# ColorLite ColorCube



# Laboratory Spectrophotomter



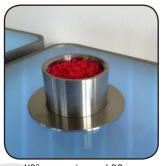
# Colour measuring instrument

- Fast and precise measure in 0.5 seconds
- with aluminium unibody housing & long-lasting high-performance LED light sources
- Visual pass / fail assessment by means of coloured backlighting
- Various measuring geometries for diverse applications

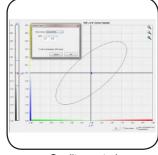
The ColorLite ColorCube benchtop spectrophotometer - minimalistic and functional design - easy to use and looks good. Made from only the highest quality materials: solid aluminium housing, stainless steel trimming, illuminated safety glass cover and combining this with state of the art metrology technology.

Using high performance LED's, with a life span of over 20 years and a grating spectrometer we can ensure perfect stability over its life time. The ColorCube series can be connected easily via USB cable with any Windows PC, together with the comprehensive quality assurance software offers your company the perfect solution for your laboratory. The ColorCube series is available in different versions, with different scanning areas from 2 mm (d/8° geometry) to 80 mm (d/0° geometry) for a wide range of applications.

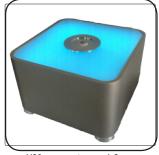
You can not only measure colour data with the ColorCube quickly and accurately, but also manage the data using the our QS-software ColorDaTra to evaluate, analyse and create professional reports in all common colour scales.



d/0° geometry and 38 mm scanning area



Quality control PC software ColorDaTra



d/8° geometry and 6 mm scanning area

## ColorCube sph45



#### 45°/0° Geometry

Illumination at 45° and viewing at 0° according to DIN5033

- Scanning area approx. 15 mm
- 2-channel system with Internal white reference
- Solids and powders
- Optional Black metrics mode

### ColorCube sph38



#### d/0° Geometry

Diffuse illumination and viewing at 0°

- Scanning area 38 mm
- Inhomogenious samples
- Glass and metal optical cells
- Powders and liquids

# ColorCube sph80

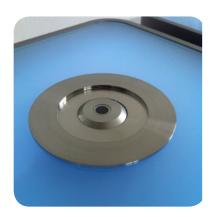


#### d/0° Geometry

Diffuse illumination and viewing at 0°

- Scanning area 80 mm
- Very inhomogenious samples
- POM optical cell
- · Granuals and foods

### ColorCube sph d/8-6



#### d/8° Geometry

Diffuse illumination and viewing at 8° according to DIN 5033

- Scanning area 3, 6, or 10 mm
- Solids and powders
- · Optional Glass optical cell

## **Applications**

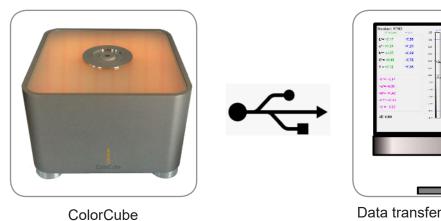
Colour measurement for quality control of a variety of surfaces and materials such as:

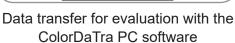
- Plastics
- Leather
- Foods products

- Paints
- Powders
- Packaging

- Textiles
- Granuals
- Cables ... etc.

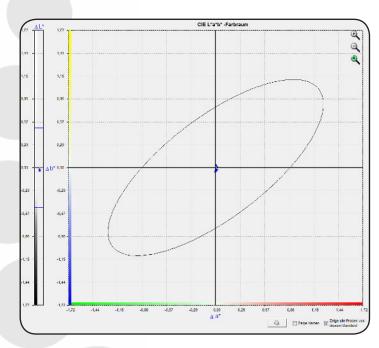
#### Data Transfer





Das Gerät kann bequem per USB-Kabel oder optionalem WLAN an jeden Windows-PC angeschlossen werden.

#### PC Software



The powerful and easy-to-use software supports all aspects of quality assurance. The colour measurement data is not only recorded quickly and precisely with the ColorCube, it can also be managed, evaluated and analysed in various colour space representations using the software. All this relevant information can then be summarised quickly and easily using the professional report function.

Spectrophotometer	r ColorCube	sph45	sph38	sph80	sph d/8
Measurement geometry	45°/0° Circular illumination at 45°, viewing angle 0° accordig to DIN 5033	X			
	Diffuse illumination d/0°, (non standardised)		X	Χ	
	Diffuse illumination d/8° according to DIN 5033				X
Normlichtarten	D65, D55, D50, A, C1, C2, C3, F11	Х	Х	Х	X
Standard observer	2° and 10°	X	Х	Х	X
Measured area		approx. 15 mm	38 mm	80 mm	3, 6, 10 mm
Colour scales	XYZ, Yxy, ΔE CIE L*a*b*, L*u*v*, L*C*h, Hunter Lab Remissions curve with cursor in nm and % CIE-L*a*b* Diagram incl. Pass/Fail limits	X	X	X	X
Quality control tolerance limits for co- lour 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, $\Delta ECMC$ (1:1 and 1:2), CIE $\Delta E94$ Metameric-Inex for D65/A and D65/F11 according to DIN 6172	Х	Х	Х	Х
Additional colour values	Contrast: LRV - BS 8493:2008, Various white index values, various yellow index values, Grauindex, Hazen/APHA; JOD	Х	Х	X	X
Spectral range	400 nm to 700 nm	X	Х	Х	Х
Spectral resolution	Holographic grating spectrometer HWB at 500 nm < 10 nm Scanning in 3.5 nm steps 115 x 16-bit values per scan => 100 measuring points	X	X	X	X
PC-connection	USB 2.0	Χ	Х	Χ	X
Repeatability	< 0.03 dE* CIE L*a*b* (measured on a white surface)	X	X	X	X
Dimensions/ Weight	150 mm x 230 mm x 230 mm (H x L x W); 6.3 Kg	Х	Х	Х	X
Light source	White and blue LEDs Lifetime > 20 years	X	Х	Х	X
External power supply	110 - 240 VAC/50-60 Hz	Х	Х	Х	Х

# Included in the delivery are:

- White standard certified by the PTB (Physikalisch-Technische Bundesanstalt)
- Black reference standard
- PC software ColorDaTra Professional licence including free updates
- USB cable