

## **Bench-top Spectrophotometer**







## **CS-820N**

## **Instrument Advantages**

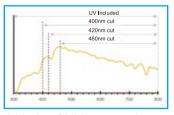
- Inter-Instrument Agreement:dE<0.15 (XLAV aperture)
- It has two kinds of light sources: pulsed xenon and LED lamps.
- 24 standard light sources, 40 measurement standards.
- Temperature and Humidity Compensation Function.
- Double optical path spectrum analysis technology.
- Simultaneous rapid measurement of SCI + SCE



4 kinds of apertures, instrument can automatically recognize and adjust light path.



Camera to view the measurement area.



4 kinds of UV test modes.



Innovative design of fixture for both stable clamping and protection of the instrument.

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Unique multifunction transmittance fixture design.



Perfect combination of accessories and instrument body, convenient for protection and storage.



Instrument is with 7.0 inches TFT touch display screen with good human-computer interface.



Intelligent instrument software, support operation wihtout PC.



Open measurement area, no limit on sample size.



Different kinds of standard accessories and optional accessories to meet the measurement requirements of different materials.

please contact us

More details

## **Technical Data**

Illumination/ Viewing System	Reflection: d/8(Diffused illumination, 8 degree viewing) Simultaneous measurement of SCI/SCE (ISO7724/1, CIE No.15, ASTM E1164,DIN5033 Teil7,JIS Z8722 Condition C standard)Transmittance d/0(Diffused illumination, 0 degree viewing)
Sphere Diameter	152mm
Wavelength	360-780nm
Wavelength Pitch	10nm
Reflectance Range	0-200%
Resolution	0.01%
Light Source	Pulse Xenon Lamp+LED
UV Measurement	Include UV, 400nm cut, 420nm cut, 460nm cut
Measurement	SCI/SCE < 2s
Time	SCI+SCE < 4s
Transmittance Sample Size	No limit on sample width and height, thickness ≤50mm
Inter-Instrument Agreement	XLAV ΔE*ab 0.15 (BCRA Series II, Average measurement of 12 tiles, at 23℃)
Measurement Aperture	Reflectance: XLAV Ф25.4mm/Ф30mm, LAVФ15mm/18mm,MAVФ8mm/Ф11mm,SAVФ3mm/Ф 6mm (Aperture size can be custom made) Auto aperture size recognition Transmittance:Ф17mm/Ф25mm
Viewing Angles	2° and 10°
Repeatability	XLAV Spectrum Reflectance/Transmittance: standard deviation within 0.1%XLAV Chromaticity value: Standard deviation within $\Delta E^*ab$ 0.015 $^*$ When a white calibration plate is measured 30 x at 5-second intervals after white calibration

Color Spaces L\*a\*b, L\*C\*h, Hunter Lab, Yxy, XYZ

color tendency

Illuminants

Display

A,C,D50,D55,D65,D75,F1,F2,F3,F4,F5,F6,F7,F8,F9,F10,F11,F12,CWF,U30,DLF,NBF,TL83,TL84

Reflectance and Transmittance graph/value, color

value, color difference values, pass/fail, olor simulation,

color assessment, haze, liquid chromaticity values,

 $\Delta$ E\*ab,  $\Delta$ E\*CH,  $\Delta$ E\*uv,  $\Delta$ E\*cmc,  $\Delta$ E\*94,  $\Delta$ E\*00, Color Difference ΔE\*ab(hunter),555 shade sor 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 E313-00, CIE, Other Indices Ganz), Metamerism index milm, stain fastness, color fastness, ISO brightness, R457, A density, T density, E density, M Density, APHA/Pt-Co/Hazen, Gardner, Saybolt, ASTM color, Haze, Total Transmittance, Opacity, Color Strength Chinese Simplified, English, Chinese Traditional, Russian, Spanish, Portuguese, Japanese, Thai, Korean, German, French, Polish 8GB Storage Memory 7 Inches Touch Screen Screen Size Power 12V/3A 5-40°C(40-104F), relative humidity 80% (at 35°C) Operate Temperature no condensation -20-45°C(-4-113F), relative humidity 80% (at 35°C) Storage Temperature no condensation Power Adaptor, USB Cable, Transmittance Fixture, USB Disk, Black Cavity, White Tile, Green Tile, 0% Calibration Cover, 30mm Aperture, 18 mm Accessories Aperture, 11 mm Aperture, 6 mm Aperture, Support, Glass Cell, Sample Fixture Transmittance Heating Fixture, Vertical Support, Optional Accessories Pneumatic ram, Small Sample Fixture, Reflectance Glass Cell Support, Corrosion Resistant Support,



Interface Instrument Size

Weight

Fiber Holder, Film Fixture, Transmittance Fixture for

Small Aperture, Trolley Case, European Standard Plug,

American Standard Plug

RS-232、USB、USB-B

465x240x260mm

10.8kg