

Technical Sheet

GL GONIOPHOTOMETER GLG A 50-1800

The GLG A 50-1800 is a Type A goniometer system compliant with the CIE 121-1996 and IESNA LM-75-19 standards regulating far-field photometric and colorimetric measurement systems. It is designed for testing of light sources specific to automotive, railway or similar industries following regulations issued by UN/ECE and SAE/FMVSS.

This goniometer system can support samples of up to 50 kg weight and 1800 mm width. Robust construction, high accuracy and precise, reproducible sample alignment allow for fast and trouble free adaptation for variety of applications.



Features:

- Far Field Type A goniometer
- H, V axes rotation and X, Y, Z linear movement with servo motors
- Angular resolution of 0.002°
- Universal DUT mounting table adjustable in three axes
- 10 inch LCD touch screen and manual controller
- Compatible with photometer, spectroradiometer, colorimeter and retroreflectometer
- Reduced weight for easier transport and installation
- Designed for safety and convenience of operation

APPLICATION

Compliance testing of lamps and other lighting devices according to UN/ECE and SAE /FMVSS Regulations. This is a Type A system 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	Far Field Type A with H, V axes rotation and X,Y,Z linear movement <ul style="list-style-type: none"> ▪ DUT positioning in X,Y axes on a motorized table ▪ All axes equipped with absolute encoders
Angular range H axis	± 180° Nominal torque 98 Nm. Speed up to 50°/s
Angular resolution of encoder reading for H axis	0.002°
Angular positioning accuracy for H axis	0.05° *
Angular range V axis	± 100° Nominal torque 555 Nm. Speed up to 10°/s
Angular resolution of encoder reading for V axis	0.002°
Angular positioning accuracy for V axis	0.05° *
Linear range for X axis	± 300 mm Speed up to 40 mm/s
Linear range for Y axis	± 150 mm Speed up to 40 mm/s
Linear range for Z axis	0-600 mm Lifting capability up to 1500 N

*at nominal load

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.

