

MK350N

USB Spectrometer for measuring light intensity, colour temp., colour rendition index,...

- Ideal for light planning professionals, lighting research & development, LED light salespeople and much more
- Quick process- measures spectrum of light, gives readings in Lux, Color Rendition Index (CRI), colour temperature, and peak wavelength
- After turning on, the device will process dark calibration automatically which ensures that exact measurement values remain stable
- Data is easily stored on a SD card or you can connect the meter to a PC or laptop using USB 2.0 interface



MK350S

USB Spectrometer with App for iOS with WiFi and fast integration speed

- Provides data quickly and allows for customers to develop their needs with a number of functions
- Integrated programs allow user to view the full-colour spectrum in colour without needing a PC
- Can also be used with a smartphone, and supports devices with iOS as well as with Android
- Built-in file browser allows users to instantly read data within saved files



Technical specifications

Sensor	CMOS image sensor	C.I.E. Chromaticity Coordinates
Spectral bandwidth	Approx. 12 nm	- CIE 1931 x,y coordinates
Receptor size	Ø 6,6 ±0.1 mm	- CIE 1976 u',v' coordinates
Meas. range	70 ... 70,000 lux	Max. wavelength (Peak),
Wavelength range	360 ... 750 nm	Colour temp. CCT (in Kelvin),
Resolution	Digital 16 bits	Colour rend. index; RA
Accuracy		(rendering average)
Illuminance accuracy	±5 %	Calibration
Colour	±0.0025 en CIE 1931 x; y	Calibration in the dark
Colour repeatability	±0.0005 en CIE 1931 x, y	(cover in delivery content)
Colour temperature	±2 %	Stray light
Colour rendering	A RA ±1.5 %	Wavelength
(Ref: 2,856 K with 20,000 lux)		Resolution
Int. time range	8 ... 1,000 ms	Reproducibility
Capture function	One time / continuous	USB 2.0
Integration mode	Automatic / manual	Interface
Measuring mode	Basic value mode,	Display
	Spectrum graphic mode,	320 x 240 pixels
	CIE 1931 Chro. Diagram Mode,	Memory
	CIE 1976 U.C.S. Chromatically	Max. approx. 2,000 values,
	Diagram Mode	on 2GB SD card
Meas. capabilities	Light intensity in lux,	Op. conditions
	Spectral Irradiance intensity	0 ... +35 °C
		Power
		2,500 mA, Li-Ion-recharg. batt.
		Dimensions
		145 x 78 x 24 mm
		Weight
		Approx. 250 g

Delivery content

Spectrometer, USB cable, screen wiper, battery, power adapt., wrist strap, nylon bag, aluminium case, cover for dark calibration, instructions manual

Reference	Item
K-MK350N	Spectrometer
Optional accessories	
K-CAL-SC1	Calibration certificate for the illuminance
K-CAL-SC2	Calibration certificate for the illuminance and spectral analysis



Technical specifications

Sensor	CMOS Linear Image Sensor
Spectral Bandwidth	Approx. 12 nm
Receptor size	Ø 6,6 ±0.1 mm
Meas. range	70 ... 70,000 lux
Wavelength Range	380 ... 780 nm
Resolution	Digital 16 bits
Illuminance accuracy	±5 %
Colour accuracy	±0.0025 in CIE 1931 x; y
Color Repeatability	±0.0005 in CIE 1931 x, y
Accur. temp. colour	±2 %
Accur. repeat. colour	With RA ±1.5 %
(Reference illuminant at 2,856 K at 20,000 lux)	
Integration time range	6 ... 5,000 ms
Capture function	One time / Continuous
Integration mode	Automatic / manual
Measuring modes	Basic value mode,
	Spectrum Graph Mode,
	CIE 1931 Diagram Mode,
	CIE 1976 U.C.S. Diagram
	Colour Rendering Index Mode,
	Lux Image Distribution Mode,
	Measurement Log Mode
	CCT BIN Chart Mode,
	Quality Control Checker Mode

