

ColorLite sph xs1

State-of-the-Art - Colour measuring instrument
Spectrophotometer in pocket format

Unique Selling Points

- 100% Internet connectivity via Wireless LAN or Bluetooth 4.0
- Ultra mobile
- Same high resolution as a benchtop spectrophotometer
- Intergrated Data-Matrix scanner
- Optional 60° gloss measurement according to DIN EN ISO 2813



ColorLite present a new „state of the art“, ultra mobile, 45°/0° geometry, high resolution spectrophotometer in a pocket format. Connect direct to your colour reference database from anywhere in the world, using wireless LAN or tether to your smart phone with Bluetooth V4.0

The small sized instrument, made in Germany from a solid aluminium block, weighs just 270g.

It is equipped with the latest high-definition technology allowing a high resolution spectral scan

in 3.5nm steps in less than 1 second. The brilliant colour high contrast O-LED display makes a perfect user interface. The menu is simple and clear, so

anyone can perform measurements fast and accurate. A further unique feature of the ColorLite XS1 is the integrated data-matrix and bar-code camera. This allows for fast effect sample identification and management.



Technical specification

Measurement Geometry	45°/0° circular according to DIN 5033
Illuminants	D65, D55, D50, A, C, F11
Standard Observer	2° and 10°
Measuring area	3.5 mm
Data Output/Colour Scales	XYZ, Yxy, ΔE CIE L*a*b*, L*u*v*, L*C*h, Hunter Lab Remissions spektrum with cursor displaying wavelength and % CIEL* a*b* diagram incl. tolerance limits
Quality Control Tolerance Limits and Colour Differences	ΔE CIELab; ΔL , Δa , Δb ; ΔL , Δu , Δv ; ΔL , ΔC , Δh ; Min/Max, PASS/FAIL; Δ ECMC (1:1 and 1:2), CIE $\Delta E94$; Metameric-Index for D65/A and D65/F11 according to DIN 6172
Other Values	Contrast: LRV (Light Reflectance Value) according to - BS 8493:2008; Various White-Index values; Various Yellowness-Index values; Grey-Index
Spectral Light Source Measurement	Spectral and chromaticity measurement of light source such as LED's - optional
Gloss value	60° according to DIN EN ISO 2813 (old DIN 67530)
Scanner	Data-Matrix and Bar-Code
Sample photos	350 colour photos to display scanning position dimension: 160 x 120 Pixel
Displayed Spectral Range	400 to 700nm
Spectral Resolution	Holografic grating-Spectrometer FWHM** @ 500 nm < 10 nm; Scanning in 3.5 nm interval 115 steps per scan
Display	High resolution O-LED colour display: High contrast and low-power 1/4-VGA, 320 x 240 Pixel
Repeatability	0.03 ΔE CIELab (ideal conditions)
Light Source	White and blue LED's Life span > 20 years
Scanning Time	Complete measurement cycle with calculation and readout time: < 1 sec
Multiple Scanning	Mean calculation of 1 to 20 individual measurements with colour values and standard deviation statistics displayed
Calibration	With white standard certified by the PTB (Physikalisch-Technische Bundesanstalt), Optional - 2-stage calibration with working standard
Memory	Memory for 1000 standard colours Memory for 1000 colour values Memory for 300 spektra (400-700nm / 3.5nm) Memory for 350 sample-photos (160 x 120 Pixel)

Power Supply	Lithium Polymer-Akku; Charging time 1.5 hours
Upload Standards from PC	Yes
Standard Colour Management	Standards loaded by <ul style="list-style-type: none">■ list with Best-Match tool■ index-no.■ entering name
PC and Internet Connection	USB 2.0; Bluetooth® V.4.0; Wireless LAN
Dimensions	Device with battery: 120mm x 70mm x 32mm, 270g
Climatic Conditions	Ambient temperature: 15°C to 45°C Relative humidity: max. 85% noncondensing

Included in the delivery are

- White standard with PTB certificate - PTB (Physikalisch-Technische Bundesanstalt)
- Aluminium case with foam padding
- Battery charger, USB cable and instruction manual

<https://www.gamin.cz/spektrofotometr-sph-xs1/>