

Light Meter

Spectroscopy



Absolute light measurement made simple.

Our PerkinElmer light meters offer a wide-spectrum-range, high-performance spectrometer; NIST traceable calibration; easy-to-use free software; and the best price/performance ratio in the industry.

It is the ideal instrument for the measurement of lamps, fluorescents, LEDs, LED chips, and flat-panel displays. Measure spectral irradiance ($\text{W/m}^2/\text{nm}$), absolute intensity, chromaticity (CIE 1932 2° or CIE 1964 10° observer), lab color coordinates, correlated color temperature, and color rendering indices. Included software also contains peak detection capabilities, derivatives, and smoothing functions.

- High-quality, scientific-grade, deep-well, silicon-diode array detector providing "quiet" spectra with high signal to noise
- Wide spectral range (300 nm to 1095 nm standard) with custom ranges available
- NIST calibration and certificate included
- Spec32™ software includes irradiance measurement and colorimetry modules
- DLL libraries, LabView VI, and Active X interface included – *free*
- Cosine corrector included
- Fiber-optic cable included
- Rugged and portable

Product Specifications

Part Number	CDI-LM1
Spectrometer	
Spectral Range (nm)*	300-1095
Linear Dispersion (nm/pixel)	1.6
Resolution FWHM (nm)	4
Wavelength Accuracy*	¼ pixel
Input Fiber	
Single Fiber	
Core Diameter (microns)	400
Material	Ultra Low OH or High OH
Connector	905 SMA
Input Slit Width (microns)	25
Optics	f/3
Gratings	
Lines/mm	400
Coating Material	Aluminum
Order Sorting Filter	Yes
*nominal, factory set, user-defined range in that spectral region	
Detector	
Material Type	Silicon
Number of Elements	512
T.E. Cooling	none
Pixel Dimensions (WxH)	25 µm X 500 µm
Electronics	
Integration Times	1.6 ms to 16 s
A/D Converter	16 Bit
Readout Speed	3 µs per pixel
Readout Noise *	<6 counts RMS
Offset DAC	Yes
Memory	On-Board
Microprocessor	Enhanced 8051
Strobe	TTL compatible
Lamp Drivers	Two
Power Requirements	
Voltage	5V DC
Current	8 Amps
Power Supply	Included
Communications	
USB 2.0 Interface	
Internal Wavelength Calibration	
Internal Mercury-Argon Line Source Option Available	
Physical Dimensions	
Dimensions	6.535" L x 4.173" W x 3.0" H
Weight	2 lb
Software	
The following is included free with every spectrometer purchase: Spec32™, DLLs, Lab View VI, and Active X App all with user manuals	
Warranty and Support	
Warranty	1 year
Extended Warranty	Available
Support	Several support packages available
Telephone	

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