

# CS-800



## Product Introduction :

CS-800 uses 8/d (8°/diffused illumination) ,design the upward test caliber, can measure state of solid, samples of different particles, powder, paste etc. easily.

Solid samples (steel, cloth) can be placed directly on the measurement port, particles (tablets, master batch), powder (pigment, coffee), paste objects (tomato sauce) can be placed in a Petri dish, and then placed in the mouth of the measurement test.

Using ETC (Every Test Calibration) real-time calibration technique, in each measurement, the spectrophotometer will be to calibrate the system hardware and software.

This technique solves the problem of long-term stability and measurement data drift color measuring instrument fundamentally. Spectral reflectance standard deviation within 0.08, Chroma value Delta E\*ab maximum value of 0.03, the Inter-instrument agreement is less than 0.2.

The spectrophotometer can be connected through the use of PC and color management software, it is easy to the quality control and color data management of enterprises. The color management of user data, compare the color difference, generate test report, to provide a variety of color space data, color management of customized customer.

Specifications	
Illumination	d/8(Diffused lighting, 8 degrees observe angle) SCS optical engine ( light splitting and integration system) , ETC
	(real time calibration technology) ,SCI (specular reflection included) /
	SCE(specular reflection excluded) simultaneous measurement。 ( conform to CIE No.15、 ISO 7724/1、 ASTM E1164
	、 DIN 5033 Teil7、 JIS Z8722 Condition c standards)
Size of integrating sphere	Φ40mm, Alvan diffused reflection surface coating
Illumination Light source	CLEDs(entire wavelength balanced LED light source)
Sensor	dual light path sensor array
Wavelength range	400-700nm

Wavelength interval	10nm
Half spectral width	5nm
Reflectivity range	0-200%
Reflectivity resolution	0.01%
Observation angle	2°/10°
Measurement light source	A,C,D50,D55,D65,D75,F1,F2,F3,F4,F5,F6,F7,F8,F9,F10, F11,F12,DLF,TL83,TL84,NBF,U30,CWF
Data being displayed	SPD distribution/data, sample's color values, color difference values/graph, pass/fail results, color error tendency, color simulation, display measurement area,history data color simulation, manual input standard sample, generate measurement report
Measurement time	About 1 second
Measurement time interval	0.5 second
Measuring caliber	Φ11mm
Color space	CIE- L*a*b,L*C*h,L*u*v,XYZ,Yxy,reflectivity,Hunterlab,Munsell MI,CMYK
Color difference formulas	$\Delta E^*_{ab}$ , $\Delta E^*_{CH}$ , $\Delta E^*_{uv}$ , $\Delta E^*_{cmc}(2:1)$ , $\Delta E^*_{cmc}(1:1)$ , $\Delta E^*_{94}$ , $\Delta E^*_{00}$ , $\Delta E_{ab}$ (Hunter), 555,color classification
Other colorimetric indices	WI(ASTM E313-00,ASTM E313-73,CIE/ISO,AATCC,Hunter,Taube Berger Stensby), YI(ASTM D1925,ASTM E313-00,ASTM E313-73),Tint(ASTM E313,CIE,Ganz),metamerism index Milm, adhesive/changing color fastness, ISO luminance,8 gloss, A density, T density
Repeatability	light splitting reflectivity : standard deviation within 0.08% color values : $\Delta E^*_{ab} \leq 0.015$ ( After calibration, standard deviation of 30 measurements on test white board, 5 second intervals) , Maximum : 0.03
Battery capacity	rechargeable, 20000 continuous tests, 7.4V/6000mAh
Interface	USB
Data storage	40000 test results
Light source longevity	10 years, 3 million tests
Inter-instrument agreement	$\Delta E^*_{ab}$ within 0.2 ( BCRA color charts II, average of the 12 charts)
Size	350*300*200mm(L*W*H)

Weight	About 4.5kg
Display	5-inch True color screen
Work temperature range	0~45°C, relative humidity 80% or below (at 35°C) , no condensation
Storage temperature range	-25°C to 55°C, relative humidity 80% or below (at 35°C) , no condensation
Standard accessories	AC power line, manual, color management software, drive software, electronic
	manual, color management guide, USB cable, black/white calibration tube,
	electronic color charts
Optional accessories	powder molding device, measurement and test report
Color matching system	Matches
UV light source	Does not include UV light source