Meas. capabilities	Veas. Comparison Mode, Data Browser Mode, Lux and Foot Candle; Spectral Irradiance intensity; C.I.E. Chromaticity Coordinates - CIE 1931 x, y coordinates - CIE 1976 u',v' coordinates; Max. wavelength (Peak); Temp. colour CCT (in Kelvin); Colour rendering index: RA, R1 ... R15 (rendering average); $\Delta x, \Delta y, \Delta u', \Delta v'$; Duv, purity; PPF (400 ... 700 nm), PPF-R (600 ... 699 nm), PPF-G (500 ... 599 nm), PPF-B (400 ... 499 nm), PPF-UV (380 ... 399 nm), PPF-NIR (700 ... 780 nm); BIN
Calibration	Dark calibration
Stray light	max. -25 dB

Increment	1 nm
Reproducibility	±0.5 nm
Interface	USB 2.0, Wireless SD card
Display	4.3" LCD with touch panel
Camera resolution	2M pixels
Memory	Approx. 2,000 datos max. , 2GB on SD card
Op. conditions	0 ... +35 °C
Power	2,500 mA, Li-Ion-recharg. batt.
Dimens. / Weight	163 x 81 x 26 mm / 250 g
Delivery content	
Spectrometer, cover for dark calibration, screen wiper, USB cable, charger, recharg. batt., wireless SD card, hanging support, tripod support, nylon bag, aluminium case, instructions manual	
Item	
K-MK350N	Spectrometer
Optional accessories	
K-CAL-SC1	Calibration certificate for the illuminance
K-CAL-SC2	Calibration certificate for the illuminance and spectral analysis



PCE-RGB2

Colour Spectrometer with External Display / PC Interface

- complies with DIN 5033 norm
- measures on non-luminous surfaces such as paper, leather, textiles, paint, ...
- self-illuminating surfaces such as LC displays can be measured relative to each other
- calibration function, white standard included
- relative function allows comparison of different materials



TECHNICAL SPECIFICATIONS

Meas. geometry	45°/ 0°
Measurement range	RGB:0...1023 each for R, G, B; 7 HSL: 0...1000 each for H, S, L
Resolution	1 (RGB measurement); 0.001 (HSL measurement)
Spectral range	400 ... 700 nm
Range of application	1. non-luminous surfaces; 2. self-illuminating surfaces (rel.); Note: only suitable for non-fluorescent samples
Display	relative and absolute values
Interface	RS-232
Software	optional
Power supply	9 V block battery
Dimensions	sensor: 45 x 92 x 160 mm device: 205 x 76 x 37 mm
Weight	approx. 600 g

INCLUDES

Colour spectrometer with sensor on 1 m cable, white standard, carrying case, instruction manual

ITEM NO.	ITEM
K-PCE-RGB2	colour spectrometer with external display

OPTIONAL ACCESSORIES

K-SOFT-LUT-B02	RS-232 data cable + software
K-SOFT-LUT-USB	USB data cable + software

PCE-TCD 100

Colour Difference Meter According to CIELab

- CIELab colour measurements
- conversion into LCH
- determines the colour difference value ΔE
- high-contrast display
- measures the colours of all surfaces



TECHNICAL SPECIFICATIONS

Measurement range	L: 0 ... 100 a: -128 ... 127 b: -128 ... 127
Response time	approx. 3 s
Sampling rate	approx. 2 s
Measurement angle	10° according to CIE standart
Sensor	silicon photodiode
Display	LC display, 6 mm digits, backlight
Power supply	2 AA 1.5 V batt./ext. mains adaptor
Operating conditions	0 ... +40 °C / <85 % RH
Dimensions	171 x 50 x 48.8 mm
Weight	203.6 g

INCLUDES

CIELab colorimeter, mains adaptor, batteries, USB data cable, software, instruction manual

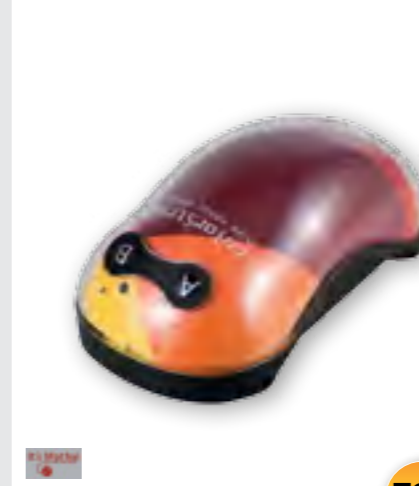
ITEM NO.	ITEM
K-PCE-TCD 100	colorimeter



colorStriker

Colorimeter According to Lab Norm

- colourfast indication on screen
- QM capable software
- readings can be transferred per Bluetooth
- non-contacting colour measurement
- für a wide range of materials (even skin tones)



