



CM300

SPECTROPHOTO METER



- 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*abs≤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	USB disk	1pc
Calibration cavity	1pc	AC/DC adapter	1pc
USB cable	1pc		