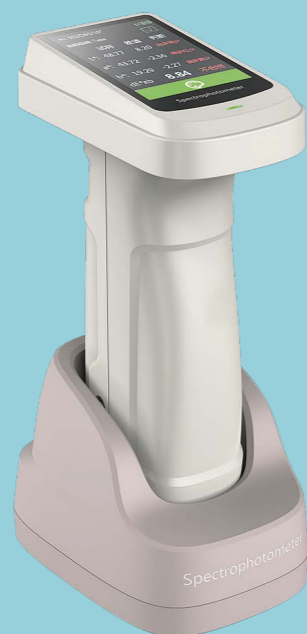


Portable Spectrophotometer



# DS-700D

## Product Features

- Excellent repeatability and inter-instrument agreement. (repeatability :  $dE^*ab \leq 0.04$  (max.) and inter-instrument agreement :  $\leq 0.25$ )
- Dual optical path high precise CMOS array sensor.
- Intelligent auto calibration, white tile is made by ZrO<sub>2</sub> with reflectance more than 90%, no need for frequent white calibration.
- 360-700nm Full Wavelength Balanced LED+UV.
- 10nm Resolution Grating Spectroscopy Technology.
- Three aperture as standard accessories, no tools are needed and apertures can be replaced at any time to meet different sample measurement requirements.
- 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

Model	DS-700D
Geometry	d/8,SCI+SCE
Sensor	Dual optical path high precise CMOS array sensor
Spectroscopic method	Grating spectroscopy
Sphere Size	Φ40mm
Wavelength Range	
Wavelength Interval	10nm
Reflectance Range	0-200%, resolution 0.01%
Light Source	LED(Full wavelength balanced LED) + UV
Measurement Time	About 1.5s
Illumination Area/Aperture	3 Apertures (MAV:Φ8mm/Φ11mm; SAV:Φ4mm/Φ6mm; MINI:1*3mm)
Repeatability <sup>*</sup>	$\Delta E^*ab \leq 0.025$
Inter-instrument agreement <sup>**</sup>	$\Delta E^*ab \leq 0.25$
Language	English and Chinese
Display Resolution	0.01
Observer Angles	2°, 10°
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
Color Spaces and Indices	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/ISO,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
Storage	APP Mass Storage
Interface	USB, Bluetooth
Battery	Rechargeable, 8000 times continuous tests, 3.7V/3000mAh
Camera to see the measurement area	Yes
Calibration	Intelligent auto calibration
Software	Andriod,IOS,Windows
Accuracy	Metrology Level I
Standards	Conform to CIE No.15, GB/T 3978, GB 2893, GB/T 18833, ISO7724-1, ASTM E1164, DIN5033 Teil7
Screen	IPS Full Color Screen,3.5 inches
Light Source Lifetime	10 years, 1 million tests

<sup>\*</sup> When a white tile is measured 30 times at 5-seconds interval with MAV  
<sup>\*\*</sup> BCRA Series II, average measurement of 12 tiles