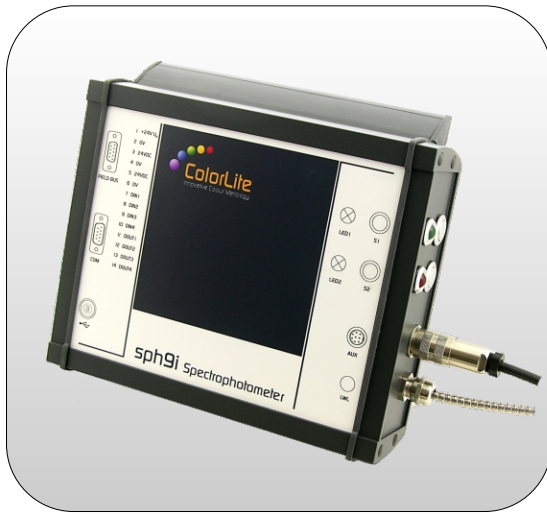


ColorLite sph9i

Industrial Online Spectrophotometer



Spectral Colour Measurement

Online continues production control

- High resolution spectrophotometer
- 100% quality control
- Saves time and costs
- Reduces waste



The sph9i spectrophotometer from ColorLite is suited for continues 100% quality control of colours of plastic sheets, textiles, paper etc. The system from ColorLite implements LED light source, real optical grating and flexible optical fiber connections. This makes it extremely robust and flexible and enables scanning direct in the production line in difficult vicinities.

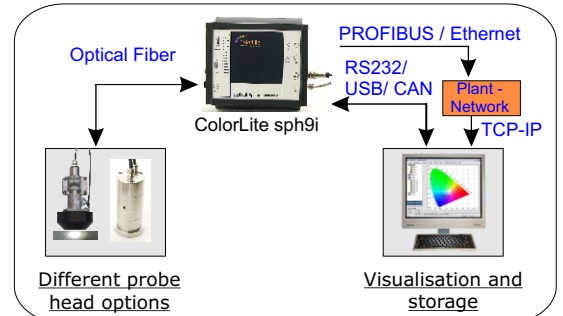
By measuring slightest (for the human eye non-visible) colour deviations direct in the production, faults can be detected long before tolerance limits are reached. This greatly reduces a main reason for complaints, saving time and money and improving product quality.



MA38-VA probe head and automatic calibration unit with integrated reference



Different probe heads:
45°/0° or d/0°



Schematic diagram - Example for non-contact measurement with MKi3010 or MA38-VA probe heads

Features

- 100% high-resolution spectral colour measurement in laboratory precision
- Immediate quality control in the production means minimal wastage
- Optional automatic calibration units for low maintenance and perfect stability
- 3.5 nm interval measurement means 115 values with 16-Bit resolution per scan
- Memory buffer for 1,000 results as system backup in case of communication errors
- Different probe heads available: scanning areas from 3.5 mm to 38 mm
- Light source high powered white and blue LEDs with an operating span of many years
- Infra-red sample temperature measurement for thermochromic compensation - optional
- Connection to process control system via: PROFIBUS, Ethernet, USB, RS232
- User programmable: scan interval, number of scans and storage interval

Applications

Continual control of production colours for plastic foils, textiles paper etc.
 Non contact measurement using probe heads MKi3010 or MA38-VA.
 The system can perfectly integrated and is therefore ideal for OEM applications.

Technical Data

Measurement Geometries:	45°/0°; 0°/0°; d/0° - Measuring area: 3.5 to 38 mm
Illuminants:	D65, D55, D50, A, C, F11
Standard Observer:	2° and 10°
Colour values:	XYZ, Yxy, ΔE CIE L*a*b*, L*C*h, ΔL, Δa, Δb ΔE_CIE94, ΔE_CMC, PASS/FAIL
Calibration	With white standard certified by the Federal Institute for Materials Research (Bundesanstalt for Materialforschung -BAM)
Spectral Resolution	Holographic grating-Spectrometer FWHM @ 500 nm < 10 nm Scanning in 3.5 nm steps, VIS Range 115 x 16-Bit values per scan
Light Source	White and blue LED's - extrem long lasting
Repeatability	< 0,05 ΔE CIELab on a white tile
Scanning Time	Complete measurement cycle with calculation and readout time < 1 sec
Communication	USB V2.0, RS232, CAN, Ethernet, PROFIBUS
Digital Input/Output	4/4-digital channels - reading and writing status information for industrial process control systems

Perfect solution complete with database software

For an easy evaluation, analysis and creation of reports of your colour data, the database quality control software **ColorDaTra-IPM** is available.

