

# ColorLite sph870

Spectrophotometer for quality control



## Spectral colour measurement:

- easy to use
- extremely flexible
- long life LED light source
- High quality: Made in Germany

The sph870 is a user-friendly, portable spectrophotometer with a  $45^{\circ}/0^{\circ}$  geometry, which due to the wide range of accessories available is suitable for a variety of surfaces and materials. For example, the system can be easily changed from the  $45^{\circ}/0^{\circ}$  to a  $d/8^{\circ}$  geometry simply by using our MA35 probe head adapter. The high-resolution technology enables a spectral scan in 3.5 nm steps in just 0.5 seconds. The menu is simple and well arranged, so that even untrained staff can perform the measurement task fast and accurate.



Measuring set  
inhomogeneous samples



Probe head with v-block  
for cylindrical samples



sph870 with measuring  
head MA35



Delivery contents

## Features

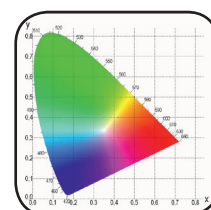
- Flexible external probe head and a small spot size (3.5 mm Ø) for reliable scans on curved surfaces and small samples
- A comprehensive range of accessories and probe head adapters enables the use for a wide range of applications
- Two main geometries (45°/0° and d/8°) available in one device, with the optional accessory MA35-UK
- The automatic accessory detection changes internal settings depending on what accessory is attached
- Very easy 4-button operation and high resolution graphic display
- High quality „Made in Germany“

## Technical data

Measurement Geometry	45°/0° according to DIN 5033 optional d/8° with the MA35-UK adapter
Standard Observer	2° and 10°
Illuminants	D65, D55, D50, A, C, F11
Colour Scales	XYZ, Yxy, E CIE L*a*b*, L* u* v*, L*C*h, Hunter Lab, PASS/FAIL
Spectral Range	400nm to 700 nm, scanning in 3.5nm steps
Light Source	White and blue LED's, extremely long life span
Power Supply	Akku NiMH 6-Volt/1100 mAh
Repeatability	< 0.05 E CIELab
Scanning Time	Complete measurement cycle 0.5 sec
PC-Interface	USB 2.0, RS232 (optional)
User-Mode	Limited user rights – Password protected
Calibration	With white standard certified by the Federal Institute for Materials Research (Bundesanstalt für Materialforschung – BAM) optional – 2-stage calibration with working standard
Memory	1000 standard colours, 1000 colour values and 300 spectra (400-700nm / 3.5nm steps)
Display	High resolution TFT display
Accessories	For the measurement of inhomogeneous samples, transparent, translucent and opaque liquids, powders in cuvettes or tablet form and more.
Automatic Accessory Recognition	Accessories are detected and device settings automatically modified accordingly.
Climatic Conditions Ambient temperature	15°C to 45°C, relative humidity: max. 85% non-condensing

## Perfect solution with PC-software

ColorDaTra is the software of your choice, when it comes to a complete solution for your quality assurance. This powerful and easy to use software supports you in all aspects of your quality control task. ColorDaTra allows you to collect and manage all of your colour measurement data, evaluate and to analyse in different colour scales. All this relevant information can then be easily summed up with the help of the professional reporting function.



CIE-xy Colour Scale

## The delivery includes:

- Certified white standard - BAM (Bundesanstalt für Materialforschung)
- Valuable aluminium case with foam padding
- USB interface cable, battery charger and user manual