

Technical Sheet

GL SPECTIS 1.0 Touch

The world's first smart spectrometer. Often copied but never duplicated this is a reliable and versatile device for accurate absolute spectral measurement.

GL SPECTIS 1.0 Touch is the world's first intuitively operated touch screen version of our successful SPECTIS 1.0 product line. If you need to measure lux, lumen, CRI, CCT, color, mWatt and much more, our highly portable and precise GL SPECTIS 1.0 Touch is the perfect solution.

Features:

- Completely portable device
- Color LCD Touch screen
- Communication features: USB cable, SDcard slot
- Android based operating system
- Approx. 6 hours on battery



APPLICATION		
Application	Natural light, LEDs, halogen light, etc.	
LED MEASUREMENT		
Illuminance (lux)	1 lx ... 200,000 lx	Standard diffusor
Luminance [cd/m ²]	3 – 80,000 cd/m ²	with OPTI PROBE
Luminous intensity (cd)	Calculated in SPECTROSOFT	
Illuminance class	Class B – DIN 5032-7 Class AA – JIS C 1609-1:2006	
Tolerance – cosine response (f2')	< 3% (1,9%)	
Luminance measurement method	Optional with GL OPTI PROBE 1.0	
Spectral range	340 – 780 nm (UV _a – VIS) 640 – 1050 nm (VIS – NIR)	SPECTIS 1.0 Touch UV _a – VIS SPECTIS 1.0 Touch VIS – NIR
CALCULATED VALUES		
CRI – Color rendering index according to CIE	Ra, R1-R14	
CRI according to TM-30-15	R15	
CCT – Correlated color temperature according to CIE 13.3	✓	
Color peak	✓	
Color dominant	optional with GL SPECTROSOFT	
Color position coordinates [x,y] according to CIE 1931	✓	
Color position coordinates [u,v'] according to CIE 1976	✓	
Color position coordinates [u, v] according to CIE 1960	✓	
Color coordinate error	optional with GL SPECTROSOFT	
Metameric index	optional with GL SPECTROSOFT	
Binning	optional with GL SPECTROSOFT	
Assessment in accordance with ISO 3664	optional with GL SPECTROSOFT	

GL SPECTIS 1.0 Touch

PHOTOMETRY / RADIOMETRY		
Sensor	CMOS image sensor	
Number of pixels	256	
Physical resolution / datapoint interval	~ 1.7 nm / ~ 1.8 nm	
Wavelength reproducibility	0.5 nm	
Integration time	10 ms – 10 s in automatic mode (100 s in manual mode)	
A/D converter	16 bit	
Signal-to-noise ratio	1000:1	
Stray light	2*10 E-3	
Optical resolution / FWHM		
Radiometric accuracy*	5% within range 340 – 500 nm 4% within range 500 – 780 nm	
Flicker compensation	✓	
Temperature sensor and dark current compensation	✓	
Uncertainty of color coordinates	0.0015	
Automatic accessory detection	✓	
Operating System	Android	
Power supply via USB connector	< 640 mA	
Power adapter	Power supply unit 100...240 V (50/60 Hz) 0,15 A	
Battery / Power pack	Li-ion battery 1400 mAh	
Automatic shut-off	✓	
Battery life	up to 4 h**	
Operating temperature	5 – 35 °C	
Dimensions [H x W x D]	74 mm x 146 mm x 24 mm	
Weight	315 g	
Tripod adapter	✓	
INTERFACE & MEMORY		
USB	USB 2.0	
Trigger	MQ172, 4-pin, programmable	
SD Card slot	microSD	
Measurement result storage	Auto / 4 GB microSD	
Data format	XML	
Fiber optic connector	Optional SMA905D	
DISPLAY & OPERATION		
Display	3.5" color LCD 240 x 320	
Operation	Touch Screen, PC / Notebook	

* Absolute measurement uncertainty immediately after calibration. The expanded uncertainty corresponds to a coverage probability of 95 % and the coverage factor $k = 2$

** In moderate use – continuous measurements and WiFi significantly increase energy consumption.

GL SPECTIS 1.0 Touch

SOFTWARE		
Software	Optional GL SPECTROSOFT Basic / Pro / Lab	
ORDERING INFORMATION		
Case	✓	
Battery	✓	
USB cable	✓	
Power supply	✓	
Leash	✓	
Display protection foil	✓	
4GB microSD card	✓	
Part number	GLX 1.0t no. 106260	SPECTIS 1.0 touch UV _a -VIS
	GLX 1.0t no. 200862	SPECTIS 1.0 touch VIS-NIR

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 Lichtmesstechnik GmbH | Tobelwasenweg 24 | 73235 Weilheim/Teck | GERMANY | Tel.: +49 (0)7023 9504-20 | Fax: +49 (0)7023 9504-830 | office@gloptic.com | www.gloptic.com
 Geschäftsführer: Michael Gall | Sitz der Gesellschaft: Weilheim/Teck | Amtsgericht Stuttgart HRB746271 | USt-IdNr.: DE 292228248 | Steuer-Nr.: 69068/56239