

Spectrophotometer



DS-400/410/420

Product Features

- Automatic calibration
- Support SCI/SCE
- Covering power, whiteness, yellowness and other 30+measuring indicators
- Provide nearly 40 evaluation light sources
- Measurement stability, repeatability 0.03
- Portable massive color card database
- Including UV, fluorescent color measurement can be carried out
- Built-in high-definition camera to clearly observe the tested area

Technical Data

Name	DS-400	DS-410	DS-420
Geometry [*]	D/8, SCI/SCE		
Repeatability ^{**}	$\Delta E^*ab \leq 0.03$		
Display Resolution	0.01		
Measuring aperture	Two: $\Phi 11mm, \Phi 6mm$	Three: $\Phi 11mm, \Phi 6mm, \Phi 3mm$	Five: $\Phi 11mm, \Phi 10mm, \Phi 6mm, \Phi 5mm, \Phi 3mm$
Measurement index	Reflectance, CIE-Lab, CIE-LCh, HunterLab, CIE-Luv, XYZ, Yxy, RGB, Color difference ($\Delta E^*ab, \Delta E^*cmc, \Delta E^*94, \Delta E^*00$), WI (ASTM E313-00, ASTM E313-73, CIE, ISO2470/R457, AATCC, Hunter, TaubeBergerStensby), Yi (ASTM D1925, ASTM E313-00, ASTM E313-73), Blackness (My,dM), Color Fastness, Tint, (ASTM E313-00), Color Density CMYK(A,T,E,M), Milm, Munsell, Opacity, Color strength		
Illuminants	A, B, C, D50, D55, D65, D75, F1, F2, F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, CWF, U30, U35, DLF, NBF, TL83, TL84, ID50, ID65, LED-B1, LED-B2, LED-B3, LED-B4, LED-B5, LED-BH1, LED-RGB1, LED-V1, LED-V2		
Light Source	Full-band balanced LED light source		Full-band balanced LED light source+UV
Measurement and observation mode	Visual	Camera	
Calibration	Intelligent automatic calibration		
Software support	Andriod, iOS, Windows, WeChat applet		
Accuracy	Qualified measurement	Metrology Level I	
Observer Angles	$2^\circ, 10^\circ$		
Sphere Size	40mm		
Standards	CIE No. 15, GB/T 3978, GB 2893, GB/T 18833, ISO7724-1, ASTM E1164, DIN5033 Teil7		
Spectroscopic method	Nanometer integrated spectral device		
Sensor	Silicon photodiode array double 16 groups		
Wavelength Interval	10nm		
Wavelength Range	400-700nm (Users can view the reflectivity of 31 wavelengths)		
Reflectance Range	0-200%		
Reflectivity resolution	0.01%		
Measurement method	Single measurement, average measurement (2~99 times)		
Measurement time	About 1 second		
Interface	USB, Bluetooth		
Screen	Full-color display, 2.4 inches		
Battery capacity	Rechargeable, 8000 times continuous tests, 3.7V/3000mAh		
Light Source Lifetime	10 years, 1 million tests		
Language	Chinese and English		
Storage	Instrument: 10000 pieces of data; APP: mass storage		

^{*}45 degree circular illumination/0 degree angle reception

^{**} When a white tile is measured 30 times at 5-seconds interval with MAV