

GONIOMETERS



Table of contents

GL Optic	3
GL GONIO SPECTROMETER GLG 8-850	4
GL GONIO SPECTROMETER GLG 30-1800	6
GL GONIO PHOTOMETER GLG A 50-1800	7



Partner **GL Optic**



GL Optic is a Polish-German manufacturer specializing in advanced light measurement systems for photonics and precision optics applications. Their comprehensive portfolio includes spectroradiometers, photometers, integrating spheres, goniometers, and luminance cameras, all designed to deliver accurate and reliable measurements across a broad spectrum of light sources.

Product offering

**GL GONIO
SPECTROMETER GLG
8-850**

A black spectrometer with a red goniometer arm.

**GL GONIO
SPECTROMETER GLG
30-1800**

A black spectrometer with a red goniometer arm and a green sensor head.

**GL GONIO
PHOTOMETER GLG A
50-1800**

A black photometer with a large sensor head and a control panel.

← [Back to partner](#)



Light Measurement Solutions > Goniometers

GL GONIO SPECTROMETER GLG 8-850

This easy-to-operate system combines the functionality of a goniophotometer with the features of a spectroradiometer to measure flux and to check angle dependent luminous intensity together with the colorimetric data required by international standards. The upgraded GLG 8-850 version is a table top light goniometer specifically designed for LED modules and component testing.



The GLG 8-850 goniometer is a top-of-the-range benchtop goniometer designed to measure LED modules and smaller luminaires and to test components. The automated system allows to measurement of devices weighing up to 8 kg and with a diameter of 850 mm. The system with computer and GL Spectrosoft add-on software, enables measurements with an angular resolution of 0.1° and in the angular range of the C axis and $\lambda \pm 180^\circ$.

Don't let the size fool you. GLG 8-850 offers the ability to measure not only LED modules or small luminaires, but also vehicle lamps, thanks to the optional Type A conversion kit. The included lasers allow precise positioning of the DUT on the goniometer and measurement of the distance to the measuring instrument. In addition, the goniometer can be equipped with a temperature stabilization module.

GL Optic's devices are constantly updated to work in accordance with worldwide standards. Compliance with CIE S025/E:2015 and IES LM-79 ensure, that the results obtained can be used to sell products worldwide.

There is no need to build a large laboratory. The compact size of the GLG 8-850 goniometer, the intuitive interface software and the best price/performance ratio is a great basis for starting your own measurements. Instead of ordering measurements from external laboratories and wait for results, now you can have them done in minutes!

Key Advantages:

- Simple interface to perform advanced tests and measurements.
- Build-to-last mechanical system with integrated aluminium base including controllers and connectors with plug-and-measure concept. Ideal for LED modules and linear lights.
- Programmable turnkey system with smooth and quick operation. Optional sliders for optimum photometric distance settings are available.
- Included laser alignment tool allows for quick positioning and distance measurements.
- Connectors for peripheral power supply in the base are wired with banana sockets placed close to DUT

Applications include photometric and colorimetric characterization of LED modules and small luminaires, measurement of light intensity distribution and luminous flux, testing of lighting components, measurement of car lamps, projectors, and signal lamps used in land transport and aviation, generation of IES/LDT photometric files, compliance testing with international standards, in-house R&D and quality control, and laboratory or test-station evaluation of compact lighting products.

For more information, simply complete the [contact form](#), and a member of our team will be in touch shortly.

← [Back to partner](#)



Light Measurement Solutions > Goniometers

GL GONIO SPECTROMETER GLG 30-1800

GL GONIO SPECTROMETER GLG 30-1800 combines the functionality of a goniophotometer with the features of a spectroradiometer to measure brightness and to check angle dependence luminous intensity distribution. With easy to use software, precise alignment protocols and extensive automation capabilities, the system offers a new level of performance and usability.



The GLG 30-1800 gonio spectrometer removes the dependency on highly skilled technicians to deliver reliable results. With easy to use software, precise alignment protocols and extensive automation capabilities, the system offers a new level of performance and usability.

While this goniospectrophotometer generates spectral and color data at any angle, it remains true to its primary use - generating IES/LDT output files, simply and with the click of a button.

With an extended max load up to 30 kg and 1800 mm diameter max dimension, the GL GONIO SPECTROMETER GLG 30-1800 will cover most of the demand for testing. Have a range of small and large fixtures? No problem. The system can accurately characterize big and small fixtures without any mechanical changes.

Key Advantages:

- Manual controller supports the user to align the lamp position before measurements. An easy to use software interface shortens configuration time and allows for quick DUT description and settings.
- Robust CNC machined body of the device is durable and stable enough to hold large lamps and guarantees long lasting performance. Exceptional lamp size capacity 1800 mm x 700 mm.
- Tried and tested industrial gears paired with high accuracy absolute encoders to provide best angular accuracy and repeatability.
- Unique laser alignment system with mirrors and system control options helps to calibrate system vertical and horizontal alignment and also faster photometric positioning of DUT.
- Smart cable management system will help keep the cables neat and turning connectors will help avoid problems with tangled cables during tests and faster connections. Banana connectors right next to the DUT provide the necessary electric power stability.

Applications include the measurement of car lamps, projectors, and signal lamps used in land transport and aviation, as well as angular-dependent photometric and spectral characterization of LED luminaires, measurement of luminous intensity distribution, generation of IES/LDT files, in-house R&D and quality control testing, verification of lighting specifications for designers, and laboratory testing of small to large lighting fixtures.

For more information, simply complete the [contact form](#), and a member of our team will be in touch shortly.



GL GONIO PHOTOMETER GLG A 50-1800

GL GONIO PHOTOMETER GLG A 50-1800 has been designed in accordance with CIE 121-1996 and IESNA LM-75-01 standards governing photometric and colorimetric far-field measurement systems. It allows the determination of photometric characteristics in H, V coordinates for automotive lamps and headlights as well as all kinds of signaling equipment used, for example, in aviation. This goniometer system can support samples of up to 50 kg weight and 1800 mm width.



The GLG A 50-1800 goniophotometer is built with the highest quality mechatronic components from leading manufacturers. This ensures high accuracy of the entire system and repeatability of movements. The design of the goniophotometer allows the measurements of lamps weighing up to 50 kg and measuring up to 1800 mm length (optional up to 2600 mm).

GL Optic's equipment is constantly updated to work in accordance with internationally available standards. The GLG A 50-1800 goniophotometer works in accordance with CIE 121-1996 and IESNA LM-75-01 standards, and the system enables photometric testing in accordance with UN/ECE instructions and FMVSS requirements based on SAE standards.

The goniophotometric system working with the GL PHOTOMETER 3.0 LS + Flicker reduces measurement time by up to 5 times! The high sampling rate together with the high sensitivity of the sensor allows continuous On-fly measurement during smooth lamp movement. Using the flicker measurement function, it is possible to determine the light modulation characteristics.

The GL Optic goniophotometer is characterized by its high precision, robust design and user-friendly interface. In cooperation with a photometer, spectrometer and retroreflectometer, it forms a complete system for the automotive industry.

Key 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

Applications include photometric and colorimetric far-field measurements of automotive exterior lamps and headlights, signaling equipment for land transport and aviation, in-house R&D and quality control testing, compliance testing according to international standards, flicker and light modulation analysis of indicators and emergency lights, and laboratory-grade testing of large luminaires and lighting systems.

For more information, simply complete the [contact form](#), and a member of our team will be in touch shortly.