

Light Analyzer LA-106



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Affordable and Convenient Light Analyzer with High Precision
Light Analyzer complies with Class AA of JIS C 1609-1:2006.

Features

- PPFD (400–700nm) value ● PFD (350–800nm) value
- Ultraviolet region (350–400nm) value ● Blue region (400–500nm) value
- Green region (500–600nm) value ● Red region (600–700nm) value
- Far-red to infrared region (700–800nm) value

Measures, displays, and data-logs values across 5 wavelength bands.

1. Expanded spectral wavelength range
 LA-105's range was 380–780 nm, but the LA-106 now covers 350–800 nm, enabling measurement down to 350 nm in the ultraviolet region.
2. Reduced logging interval
 Minimum logging time shortened from 10 seconds to 1 second (PC connection only).
3. Automatic dark correction per measurement
 Added function performs automatic dark correction for every measurement.



Specifications

Optical characteristics

Light-Receiving Sensor	CMOS Linear Image Sensor		
Illuminance meter class	Class AA of JIS C 1609-1:2006		
Wavelength Range	350 to 800 nm	Accuracy	±5%
Wavelength Data Increment	1 nm	Color Accuracy	at 2,856K, 20,000 lx (Standard Light Source A ²) ±0.0025 in CIE 1931 x,y
Spectral Resolution	Approx. 12 nm (half bandwidth)	Color Repeatability	0.0005 in CIE 1931 x,y
Optical Section Inner Diameter	φ6.9 ± 0.1 mm	Correlated Color Temperature Accuracy	±2%
Wavelength Repeatability	±1 nm ¹	Color Rendering Index Accuracy @ Ra	±1.5%
Measurement Range	(1) 70 to 150,000 lx (illuminance) (2) 0.5 to 1,000 Wm ⁻² (irradiance) (3) 1 to 3,000 μmolm ⁻² s ⁻¹ (photon flux density)		
Exposure Time	60μs to 1,000 ms		
Digital Resolution	16 bits		
Measuring mode	Single/Continuous (logging mode)		
Dark Correction	Automatic/Manual		
Operation mode	Standalone Mode / USB Mode (MSC Mode ³ + PC Connection Mode)		
Exposure mode	Automatic/Manual		
Display mode	(1) Basic mode (2) spectral mode (3) PFD (4) PPFD (5) CIE mode (6) Logging mode		
Measuring Capabilities	(1) Illuminance / Footcandle (fc) (2) Correlated Color Temperature (CCT) (3) CIE Chromaticity Coordinates (i) CIE 1931 x,y coordinates (ii) CIE 1976 UCS u',v' coordinates (4) Δx, Δy, Δu', Δv' (5) Δuv (Duv) (6) Dominant Wavelength (λd) (7) Excitation Purity (8) Color Rendering Index (CRI/R1 to R15) (9) Spectral Power Distribution (SPD) (10) Peak Wavelength (λp) (11) Peak Wavelength Value (λpV) (12) Radiance (350–800 nm) (W/m ²) (13) Photon Flux Density PPFD (400–700 nm) PFD-R (600–700 nm) PFD-G (500–600 nm) PFD-B (400–500 nm) PFD (350–800 nm) PFD-UV (350–400 nm) PFD-FR (700–800 nm)		

System Configuration

Display	3.5" 320 × 240 Touch LCD	Dimensions	196H × 78W × 30D mm
Maximum File Count	16 GB SD card: approx. 78,000 files (Excel + JPG)	Weight (with battery)	276 g ± 20 g
Battery Operation Time	≤ 5 hours when fully charged	Operating Temperature Range	0 to 35 °C
Battery	2,500 mAh (3.7 V rechargeable lithium-ion battery)	Storage Temperature Range	-10 to 40 °C
Interface	SD card (SD 2.0, SDHC / 1–32 GB) / USB 2.0	Display languages	English / Japanese / Chinese / German
Saved Data	Excel / JPG file format	*1: Input light source must be stable. *2: Temperature 23 ± 2 °C, relative humidity ≤ 50%. *3: MSC – Mass Storage Class	Specifications subject to change without notice.

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