



Spectral Color Meter CV600

Handheld Spectrometer

Specification

Spectrum		
Sensor	CMOS Linear Image Sensor	
Wavelength Range	380 to 780 nm	
Wavelength Data Increment	1 nm	
Spectral Bandwidth	Approximately 12 nm (Half Bandwidth)	
Wavelength Reproducibility	$\pm 1 \text{ nm}^{*1}$	
Measurement Range	5 to 100,000 lx	
Illuminance Accuracy	Illuminant A @ 2,856 K at 20,000 lx ^{*2}	$\pm 3\%$
Illuminance Repeatability (2σ)		0.5%
Color Accuracy		x y: ± 0.0025
Color Repeatability (2 σ)		x y: 0.0005 (30 to 100,000 lx)
		x y: 0.0015 (5 to 30 lx)
CCT Accuracy		$\pm 2\%$
CRI Accuracy @ Ra		$\pm 1.5\%$
Stray Light	-25 dB max. ^{*3}	
Integration Time Range	100us to 1,000ms	
Digital Resolution	16 bits	
Flicker		
Measurement Range	5 to 100,000 lx	
Sampling Rate	100k sample/sec	
Frequency Range	5 to 50k Hz	

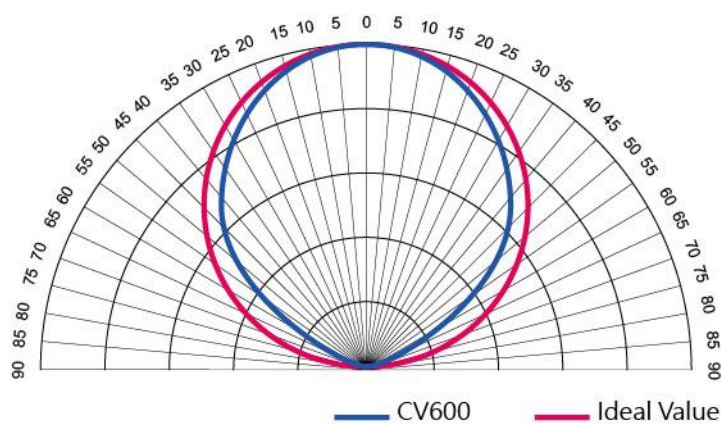
Frequency Resolution	2 or 3 Hz
Flicker Accuracy	± 5%
Feature	
Capture Function	One time / Continuous
Operation Mode	Standalone Mode / WiFi Mode ^{*4} / USB Mode (MSC Mode ^{*5}) /PC (only read)
Integration Mode	Auto/Manual
Measuring Modes	1. Basic Mode
	2. Spectrum Mode
	3. CRI Mode
	4. Flicker Mode
	5. Filter Mode
	6. Exposure Mode
	7. CIE 1931/1976 Chromaticity Mode
	8. TM-30-15 Mode
	9. Compare Mode
	10. Browser Mode
	11. Option Mode
Measuring Capabilities	1. Illuminance (LUX)/Foot Candle (fc)
	2. Correlated Color Temperature (CCT)
	3. CIE Chromaticity Coordinates (1) CIE 1931 x,y Coordinates (2) CIE 1976 u',v' Coordinates
	4. Delta uv (Duv)
	5. Color Rendering Index (CRI, Ra)/R1 to R15
	6. Television Lighting Consistency Index (TLCI)
	7. TM-30-15 (Rf, Rg, Color Vector Graphic)
	8. Flicker Frequency
	9. Percent Flicker
	10. Flicker Index
	11. LB / CC Filter (1) Light Balancing Filter (LBf) (2) Color Correction Filter (CCf) (3) Light Balancing Index (LBI) (4) Color Correction Index (CCI)
	12. Exposure (1) Shutter Priority (T Mode)

	(2) Aperture Priority (F Mode)
	(3) Shutter / Aperture Priority (TF Mode)
	(4) Exposure Value (EV Mode)
	13. Spectral Power Distribution (SPD) mW/m^2
	14. Peak Wavelength (λ_p)
	15. Peak Wavelength Value (λ_pV)
	16. Intergration Time (I-Time)

System Configurations

Display	3.5" 320X240 Resistive Touch LCD
Max. Files	≈ 69,000 Files @ 8GB SD Card (Excel + JPG)
Battery Operation Time	≤ 5 hours / Fully Charged
Power	Adapter; 2500 mAh (3.7V Rechargeable Li-ion Battery)
Data Output Interface	SD Card (SD2.0,SDHC / up to 32G) / Mini USB Port (USB 2.0) / WiFi SD Card compatible with iOS and Android
Data Format	Compatible Excel / JPG
Dimensions	147.5 x 78 x 24 mm (H x W x D)
Weight (with Battery)	225 g ± 10 g
Operating Temperature / Humidity	0 to 35 °C, relative humidity 70% or less without condensation
Storage Temperature / Humidity	-10 to 40 °C, relative humidity 70% or less without condensation
Display languages	English / Traditional Chinese / Simplified Chinese / Japanese / Spanish / German / French / Italian / Russian

Cosine Correction



*1 : Input source must be a stable light source.

*2 : Temperature $23 \pm 2^\circ\text{C}$ and relative humidity 50% or less.

*3 : Input the 550nm monochromatic light and measure the stray light ratio at $550\text{nm} \pm 40\text{nm}$.

*4 : It can be connected to mobile phones and tablets.

*5 : MSC- Mass Storage Class.

The company reserves the right to change product specifications at any time without prior notice.