# Compatible for solid and liquid color measurement, has multiple measuring calibers

I High intensity pulse xenon light

I Dual light path spectral analysis technology

I Has both SCI and SCE measurement modes

I Extra large display screen for easier measurement and settings

I Supporting color management software

I Has both reflection and transmission measurement

I Adjustable UV light source

I Four measurement calibers, maximum is 25.4mm

Tabletop spectrophotometer CS-820 has excellent inter-instrument agreement, precision and repeatability. It provides excellent color management and color matching options.

#### **Technology advantages**

1. Dual light path spectral analysis technology

Can acquire data from measurement sample and environmental reference in machine, in order to ensure precision and long-term stability of the instrument.

- 2. Uses D/8 lighting and observation condition, has both SCI and SCE measurement modes Uses D/8 lighting and observation condition recommended by CIE, satisfies different industries' color measurement needs; can provide both SCI (Specular component included) and SCE (Specular component excluded) color measurements, and provide full insight of the color data.
- 3. Light source is pulse xenon light

Uses pulse xenon light as light source, and covers both UV and visible spectra. Can measure dark colors precisely and provide color data, and eliminate the effects of stray light. Warm-up is not needed before the measurement.

4、Adjustable UV light source

Can adjust the percentage of the UV component of the light source

5. Can operate on the instrument with extra large display screen

The user can complete measurement without connection to the PC machine. The user can also view measurement results and complete settings on the large display screen. Or the user can use the supporting color management and color matching (ColorMatch) software.

6. Four measurement calibers.

Easy to adjust measurement caliber, with largest caliber being 25.4mm. This can satisfy the measurement needs of samples of different sizes. CS-820 can measure the color data of opaque samples,

or measure the transmission and opacity of transparent or semi-transparent samples.

## 7、 Unique calibration white board design

Can easily fit the calibration white board on the measurement port to ensure the accuracy of white calibration, and guarantees high precision measurement.

#### 8. Flexible measurement fixtures

Can fit samples of different sizes and thickness on the measurement port, and eliminate the effects of stray light on measurement results.

- High intensity pulse xenon light
- Dual light path spectral analysis technology
- Has both SCI and SCE measurement modes
- Extra large display screen for easier measurement and settings
- Supporting color management software
- Has both reflection and transmission measurement
- Adjustable UV light source
- Four measurement calibers, maximum is 25.4mm

## **Specifications**

•	
Repeatability	color values: ΔE*ab0.015, Maximum 0.03
Inter- instrument agreement	ΔE*ab ≤0.2 (BCRA color charts II, average of 12 charts)
Light source	pulse xenon light
Spectral range	360nm-740nm
Wavelength interval	10nm
Band-pass filter	10nm
Half spectral width	5nm
Reflectivity range	Reflectivity: 0% to 200%
Reflectivity resolution	0.0001
	LAV: large aperture: 2.54cm (1 inch)  MAV: 1.5cm (0.6 inch) middle aperture  SAV: 0.75cmx1.0cm (0.3 inch x0.4 inch) small aperture  VSAV: 0.3cmx0.8cm (0.12 inch x0.31 inch) very small aperture
color space	IE Lab, LCh, CIE_Luv, XYZ, Yxy, Reflectivity, Hunterlab, Munsell M I,CMYK, 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),

	metameric index Milm, colour stain, color fastness, ISO luminance, A/T/E density
color difference formula	$\Delta$ E*ab, $\Delta$ E*CH, $\Delta$ E*uv, $\Delta$ E*cmc(2:1), $\Delta$ E*cmc(1:1), $\Delta$ E*94, $\Delta$ E*00, $\Delta$ Eab (Hunter), 555, color classification
Measurement time	< 1 second
Transmission	total transmission and direct transmission
Optical configuration	Diffused/8°(Light source/measurement), 15.2cm(6 inch) integration sph ere, 2 spectrometers
Working temperature	15° C - 32° C (60° F – 90° F)
Working humidity	< 80% at 0~45°C, no condensation
Power source	117VAC/50-60Hz, 230VAC/50-60Hz
Port	USB
Size	583*330*304mm(L x W x H)