

# GL SPECTIS 1.0

Precise Light Measuring Technology in a handy size.

We present you with the new GL SPECTIS 1.0 for various applications.

This high-quality and easy-operating device gives you all you need for reliable light measurement. Check out the unique capabilities of GL SPECTIS 1.0.

GL SPECTIS 1.0 is a practical and reliable measuring device. It is ready to work immediately after connecting to your PC. No extra power supply is required. Thanks to its high sensitivity and accuracy it is a perfect solution in light measurement.

Different light sources like LED, Fluorescent Lamps or LCD Displays require different optical probes. GL SPECTIS 1.0 can be combined with additional equipment to measure all different light sources, displays as well as LED light. Find out more about our best mini-spectrometer available on market now!

GL SPECTIS 1.0 optical systems and software can be easily adapted to meet any customers' needs. Facing the challenges of modern lighting industry and demanding LED market GL Optic developed practical hand-held spectrometer which can be used for everyday incoming quality control of light sources, field work of quality engineers and other professionals who deal with the quality of light. The GL SPECTIS 1.0 is the measuring device suitable for final assessment of lamps as well as for testing of complete lighting installation. It is a very good instrument for measurement of LEDs.

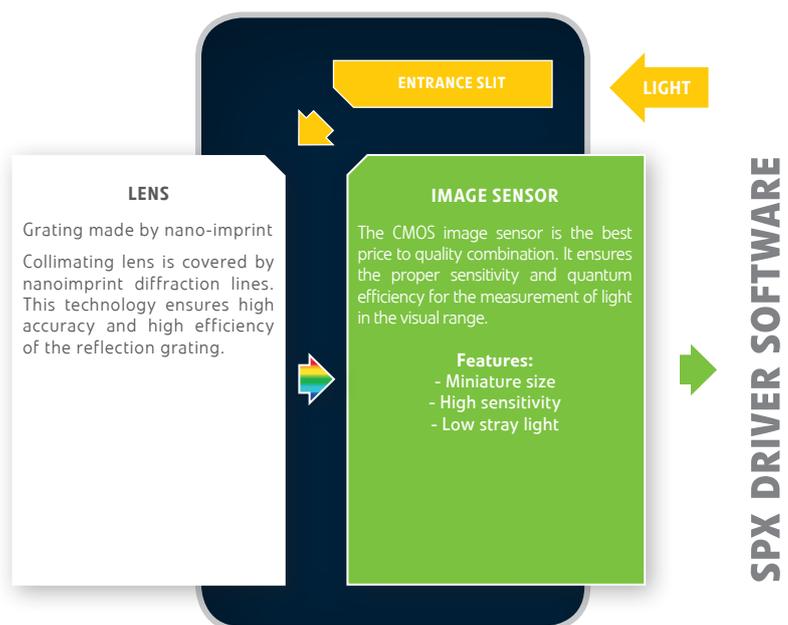


## PRACTICAL INSTRUMENT WITH HIGH POTENTIAL

The GL SPECTIS 1.0 optical system is using miniature collimating lens with nano-imprint of diffraction lines and the CMOS image sensor working in the range of 340-750nm. This is a miniature low stray light system providing 1,7nm data acquisition interval which is ideal for the measurement of LEDs and OLEDs and other light sources in the visual range.

The electronic board ensures the proper speed of data transfer and a very low noise. The temperature sensor installed on the board monitors the change of the ambient temperature and its influence on the measurement stability.

The SPX driver software contains all necessary correction procedures to reduce the stray light, bandpass error, noise level and background level. In order to achieve the best spectra representation and highest accuracy of the measurements. The data acquired are calculated according to CIE norms to obtain the right color calculation for LED and other light sources.



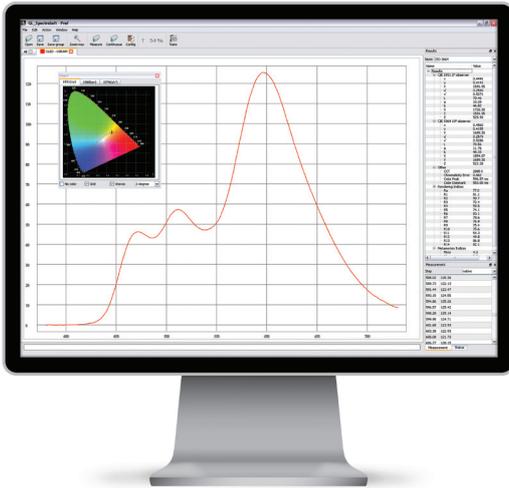
**FEATURES**

- High sensitivity and precise calibration
- Low noise and stable measurements
- Ready to work when connected to PC
- After approximately 10min
- Small size and low energy consumption
- Powered via USB connection

**APPLICATIONS**

- Different light sources measurements: halogens, fluorescent lamps
- LED measurement and testing compliant with CIE 127:2007
- Display measurement

**SOFTWARE**



**SPX DRIVER**

GL Optic spectrometers are delivered with free-of-charge driver software. It also features the measurement mode to run measurements and providing the information on the native data as well as a simple graphical representation of spectra. The SP X driver software contains all necessary calculations for band-pass error correction, correction of baseline level and the calculation procedure for OSR \* system /Optical Stray Light Reduction/ to determine and correct the influence of stray light on measured spectra.

**GL SPECTROSOFT**

GL SpectroSoft is the helpful tool for laboratory application as well as for field work in production quality control and for general light assessment purposes. The software interface gives the user quick access to useful information and functions. It contains Calculation of tri stimulus values for the specification of light source color according to CIE standards. CCT, Chromaticity Error, Color Peak, Color dominant, CRI (CIE 13.3) and Metamerism Index (CIE 51.2).

Additionally the measurement procedure according to IS O 3664:2009 for the assessment of the light viewing conditions is available.

- Absolute or relative measurements
- Flexible data interpretation
- Helpful tools for easy analysis and interpretation of measured spectra

**TECHNICAL DATA SHEET**

Spectral range	340-750nm / 640-1100nm
Detector	CMOS image sensor
Numer of pixels	256
Physical resolution	~ 1.7nm / ~ 1.8nm
Wavelength reproducibility	± 0.5nm
Integration time	5ms to 100s
A/D conversion	16 bits
Signal to noise ratio	1000:1
Stray light	2*10E-3
Optical FWHM	12nm
Spectroradiometric accuracy	± 4%
Measurement uncertainty of color coordinates (x,y)	± 0.0015
Connector for optical fiber	SMA905D
PC interface	USB 2.0 standard
Power consumption	< 100mA
Ambient temperature	5-35 °C
Dimensions	62mm x 115mm x 19/30mm
Weight	90g

**GL SPECTIS 1.0 ACCESSORIES**

**GL OPTI SPHERE 48**

GL Optic integrating sphere is an accessory for our GL SPECTIS 1.0 for luminous flux measurement of LEDs and other small light sources. Thanks to its well known characteristics integrating sphere helps to get the ideal light distribution and proper measurement of light power.



**GL OPTI PROBE**

This display sensor from GL Optic is an accessory which is designed to be used with our GL SPECTIS 1.0 for luminance measurement of flat LCD and OLED panels, and plasma FPDs. It is also a perfect solution for testing projection displays as well as for OLED light source measurement.



GLOPTIC IS THE BRAND NAME OF JUST NORMLICHT GMBH GERMANY

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