TOP seller

TECHNICAL SPECIFICATIONS

Type of device	Truecolorimeter
Measurement range	400 ... 700 nm
Measur. geometry	45° / 1° or 1° / 45°
Norms	ISO 13655, DIN 5033
Resolution	12 bits per colour channel
Measuring field	15 mm
Accuracy	<0.6 ΔE
Repeatability	<0.2 ΔE
Illumination	white light LEDs
Sensors	2 MCTS True Color sensors
Operating system	Windows XP, Vista, Windows 7
Dimensions	60 x 110 x 40 mm
Weight	120 g

INCLUDES

Colorimeter colorStriker, mains adaptor, USB Bluetooth dongle, software, instruction manual

ITEM NO.	ITEM
K-colorStriker	colorimeter



PCE-TCR 200

Surface Colorimeter, Lab Norm

- measurement of Lab colour values
- conversion into LCH, RGB ...
- measurement of colour differences (ΔE_{ab} , ΔE_{ch})
- measurement port with \varnothing of 8 mm / three selectable light sources
- black and white balance
- USB interface / software for analysis



TECHNICAL SPECIFICATIONS

Accuracy	± 0.08
SCI	SCE
Measur. geometry	8/d
Light source	standard white light
Standard illuminants	D65, D50, F11
Measurement angle	10° according to CIE standard
Balancing	standard white / black acc. to CIE
Memory	12 groups with 30 sets of d. each
Display	L*a*b*, L*c*h*, E*ab, RGB deviations from L*a*b* u. L*c*h*
Power supply	4x AA 1.5V, external 5V m. adaptor
Dimensions	77 x 86 x 210 mm
Weight	550 g

INCLUDES

Colorimeter, white and black body, batteries, mains adaptor, USB cable, software, instruction manual

ITEM NO.	ITEM
K-PCE-TCR 200	colorimeter



X-Rite CAPSURE

Precision Colorimeter with Integrated Colour Fans

- 100 saved colours with 30-second language codes each
- colour measurement of various materials and surfaces, plain or multicoloured
- saved colours can be used for own palettes and in design applications
- target colours can be formulated in colour mixing systems

Colour data saved on the device:

- PANTONE FASHION + HOME Color System library (paper and wool) for fashion and home use
- PANTONE PAINT + INTERIORS library (paper and wool) for architects and decorators (1925 standard colours)
- PANTONE PLUS SERIES Formula Guide (coated and uncoated)
- PANTONE PLUS SERIES CMYK (coated and uncoated)
- PANTONE Goe System (coated and uncoated) for graphic designers and printers
- the saved L*a*b*, XYZ-, RGB- and cmk data can be retrieved in connection with each colour shade



TECHNICAL SPECIFICATIONS

Measurement range	2.4 and 8 mm
Meas. geometry	45° / 0°
Measurement time	1.8 seconds
Reproducibility	on average 0.2 DE94 on white (short time)
Light source	25 tridirectional LEDs (8 x visible wave lengths, 1 x UV)
Functions	ColorPicker-simultaneous recognition of 4 dominant colours
Standard illuminants	10°: D65, A, 2°: D50, D65, A, F2, F11 (adjustable)
Interface / software	USB / compatible with Windows XP and higher
Memory	256 MB > 45.000 reference colours
Display	4.5 cm TFT colour display
Power supply	3.7 V / 1.200 mAh Li-Ion rechargeable battery; life: 5 h, standby operation: 100 h; charging via USB; ch. time: 4 ... 6 h
Operating conditions	0 ... +40 °C
Dimensions / weight	144 x 52 x 40 mm / 165 g (incl. battery)

INCLUDES

Colorimeter, protective bag, carrying strap, USB cable 1.5 m, software, manual

ITEM NO.	ITEM
K-CAPSURE	colorimeter



NH310

Professional Norm Colorimeter (+Degree of Whiteness and Yellowing)

