

PORTABLE SPECTROCOLORIMET ER SPE73-400



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Portable Spectrocolorimeter is a portable instrument designed to measure transmittance of sample and color measurement.

SPE73-400 PORTABLE SPECTROCOLORIMETER

Adopt international common use d/8 SCI/SCE Synthesis technology

Adopt full waveband balanced LED light source

Silicon photodiode array sensor (32 groups with double rows)

A variety of color space, a variety of observation light sources

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Ergonomic design and easy measuring device

Pass the Calibration Certificate

ETC real-time calibration technology

Camera locating can clearly observe the measured area

Color management software

SPECIFICATIONS

Model	SPE73-400
Optical Geometry	D/8° diffused illumination, 8-direction reception
Standards compliant	Comply to CIE No.15,GB/T 3978,GB 2893,GB/T 18833,ISO7724-1,ASTM E1164,DIN5033 Teil7
Integrating Sphere Size	Φ 40mm
Light source device	Combined LED lamp, UV lamp
Spectroscopic Method	Flat Grating
Sensor	Silicon photodiode array (dual arrow 32 groups)
Light wave range	400-700nm
Wavelength Pitch	10 nm
Semi-bandwidth	10 nm
Measured Reflectance Range	L:0~120; reflectivity:0~200%
Measuring Aperture	Dual Apertures:MAV:Φ8mm/Φ10mm;SAV:Φ4mm/Φ5mm
Specular Component	SCI&SCE
color space	CIE LAB,XYZ,Yxy,LCh,CIE LUV,s-RGB,βxy,DIN Lab9,DIN Lab99 Munsell(C/2)
Color Difference Formula	ΔE^*_{ab} , ΔE^*_{uv} , ΔE^*_{94} , $\Delta E^*_{cmc}(2:1)$, $\Delta E^*_{cmc}(1:1)$, ΔE^*_{00} , DIN ΔE_{99}
Other Colorimetric Index	WI(ASTM E313,CIE/ISO,AATCC,Hunter),YI(ASTM D1925,ASTM 313),Metamerism Index MI,Staining Fastness, Color Fastness, Color Strength, Opacity,Color Card Search
Observer angle	2° / 10°
Illuminant	D65,A,C,D50,D55,D75,F1,F2(CWF),F3,F4,F5,F6,F7(DLF),F8,F9,F10(TPL5),F11(TL84),F12(TL83/U30)
Displayed Data	Spectrogram/Values, Samples Chromaticity Values, Color Difference Values/Graph, PASS/FAIL Result, Color Simulation, Color Offset
Displayed Accuracy	0.01
Measuring Time	About 1.5s (Measure SCI and SCE about 3.2s)
Repeatability	Chromaticity value: MAV/SCI, within ΔE^*_{ab} 0.05 (When a white calibration plate is measured 30 times at 5 second intervals after white calibration)

Inter-instrument Error	MAV/SCI, Within ΔE^*_{ab} 0.3 (Average for 12 BCRA Series II color tiles)
Measurement mode	Single Measurement, Average Measurement(2-99times)
Locating Method	Camera Locating, stabilizer cross position
Operating Environment	0~40°C, 0~85%RH (no condensing), Altitude < 2000m
Storage Environment	-20~50°C, 0~85%RH (no condensing)
Battery	Li-ion battery, 6000 measurements within 8 hours
Illuminant Life Span	5 years, more than 3 million times measurements
Display	3.5-inch TFT color LCD, Capacitive Touch Screen
Data Port	USB, Bluetooth
Data Storage	Standard 1000 Pcs, Sample 30000 Pcs(One data is able to include SCI/SCE)
Language	Chinese, English, traditional Chinese
Dimension	81X71X214mm
Weight	About 460g

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