

# CDI Light Meter

*Absolute light measurement made simple.*

CDI 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.



CDI Light meter is the ideal instrument for the measurement of lamps, fluorescents, LEDs, LED chips and flat panel displays. Measure spectral irradiance ( $\text{W}/\text{m}^2/\text{nm}$ ), absolute intensity, chromaticity (CIE 1932  $2^\circ$  or CIE 1964  $10^\circ$  observer), L a b 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, 300nm to 1095nm standard, custom ranges available
- NIST calibration and certificate included\*
- Spec 32 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

Control Development, Inc.

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**CONTROL  
DEVELOPMENT**  
*THE PRICE PERFORMANCE LEADER...*

PART NUMBER

CDI-LM1

## Product Specifications

Part Number	CDI-LM1
<b>Spectrometer</b>	
Spectral Range (nm)*	300-1095
Linear Dispersion (nm/pixel)	1.6
Resolution FWHM (nm)	4.0
Wavelength Accuracy*	¼ pixel
<b>Input Fiber</b>	
Single fiber	
Core Diameter (microns)	400
Material	Ultra Low OH or High OH
Connector	905 SMA
Input Slit Width (microns)	25
<b>Optics</b>	f/3
<b>Gratings</b>	
Lines/mm	400
Coating Material	Aluminum
<b>Order Sorting Filter</b>	Yes
*nominal, factory set, user-defined range in that spectral region	
<b>Detector</b>	
Material Type	Silicon
Number of elements	512
T.E. cooling	none
Pixel Dimensions (WxH)	25 µm X 500 µm
<b>Electronics</b>	
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
*nominal	
<b>Power Requirements</b>	
Voltage	5V DC
Current	8 Amps
Power supply	Included
<b>Communications</b>	
USB2.0 Interface	
<b>Internal Wavelength Calibration</b>	
Internal Mercury-Argon line source option available	
<b>Physical Dimensions</b>	
Dimensions	6.535"L X 4.173"W X 3.0"H
Weight	2 lb
<b>Software</b>	
The following is included free with every spectrometer purchase: Spec32™, DLLs, Lab View VI, and Active X App all with user manuals	
<b>Warranty and Support</b>	
Warranty	1 year
Extended Warranty	Available
Support	Several support packages available
Telephone	9:00 AM to 5:00 PM, EST, Mon-Fri.

Control Development, Inc., reserves the right to change specifications without notice

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