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GL **SPECTIS 1.0**

Precise light measurement technology in a handy size.

GL SPECTIS 1.0 is a high quality, easy to operate measuring device that gives you all you need for reliable light measurement. It is the perfect instrument for the measurement of LEDs, as well as for the final assessment of lamps or testing of complete lighting installations.

Features:

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

APPLICATION		
Application	Natural light, LEDs, halogen light, etc.	
LED MEASUREMENT		
Illuminance (lux)	1 lx … 200,000 lx	Standard diffusor
Luminance [cd/m²]	3 – 80,000 cd/m²	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	SPECTIS 1.0
	340 – 780 nm	SPECTIS 1.1
	640 – 1050 nm	SPECTIS 1.2
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	

Technical Sheet

GL **SPECTIS 1.0**

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		
Power supply via USB connector	< 640 mA	
Power adapter		
Battery / Power pack		
Automatic shut-off	✓	
Battery life		
Charge time with power supply / USB		
Operating temperature	5 – 35 °C	
Dimensions [H x W x D]	72 mm x 115 mm x 19 mm	
Weight	120 g	
Tripod adapter	✓	
INTERFACE & MEMORY		
USB	USB 2.0	
Trigger	Available with GL SPECTIS 1.1	SPECTIS 1.0
	Open collector, minijack 3.5mm, 3-pin stereo programmable	SPECTIS 1.1 incl. 25 ms electronic trigger
		SPECTIS 1.2
SD Card slot		
Measurement result storage		
Data format		
Fiber optic connector	Optional SMA905D	
DISPLAY & OPERATION		
Display		
Operation	PC / Notebook	

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

Technical Sheet

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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	GLX10 no. 67827	SPECTIS 1.0
	GLX11 no. 106294	SPECTIS 1.1 incl. 25 ms electronic trigger
	GLX12 no. 106302	SPECTIS 1.2

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