 3000 W   |
| Controllers              | <ul style="list-style-type: none"><li>Internal controller for all motors</li><li>PC connectivity through LAN network</li><li>Remote manufacturer support capability</li><li>10 inch LCD touch display on the external control panel</li><li>Manual all axis controller for operations during DUT fixing</li></ul> |
| Safety                   | <ul style="list-style-type: none"><li>External control panel with emergency stop button</li><li>Light fence</li></ul>   |
| Sensor type              | <ul style="list-style-type: none"><li>GL Photometer 3.0 LS + Flicker</li><li>GL SPECTIS 1.0 LS</li><li>GL SPECTIS 4.0</li></ul>   |
| Product no.              | 106260  |

**Note:** Instrument, firmware and software specification are subject to change without prior notice. All information included in GL OPTIC datasheets and product information available in any form are carefully prepared and included information believed to be true. Please note that discrepancies may occur due to text and/or other errors or changes in the available technology. We advise to contact GL Optic before the use of the product to obtain the latest product specification.

### GL OPTIC Polska Sp. z o.o. Sp.k

ul. Poznańska 70, 62-040 Puszczykowo, Poland  
Phone: +48 61 819 40 03 | E-mail: office@gloptic.com  
[www.gloptic.com](http://www.gloptic.com)



Light quality control

# GL GONIOPHOTOMETER

GLG A 50-1800

