

WSF-1B / WSF-2B / WSF-3B Portable Spectroscopical Color photometer

Characteristics

- Perfect combination of appearance modeling and structural design
- D/8 geometrical optical structure, in accordance with CIE no. 15, ISO7724/1, ASTM E1164, DIN5033 Teil7
- Sample spectrum measurement, Lab data accurate, can be used for color matching and accurate color transfer
- Large capacity storage space, can store more than 20000 pieces of test data
- Multiple light source modes
- Good function extension with PC software



WSF-2B / 3B

Specifications

Model	WSF-1B	WSF-2B	WSF-3B
Illuminating	45° /0°	D/8	D/8
Measuring Aperture	Φ8mm	Φ8mm(Standard), Φ4mm(Optional)	Φ8mm and Φ4mm
Wavelength range	400nm-700nm	400nm-700nm	400nm-700nm
Light source	LED	LED	LED+UV
Integrating sphere size	Φ58mm	Φ48mm	Φ48mm
Sensor	Silicon photocell	256 pixel dual array CMOS image sensor	
Wavelength interval	10nm	10nm	10nm
Measuring range of reflectivity	0-200%	0-200%	0-200%
Display	3.5 inch TFT capacitive touch color screen		3.5 inch TFT capacitive touch color screen
Color space	CIELAB, XYZ, Yxy, LCH CIELUV		CIELAB, XYZ, Yxy, LCH CIELUV, HunterLAB
Color Difference Formula	ΔE*ab, ΔE*uv, ΔE*94, ΔE*cmc(2:1), ΔE*cmc(1:1), ΔE*cmc(ICE), CIE2000, ΔE*00, ΔE(h)	ΔE*ab, ΔE*00, ΔE*uv, ΔE*94, ΔE*cmc(2:1), ΔE*cmc(1:1), ΔE(Hunter)	
Color index	WI(ASTM E313, CIE/ISO, AATCC, Hunter), YI(ASTM D1925, ASTM 313), TI(ASTM E313, CIE/ISO), Homochromic index MI, Viscosity fastness, Colour fastness, Force, Coverage	WI(ASTM E313, CIE/ISO, AATCC, Hunter), YI(ASTM D1925, ASTM 313), TI(ASTM E313, CIE/ISO), Homochromic index MI, Viscosity fastness, Colour fastness, Force, Coverage	
Observation of light source	A, C, D50, D55, D65, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12	A, C, D50, D55, D65, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, TL83, TL84, U30, CWF, U35	
Observation Angle	2° /10°		2° /10°
Display content	Spectrogram/data, sample chromaticity value, color difference value/graph, qualified/unqualified result, color deviation		Spectrogram/data, sample chromaticity value, color difference value/graph, qualified/unqualified result, color deviation
Measuring time	Approx. 1.5s		Approx. 1.0s
Repeatability	Spectral reflectivity: Within 0.1% of standard deviation; Within ΔE*ab0.04	Spectral reflectivity: MAV/SCI00, within 0.1% of the standard deviation (400-700nm: 0.2%); Chroma value: MAV/SCI, ΔE*ab within 0.04 (adjusted, in order to measure the whiteboard 30 times interval 5 s average)	Spectral reflectivity: MAV/SCI00, within 0.08% of the standard deviation (400-700nm: 0.18%); Chroma value: MAV/SCI, ΔE*ab within 0.03 (adjusted, in order to measure the whiteboard 30 times interval 5 s average)
Storage	1000 pcs standard samples; 15000 pcs test samples	1000 pcs standard samples; 20000 pcs test samples	1000 pcs standard samples; 28000 pcs test samples
Battery Life	More than 3 millions of times in 5 years		More than 3 millions of times in 5 years
Interface	USB to TTL Level	USB to TTL Level	USB to TTL Level; Bluetooth 4.0
Operating Temperature Range	0 - 40°C; 0-85%RH(No condensation) Elevation: below 2000 m		0 - 40°C; 0-85%RH(No condensation) Elevation: below 2000 m
Storage Temperature	-20 - 50°C 0-85%RH(No condensation)		
Weight(Net)	600g		600g
Dimensions	90mm x 77mm x 230mm		184mm x 77mm x 105mm