

CS-801



CS-801 is a highly performance spectrophotometer with test caliber sideward. The instrument adopts the geometric conditions of D/8 lighting and observation of CIE recommendations, integration of the full band LED composite light source, double beam optical system, ETC real-time calibration technology, spectral reflectance standard deviation within 0.08, maximum of colorimetric values ΔE^*ab is 0.03, to provide all the necessary color formula, coating, printing, textile, meet plastic, food, medicine, automobile field measurement needs.

Product Overview

1. Product Introduction

CS-801 uses d/8 (diffused illumination/8°) ,design the side type 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.

Product Characteristics

Illuminatio n	d/8(Diffused lighting, 8 degrees observe angle) (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
Illuminatio n Light source	CLEDs(entire wavelength balanced LED light source)
Sensor	dual light path sensor array
Wavelengt h 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	ΔE^*_{ab} , ΔE^*_{CH} , ΔE^*_{uv} , $\Delta E^*_{cmc}(2:1)$, $\Delta E^*_{cmc}(1:1)$, ΔE^*_{94} , ΔE^*_{00} , ΔE_{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,E density, M 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	ΔE^*_{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

Product Characteristic

Test caliber upward, can measure state of solid, samples of different particles, powder, paste etc. easily

Φ11mm measuring caliber

1 Uses LED light source; high capacity rechargeable lithium-ion battery 3000000 times in 10 years

1 Can measure both SCI(specular included)and SCE(specular excluded) at the same time

1 Obtained China Metrology Accreditation Certificate

1 5-inch TFT color screen

1 USB data transmission, Includes PC software to manage data

1 Large data storage : Can record 40000 test data

1 Modern and fashionable design based on human engineering

1 Easy to use operation modes and compact operation interface

1 Design of low power consumption, large capacity rechargeable lithium battery configuration

1 Can connect to mini-printers for printing