CM300 SPECTROPHOTO METER

Data output Charge

- Conforms with CIE No.15, ISO7724-1, ASTM E1164 and DIN5033 Teil7 standards
- Portable design, sturdy construction, anti-shaking, dustproof and knock
- D/8 geometric optical structure, suitable for a variety of measurement conditions
- Full spectrum with highlife and low power consumption, the combined LED light source
- Dual optical path system, the SCI and SCE spectra of samples can be measured simultaneously
- 2/10° standard observer angle, multiple light source mode, multiple color space a variety of chroma parameters
- Imported white board is not easy to dirty, ensure measurement accuracy



Standard measure



Sample measurement and color difference



Calibration cavity (included)



SPECIFICATION

Optical geometry		D/8 (diffuse lighting, receiving at 8° direction), SCI/SCE (including specular light/removing specular light)
Integrating sphere size		Ø40mm
Light source		combined full spectrum LED light source
Sensor		CMOS dual beam splitting sensor
Wavelength range		400~700nm
Wavelength interval		10nm
Measured reflectance range		0~200%
Reflectance resolution		0.01%
Display resolution		0.01
Color space		CIE LAB, XYZ, Yxy, LCh, CIE LUV, s-RGB, HunterLab, βxy, DIN Lab99
Color difference formula		ΔE*ab, ΔE*uv, ΔE*94, ΔE*cmc(2:1), ΔE*cmc(1:1), ΔE*00, DINAE99, ΔE(Hunter)
Other colorimetric index		Reflectivity, WI (ASTM E313, CIE/ISO, AATCC, Hunter), YI (ASTM D1925, ASTM 313), metamerism index Mt, color fastness, color fastness, strength, hiding degree, 555 tone classification, Munsell (C/2) (realized by mobile phone APP)
Observer angle		2°/10°
Illumination		D65, A, C, D50, D55, D75, F1, F2(CWF), F3, F4, F5, F6, F7(DLF), F8, F9, F10(TPL5), F11(TL84), F12(TL83/U30), U35, NBF, ID50, ID65
Measuring time		about 1s
Repeatability	**Spectral reflectance**	within 0.1% of standard deviation
	Colorimetric values	ΔE*ab≤0.04 (after whiteboard correction, measuring the whiteboard 30 times at 5s interval)
Inter-instrument error		ΔE*ab≤0.4 (BCRA series II, average value of 12 color plates)
Memory		500 records for standard sample and 5000 records for sample, supporting PC storage
Data output		USB
Light source lifetime		10 years, more than 1 million times measurements
Battery		3.7V/3000mAh, rechargeable 8000 times continuous tests
Dimension (LxWxH)		94x68x188mm
Weight		750g

INCLUDED ACCESSORIES

Main unit	1pc
Calibration cavity	1pc
USB cable	1pc

USB disk	1pc
AC/DC adapter	1pc