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Light quality control

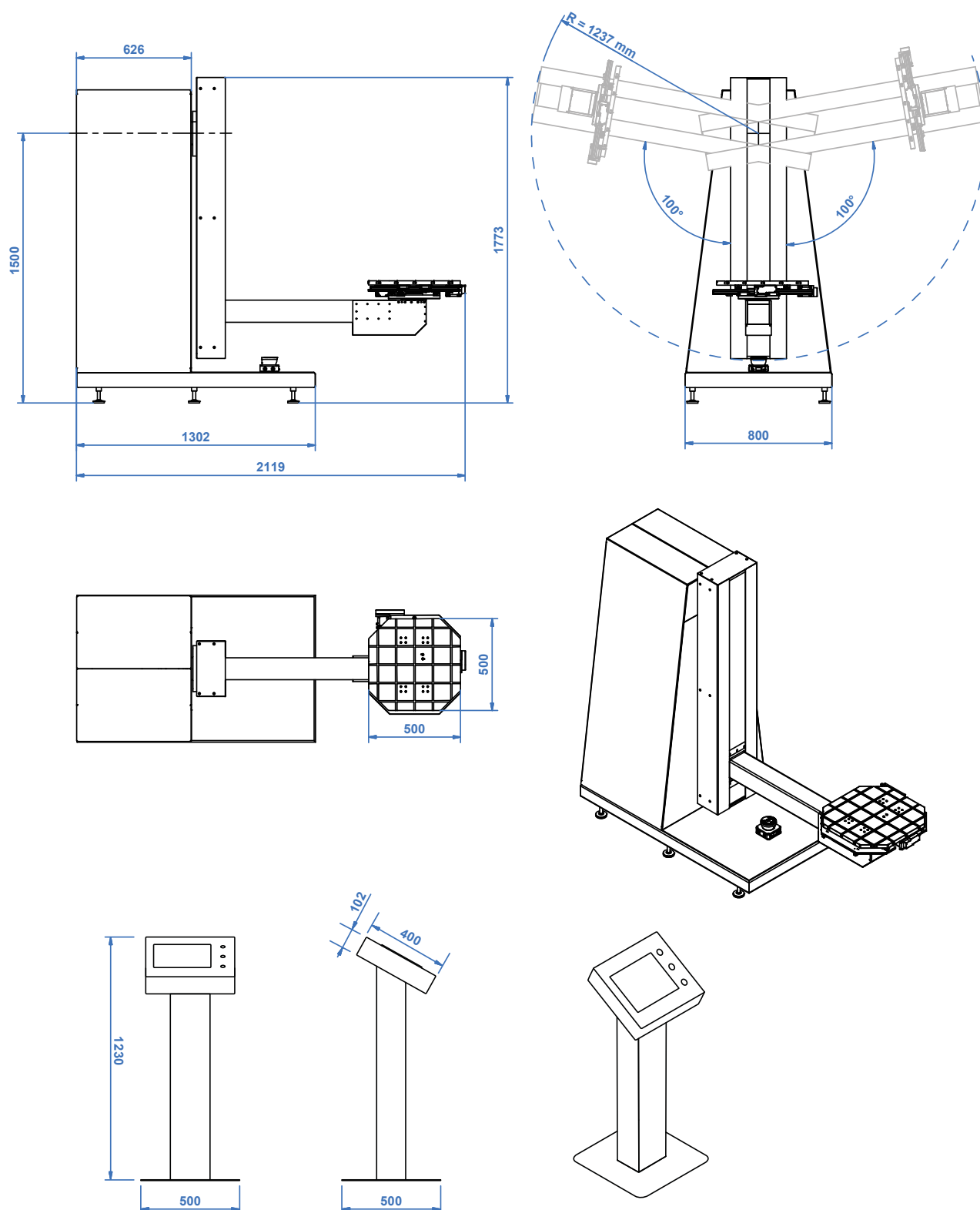
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Linear positioning accuracy for X,Y,Z	70 µm
DUT photometric center positioning	X,Y,Z linear movement, motorized
Photometric distance	100 ft (FMVSS) 25 m, 10 m, 3,162 m (ECE) or other, user defined
DUT mounting table	Square 500x500 mm. T-slot array 5x5 using Bosch Rexroth system, Multiple M6 mounting holes
Maximum DUT dimensions	≤ 1800 mm (DUT centered)
Goniometer dimensions	800 x 1780 x 2120 mm (W x H x D)
Control panel dimensions	500 x 1230 x 500 mm (W x H x D)
Optical axis height	1500 mm
Required space	Square 3000 x 3000 mm
Maximum load	50 kg
Goniometer weight	600 kg
Controls	<ul style="list-style-type: none"> GL GONIOMETER software for PC Remote manufacturer support capability 10 inch LCD touch display on the external HMI control panel Manual controller for operations during DUT positioning Optional 10 channel multiplexer unit
Communication	Ethernet
Safety	<ul style="list-style-type: none"> External control panel with emergency stop button w/ customizable safety area, max. 3 m radius, 270°
Connections	<ul style="list-style-type: none"> a pair of banana sockets for DUT power supply, rated at 10 A max. a pair of banana sockets for remote sensing a single banana socket for protective connection 3.5 mm TRS jack for temperature probes <p>All sockets appear on the base of the goniometer as well as on the DUT mounting table (or the optional multiplexer unit)</p>
Power supply and max. Consumption	AC 3-phase 400 V, 50 Hz, 3000 W **
Sensor type	GL OPTIC measuring instruments: <ul style="list-style-type: none"> GL SPECTIS 1.3 LS GL SPECTIS 1.0 Touch + Flicker GL SPECTIS 4.0 M GL SPECTIS 5.0 Touch GL PHOTOMETER 3.0 LS + Flicker GL SC RADIOMETER GL RETROREFLECTOMETER 4.0 SRS
Product no.	202522

**for the European market

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