- portable colorimeter for quality control
- automatic white / black calibration
- five colour spaces and three light sources



plate with cuvette for analysis of liquids and powders



powder calibration box



TECHNICAL SPECIFICATIONS

Measurement port	Ø 8 mm / Ø 4 mm
Measurement geometry	8/d
Accuracy	≤0.40 ΔE*ab (between every device)
Sensor	silicon photodiode
Colour spaces	CIEL*a*b*C*h*; CIEL*a*b*; CIEXYZ; CIERGB; CIEL*u*v*; CIEL*C*h*; yellowing and white colour fastness
Colour difference	ΔE*ab; ΔL*ab; ΔE*C*H*; ΔECIE94; ΔEHunter
Reproducibility	standard deviation up to ΔE*ab 0.06 / on average 30 measurements from white standard
Stand. illum. / l. source	D65 D50 A / LED
Interface / memory	USB / 100 standard values, 20000 samples
Power supply	Lithium-Ion battery, 3.7 V at 3200 mAh
Operating conditions	-10 ... +40 °C / 0 ... 85 % RH
Dimensions / weight	205 x 70 x 100 mm / 500 g

INCLUDES

Colorimeter, blinds (Ø 4 & 8 mm), recharg. batt., white standard, softw., case, manual

ITEM NO.	ITEM
K-NH310	colorimeter

OPTIONAL ACCESSORIES

K-UTC-3NH	analysis plate with cuvette
K-PTB-3NH	powder box for B/W calibration of powders
K-WCP-3NH	spare white calibration standard

NR145

Precision Colorimeter

- integrated white standard (autom. recalibration)
- large / resilient, small concave and convex measuring head
- colour spaces CIEL*a*b*C*h*; CIEL*a*b*; CIEXYZ
- 8 mm measuring port
- equipped with rechargeable Li-Ion battery



TECHNICAL SPECIFICATIONS

Measur. range	0 ... 100
Meas. geometry	45° / 0°
Reproducibility	0.08 (at ΔE*ab)
Measuring port	Ø 8 mm
Sensor	photoelectric silicon diode
Colour space	CIEL*a*b*C*h*; CIEL*a*b*; CIEXYZ
Colour difference	ΔE*ab; ΔL*ab; ΔE*C*H*
Standard illumin.	D65
Light source	LED
Display	LC display
Memory	100 stand. values, 20000 samples
Power supply	Li-Ion rech. batt., 3.7V at 3200 mAh
Dimensions	205 x 67 x 80 mm
Weight	approx. 500 g

INCLUDES

Colorimeter, software, data cable, instruction manual

ITEM NO.	ITEM
K-NR145	colorimeter

OPTIONAL ACCESSORIES

K-MP-3NH	miniature colour printer
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NR20XE

Colorimeter for Curved Surfaces

- surfaces with stripes can be measured accurately by means of the 20 mm measurement port
- new optical path and dynamic integration time enable more stable and more precise measurements
- equipped with rechargeable Li-Ion battery



TECHNICAL SPECIFICATIONS

Meas. geometry	45° / 0°
Measuring port	Ø 20 mm
Reproducibility	0.08 (at ΔE*ab)
Standard illuminant	D65
Sensor	photoelectric silicon diode
Colour space	CIEL*a*b*C*h*; CIEL*a*b*; CIEXYZ
Colour difference	ΔE*ab; ΔL*a*b*; ΔE*C*H* (formula)
Software	CQCS3 software
Memory	100 standard values, 20000 samples
Power supply	rechargeable 3.5 V Li-Ion battery
Dimensions	205 x 67 x 80 mm
Weight	500 g

INCLUDES

Colorimeter, software, data cable, instruction manual

ITEM NO.	ITEM
K-NR20XE	colorimeter

OPTIONAL ACCESSORIES

K-MP-3NH	miniature colour printer
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PCE-WSB 1

Whiteness Meter

- ISO 2470 and ISO 3688 approved
- suitable for all plane products such as paper, plastics and textiles
- for whiteness measurements
- compact and ergonomic design
- with calibration standards (black and white)



TECHNICAL SPECIFICATIONS

Measurement range	0 ... 100
Resolution	0.1
Accuracy	<±0.1
International norm	ISO 2470; ISO 3688
Range of application	production laboratories, incoming goods control, final control
Correction factor	adjustable
Display	LC display
Measuring diameter	Ø 15 mm
Lowest possible value	0.1
Power supply	5 type AA batteries
Dimensions	approx. 235 x 75 x 65 mm
Weight	approx. 500 g

INCLUDES

Whiteness meter, gloss standard, case, calibration standards black and white, user manual

ITEM NO.	ITEM
K-PCE-WSB 1	whiteness meter

