Portable 45/0 spectrophotometer

DS-700C-1/2/3

Product Features

■ 45 ° circular illumination, 0 ° observation angle. The innovative circular lighting system eliminates the direction dependence and minimizes the impact of the texture. Measurement on frosted, textured and structured material surfaces brings great advantages.

■ Excellent repeatability and inter-instrument agreement.
(repeatability : dE*ab≤ 0.02 (max.) and inter-instrument agreement : ≤0.2)

■ Pass the first level measurement.

■ 10nm Resolution Grating Spectroscopy Technology.

■ More than 30 kinds of color indices and 37 kinds of illuminants.

■ It supports Android, IOS and Windows program.

■ It is with the camera to see the measurement area clearly.

Technical Data

Name	DS-700C-1	DS-700C-2	DS-700C-3
Geometry ※	45/0		
Repeatability ※※	ΔE*ab≤ 0.025	ΔE*ab≤ 0.025	ΔE*ab≤ 0.02
Inter-instrument ※※※ greement	ΔE*ab≤0.25	ΔE*ab≤0.25	ΔE*ab≤0.2
Display Resolution	0.01		
Measuring aperture	1 w/ plate and 1 w/o plate： Φ11mm，▽10mm	4 w/ plate and 4 w/o plate： Φ11mm，Φ6mm，Φ3mm，1*3mm ▽11mm，▽6mm，▽3mm，▽1*3mm	6 w/ plate and 6 w/o plate： Φ11mm，Φ10mm，Φ6mm，Φ5mm，Φ3mm，1*3mm ▽11mm，▽10mm，▽6mm，▽5mm，▽3mm，▽1*3mm
Measurement index	Reflectance,CIE-Lab,CIE-LCh,HunterLab,CIE-Luv,XYZ,Yxy,RGB,Color difference(ΔE*ab,ΔE*cmc,ΔE*94,ΔE*00), WI(ASTM E313-00,ASTM E313-73,CIE/ISO,AATCC,Hunter,TaubeBergerStensby),YI(ASTM D1925, ASTM E313-00,ASTM E313-73),Blackness（My,dM）,Color Fastness, Tint,(ASTM E313-00), Milm, Munsell, Opacity, Color strength		
Printing quality index	Color Density CMYK(A,T,E,M)	Color Density CMYK (A, T, E, M),Dot area,Dot increase, Overprint rate,Printing contrast,Gray Lecel,Hue error	
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 balancedLED light source		Full-band balanced LED light source+UV
Measurement and observation mode	Visual		
Calibration	Intelligent automatic calibration		
Software support	Andriod,iOS,Windows,WeChat applet		
Accuracy	Metrology Level I		
Observer Angles	2°，10°		
Standards	CIE No.15,GB/T 3978,GB 2893,GB/T 18833,ISO7724-1,ASTM E1164,DIN5033 Teil7		
Spectroscopic method	Grating		
Sensor	Dual-row high-precision CMOS array sensor		
Wavelength Interval	10nm		
Wavelength Range	400-700nm		
Reflectance Range	0-200%		
Reflectivity resolution	0.01%		
Measurement time	Less than 2 seconds		
Interface	USB，Bluetooth		
Screen	Full Color Screen,3.5 inches		
Battery capacity	Rechargeable, 8000 times continuous tests，7.2V/3000mAh		
Light Source Lifetime	10 years, 1 million tests		
Language	Chinese and English		
Storage	Instrument: 100 standard samples and 10000 samples; 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
※※※ BCRA Series Ⅱ, average measurement of 12 tiles