UPRtek

Spectral PAR Meter PG200

Handheld Spectrometer

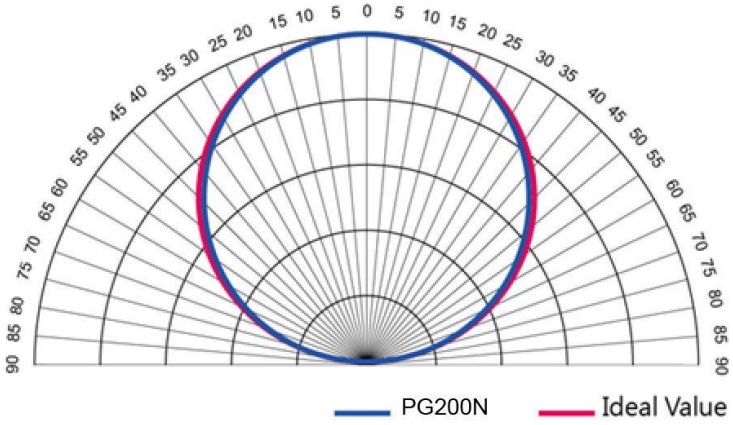
↘ Specification

Spectrum		
Sensor	CMOS Linear Image Sensor	
Illuminance meter class	Directional response conforms to JIS C 1609-1:2006 for General Class AA. Directional response conforms to DIN 5032 Part 7 Class B.	
Wavelength Range	350 to 800 nm	
Wavelength Data Increment	1 nm	
Spectral Bandwidth	Approximately 12 nm (Half Bandwidth)	
Wavelength Reproducibility	± 1 nm *1	
Measurement Range	1. 70 ~ 150,000 lx 2. 0.5~1,000 W/m^2 (Irradiance) 3. 1~3,000 µmol/(m^2*s) (PPFD)	
Illuminance Accuracy	Illuminant A @ 2,856 K at 20,000 lx *2	± 5%
Illuminance Repeatability (2σ)		0.2%
Color Accuracy		± 0.0025 in CIE 1931 x,y
Color Repeatability (2σ)		0.0005 in CIE 1931 x,y
CCT Accuracy		± 2%
CRI Accuracy @ Ra		± 1.5%
Stray Light	-25 dB max. *3	
Integration Time Range	100 us to 1,000 ms	

Digital Resolution	16 bits
Feature	
Capture Function	One time / Continuous
Dark Mode	Auto Dark
Operation Mode	Standalone Mode / Bluetooth Mode*[4] / USB Mode (MSC Mode*[5]+ PC connection)
Integration Mode	Auto/Manual
G sensor mode	Axial Displacement (x,y)
Measuring Modes	1. Basic Mode
	2. Spectrum Mode
	3. CIE 1931/1976 Chromaticity Coordinates
	4. PPFD Spectrum Mode (Including reference spectrum - Chlorophyll A, Chlorophyll B, Beta-carotene, Phytochrome A red, Phytochrome A far red)
	5. PPFD Mode
	6. Logging Mode
	7. Browser Mode
	8. Option Mode
Measuring Capabilities	1. Illuminance (LUX)/Foot Candle (fc)
	2. Correlated Color Temperature (CCT)
	3. CIE Chromaticity Coordinates (CIE 1931 x,y / CIE 1976 u',v')
	4. $\triangle x$, $\triangle y$, $\triangle u'$, $\triangle v'$
	5. Delta uv (Duv)
	6. Dominant Wavelength (λd)
	7. Excitation Purity
	8. Color Rendering Index (CRI, Ra)/R1 to R15
	9. Spectral Power Distribution (SPD) mW/m^2
	10. Peak Wavelength (λp)
	11. Peak Wavelength Value (λpV)
	12. Integration Time (I-Time)
	13. Irradiance（350nm~800nm）Wm^2
	14. Photosynthetically Active Radiation (PAR) (μmol/(m^2*s)) (1) PPFD (400nm-700nm) (2) PFD-R (600nm-700nm) (3) PFD-G (500nm-600nm) (4) PFD-B (400nm-500nm) (5) PFD (350nm-800nm)

	(6) PFD-UV (350nm-400nm) (7) PFD-FR (700nm - 800nm) (8) PFD-B:G Ratio (400-500nm:500-600nm) (9) PFD-R:FR Ratio (600-700nm:700-800nm)
System Configurations	
Display	4.3" 800x480 Capacitive Touch LCD
Waterproof level	IP66*6
Max. Files	≒ 68,000 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	Micro SD card / Type C / Bluetooth
Data Format	Compatible Excel / JPG
Dimensions	190 x 81.7 x 29.5 mm (H x W x D)
Weight（with Battery）	280 g ± 10 g
Operating Temperature / Humidity	0 to 35 ℃, relative humidity 70% or less without condensation
Storage Temperature / Humidity	-10 to 40 ℃, 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±2℃ and relative humidity 50% or less.

*3：Input the 550nm monochromatic light and measure the stray light ratio at 550nm ± 40nm.

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

*5：MSC- Mass Storage Class.

*6：Only sensor, not the whole body

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