

Spectrophotometer



Our Spectrophotometers are powerful, accurate and portable. Suitable for many applications: industrial; scientific research institutions; school and laboratories. Using d/8 geometrical optical illumination recommended by CIE, they can accurately measure the SCI and SCE reflectivity data of samples (including fluorescent samples). In a variety of colour spaces, accurately measure and express various colour difference formulas and colour indices. They come complete with high-end colour management software, which can be directly connected to a computer. Widely used in the quality control of colour difference of various products.

Key Features

3.5-inch TFT true colour capacitive touch screen

Comes with data line; 4 pcs No.5 alkaline batteries; Operating Instructions; CD-ROM (software) ; White and black calibration cavity and Protective cover

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Product Code	T01-700800	T01-700806
Illumination/Observation System	d/8 ° (Diffused illumination, 8 ° viewing angle) SCI / SCE measurement (including specular reflection and eliminating specular reflection measurement mode), including UV / exclusion UV measurement; Conforms to: CIE No.15, GB/T 3978,GB 2893,GB/T 18833,ISO7724-1,ASTM E1164,DIN5033	
Integrating Sphere Size	Φ 48mm	
Light Source	Combined LED Light Source	Combined LED Light Source; UV Light Source
Spectroscopic Mode	Concave Grating	
Sensor	256-pixel dual-array CMOS image sensor	
Wavelength Range	400nm~700nm	
Wavelength Interval/half-band width	10nm	
Reflectance Range	0~200%	
Illuminating/Measuring Aperture	Single Aperture: MAV (Big Aperture) : Φ8mm/Φ10mm	Dual Apertures; MAV (Big Aperture) : Φ8mm/Φ10mm; SAV (Small Aperture) : Φ4mm/Φ5mm
Measurement Mode	SCI & SCE	
Colour Space	CIE LAB, XYZ, Yxy, LCh, CIE LUV, Hunter LAB	
Colour Difference Formula	ΔE^*_{ab} , ΔE^*_{uv} , ΔE^*_{94} , $\Delta E^*_{cmc(2:1)}$, $\Delta E^*_{cmc(1:1)}$, ΔE^*_{00} , ΔE (Hunter)	
Other Chromaticity Data	WI: ASTM E313, CIE/ISO, AATCC, Hunter; YI: ASTM D1925, ASTM 313; TI: ASTM E313, CIE/ISO; Metamerism Index MI; Colour Stain; Colour Fastness;	
Observer	2°/10°	
Illumination	D65, A, C, D50, D55, D75, F1, F2 (CWF), F3, F4, F5, F6, F7 (DLF), F8, F9, F10 (TPL 5), F11 (TL 84), F12 (TL 83/U30)	
Display Contents	Spectral value/graph; Colorimetric value; Colour difference value/graph; Pass/Fail Result; Colour Offset;	
Measurement Time	About 1.2s (If measuring SCI/SCE at the same time, about 3s)	
Repeatability	Spectral reflectance: MAV/SCI, standard deviation within 0.1% (400~700nm: within 0.2%); Colorimetric value: MAV/SCI, within ΔE^*_{ab} 0.04 (the average value of whiteboard which was measured 30 times at intervals of 5 seconds after calibration)	Spectral reflectance: MAV/SCI, standard deviation within 0.08% (400~700nm: within 0.18%); Colorimetric value: MAV/SCI, within ΔE^*_{ab} 0.03 (the average value of whiteboard which was measured 30 times at intervals of 5 seconds after calibration)
Inter Instrument Agreement	MAV/SCI, within ΔE^*_{ab} 0.2 (Average value of 12 pcs BCRA II series color tiles)	MAV/SCI, within ΔE^*_{ab} 0.15 (Average value of 12 pcs BCRA II series color tiles)
Measurement Mode	Single Measurement, Average Measurement (2~99 times)	
Locating Mode	Camera view locating system	
Size	Length×Width×Height=184mm×77mm×105mm	
Weight	600g	
Battery	4 pcs No.5 alkaline batteries (AA alkaline battery); or USB interface as power.	
Interface	USB/RS-232	USB/RS-232, Bluetooth 4.0 Dual Mode compatible with 2.1)
Data Memory	1000 Standards, 20000 Samples (including SCI and SCE)	1000 Standards, 28000 Samples (including SCI and SCE)
Operating Temperature Range	0~40°C, 0~85%RH (No condensation), Elevation: Below 2000 m	
Storing Temperature Range	-20~50°C, 0~85%RH (No condensation)	

Accessories

Product Code: T01-700808



Mini Printer

T01 -700807



Powder Test Box