



# ***Portable Spectrophotometer LSP-C10***

## DESCRIPTION :

Portable Spectrophotometer LSP-C10 adopts 1000 line precision blazed grating as the spectroscopic element, the silicon photocell array with large photosensitive area as the detector. The full spectrum led with high life as the light source, and the optical resolution is less than 10 nm in the visible light range. Under the condition of d/8 geometric optical illumination recommended by CIE, spectrophotometer can accurately measure the SCI and SCE reflectance data of samples / fluorescent samples. It has stable performance, accurate color measurement and powerful function.

## FEATURES :

- Designed with combined LED light source with high life and low power consumption, including UV / excluding UV
- Dual optical path system, the optical resolution in the visible range is less than 10 nm
- It measures the SCI and SCE spectrum of the sample at the same time
- Accurate spectrum and lab data, used for color matching and accurate color transmission
- USB / Bluetooth dual communication mode, wider adaptability
- Large capacity storage space, which can store more than 30000 pieces of test data
- Camera locating position and Stabilizer cross measurement position
- PC software has powerful function expansion

## APPLICATION :

Sound Level Meter is used to test the sound level of environment, machinery, vehicle, ship and other noise also used for industrial environmental protection, construction, health care, teaching and research department.

## SPECIFICATION :

Model	LSP-C10
Reflect	8°(diffused illumination, 8 degree viewing angle)
Optical Geometry	SCI (specular component included)/SCE (specular component excluded) Include UV / excluded UV light source
Standards	ISO7724-1, ASTM E1164, DIN5033 Teil7
Integrating Sphere Size	Φ 40 mm
Light Source	Combined full spectrum LED light source, UV light source
Spectrophotometric Mode	Flat Grating
Sensor	Silicon photodiode array (double row 40 groups)
Wavelength Range	400 to 700 nm
Wavelength Interval	10 nm
Semi band Width	10 nm
Measured Reflectance Range	0 to 200%
Measuring Aperture	MAV: Φ8 mm / Φ10 mm
	SAV: Φ4 mm / Φ5 mm
Specular Component	SCI & SCE
Color Space	CIE LAB, XYZ, Yxy, LCh, CIE LUV, s-RGB, HunterLab, βxy,DIN Lab99 Munsell (C/2)
Color Difference Formula	ΔE*ab, ΔE*uv, ΔE*94, ΔE*cmc(2:1), ΔE*cmc(1:1), ΔE*00, DINΔE99, ΔE (Hunter)
Other Colorimetric Index	WI (ASTM E313 CIE/ISO, AATCC, Hunter),
	YI(ASTM D1925 ASTM 313),
	Metamerism Index MI,
	Staining Fastness, Color Fastness, Color Strength, Opacity, 8° Glossiness, 555 tone classification
Illuminant	D65, A , C, D50, D55, D75, F1, F2(CWF), F3, F4, F5, F6, F7(DLF), F8, F9, F10(TPL5), F11(TL84), F12(TL83/U30)
Observer Angle	2° / 10°
Measuring Time	About 1.5 s (Measure SCI & SCE about 3.2 s)
Repeatability	Spectral reflectance: MAV/SCI, Standard deviation within 0.08% (400 nm to 700 nm: within 0.18%)
	Chromaticity value: MAV/SCI, within ΔE × ab 0.02 ( When a white calibration plate is measured 30 times at 5 second intervals after white calibration)
Inter-instrument Error	MAV/SCI, Within ΔE*ab0.15 (Average for 12 BCRA Series II color tiles)
Measurement Mode	Single Measurement, Average Measurement(2 to 99 times)
Locating Method	Camera Locating, stabilizer cross position
Displayed Data	3.5 inch TFT color LCD, Capacitive Touch Screen
Data Port	USB, Bluetooth 4.2
Data Storage	Standard 1000 Pcs, Sample 30000 Pcs
Language	English
Operating temperature	0 to 40°C
Operating humidity	0 to 85 %RH
Dimension	129 × 76 × 217 mm
Battery	Li-ion battery, 6000 measurements within 8 hours
Weight	Approx. 600 g

## STANDARD ACCESSORIES :

Accessories no.	Name
1	Power Adapter
2	User Guide
3	PC Software
4	USB cable
5	White and Black Calibration Cavity
6	Protective Cover
7	Wrist strap
8	8 mm flat aperture
9	8 mm tip aperture
10	4 mm flat aperture
11	4 mm tip aperture