

# ColorLite sph xs1



NAUMETRICS

premium measuring instruments

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



## Unique Selling Points:

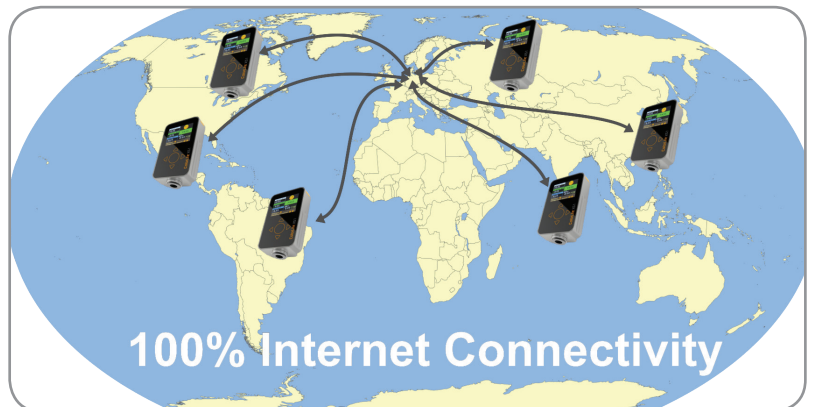
- 100% Internet connectivity via Wireless LAN or Bluetooth 4.0
- Ultra mobile
- Same high resolution as a benchtop spectrophotometer
- Intergrated Data-Matrix scanner
- 60° gloss measurement optional

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 refence 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.



Integrated QR- and BAR-Code scanner for sample ID and name



Connection to a single colour database from the factory floor nextdoor or worldwide - with Wi-Fi or Bluetooth 4.0 tethering

## Technical data

Measurement Geometry	45°/0° circular according to DIN 5033	Display	High resolution O-LED colour display: High contrast and low-power 1/4-VGA, 320 x 240 Pixel
Illuminants	D65, D55, D50, A, C, F11	Repeatability	0.03 $\Delta E$ CIELab (ideal conditions)
Standard Observer	2° and 10°	Light Source	White and blue LED's Life span > 20 years
Measuring area	3.5 mm	Scanning Time	Complete measurement cycle with calculation and readout time: < 1 sec
Data Output/ Colour Scales	XYZ, Yxy, $\Delta E$ CIE L*a*b*, L*u*v*, L*C*h, Hunter Lab Remissions spektrum with cursor displaying wavelength and %, CIE-L*a*b* diagram incl. tolerance limits	Multiple Scanning	Mean calculation of 1 to 20 individual measurements with colour values and standard deviation statistics displayed
Quality Control Tolerance Limits and Colour Differences	$\Delta E$ CIELab; $\Delta L$ , $\Delta a$ , $\Delta b$ ; $\Delta L$ , $\Delta u$ , $\Delta v$ ; $\Delta L$ , $\Delta C$ , $\Delta h$ ; Min/Max, PASS/FAIL $\Delta E_{CMC}$ (1:1 and 1:2), CIE $\Delta E_{94}$ Metameric-Index for D65/A and D65/F11 according to DIN 6172	Calibration	With white standard certified by the Federal Institute for Materials Research (Bundesanstalt für Materialforschung -BAM), Optional - 2-stage calibration with working standard
Other Values	Contrast: LRV (Light Reflectance Value) according to - BS 8493:2008 Various White-Index values Various Yellowness-Index values Grey-Index	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)
Spectral Light Source Measurement	Spectral and chromaticity measurement of light source such as LED's – optional	Power Supply	Lithium Polymer-Akku Charging time 1.5 hours
Gloss value	60° according to DIN 67530	Upload Standards from PC	Yes
Scanner	Data-Matrix and Bar-Code	Standard Colour Management	Standards loaded by - list with Best-Match tool - index-no. - entering name
Sample photos	350 colour photos to display scanning position dimension: 160 x 120 Pixel	PC and Internet Connection	USB 2.0 Bluetooth® V.4.0 Wireless LAN
Displayed Spectral Range	400 to 700nm	Dimensions	Device with battery: 120mm x 70mm x 32mm, 270g
Spectral Resolution	Holographic grating-Spectrometer FWHM** @ 500 nm < 10 nm Scanning in 3.5 nm interval 115 steps per scan	Climatic Conditions	Ambient temperature: 15°C to 45°C Relative humidity: max. 85% non-condensing

### Included in the delivery are:

- White standard with BAM certificate - BAM (Bundesanstalt für Materialforschung, Berlin)
- Aluminium case with foam padding
- Battery charger, USB cable and instruction manual