# Portable Spectrophotometer CS-500

#### -----Revolution in color measurement



Portable spectrophotometer CS-500 is with the powerful performance configuration which makes color measurement more professional. Excellent inter-instrument agreement ensures consistency of the measurement data of multiple devices; Wireless connection with Android or IOS devices via Bluetooth. It greatly expands the application boundary of color spectrophotometer; automatic calibration, magnetic seat charging, touch screen operation... it will fully upgrade the user experience.

#### Part 1. Product Features

#### 1. 20 kinds of color indexes and 26 kinds of illuminants

Spectrophotometer CS-500 supports 26 kinds of illuminants such as D65/D50,etc. It can get the value of reflectance, CIE-Lab,CIE-LCh, whiteness, yellowness, opacity, color strength and other color indexes.

### 2. Excellent inter-instrument Agreement

inter-instrument agreement < 0.3 which ensures test results consistency of multiple devices.

## 3. Auto calibration

The revolutionary auto calibration technology allows the instrument to achieve automatic calibration, which greatly improves the user experience.

#### 4. Multi-function calibration base

The multi-function calibration base keeps the white tile being protected, combining calibration and charging functions in one. When instrument is placed on the base, it will be automatically charged and calibrated. It saves a lot of time for the user to

charge and calibration the device.

## 5. Connect to the mobile device App to expand more functions

Connect to APP to find the similar color from different color swatches. Personal color database can also be established in the cloud and samples saved in cloud can be set into target for color different test. From APP, we can also obtain instrument data or download data to the instrument.

Part 2. Technical Parameter

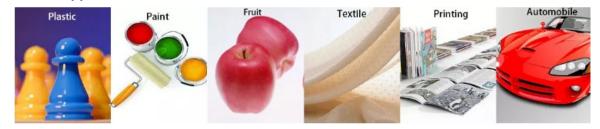
Model	Spectrophotometer CS-500		
Geometry	D/8 (diffused illumination,8° viewing), Specular Component Included (SCI)		
Light Source	LED(Full band balanced LED)		
Color Spaces and Indices	Reflectance, CIE-Lab, CIE-LCh, Hunter Lab, CIE Luv, XYZ, Yxy, RGB, Color difference (ΔΕ*ab, ΔΕ*cmc, ΔΕ*94, ΔΕ*00), WI(ASTM E313-00, ASTM E313-73, CIE/ISO, AATCC, Hunter, Taube Berger Stensby), 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		
Observer Angles	2°,10°		
Sensor	256 pixel CMOS sensor		
Calibration	Auto		
Wavelength Interval	10nm		
Wavelength Range	400-700nm		
Sphere Size	40mm		
Reflectance Range	0-200%		
Reflectance Resolution	0.01%		
Repeatability	Chromaticity value:  Max. :dE*ab < 0.1  Average :dE*ab < 0.05  Standard deviation within \( \Delta E^* ab \) 0.03 (when a white tile is measured 30 times at 5-seconds interval)  Reflectance:  Standard deviation < 0.1%		
Illumination Area/Aperture	MAV:Φ8mm/Φ11mm		
Inter-instrument agreement	$\Delta E^*ab < 0.3$ (BCRA Series II, average measurement of 12 tiles, MAV/SCI)		

Test Time	About 2s		
Storage	APP mass storage		
Battery	Rechargeable, 8000 times continuous tests, 3.7V/3000mAh		
Screen	IPS Full Color Screen,2.4 inches		
Interface	USB, Bluetooth		
Lamp Lifetime	10 years, 1 million tests		
Language	Chinese and English		
Software	Android, IOS, Windows		
Camera	without		
Pass Metrology	Yes, metrology level I		
Instrument Size	L x W x H (77.8mm x 53.2mm x 185.7mm)		
Weight	About 300g		
Packing Weight and Size	1.5kgs 32x17x29cm		

Part 3. Packing List

Qty.	Name	Qty.	Name
1	Main Instrument	1	Power Cable
1	Operating Manual	1	Charger base

## Part 4. Application



# Part 5. Warranty

