

*SD Card real time data logger, + type K/J Temp.*

# LED LIGHT METER

Model : LX-1148SD

ISO-9001, CE, IEC1010



LUTRON ELECTRONIC

*The Art of Measurement*

**SD Card real time data logger  
+ Type K/J thermometer**

# LED LIGHT METER

**Model : LX-1148SD**

**FEATURES**

* Measure White, Red, Yellow, Green, Blue, and Purple LED and Standard Lighting in Lux or Foot-Candle units.
* Light Source Selection : L0 to L9 Light Source selection.
* 3 ranges, 2,000/20,000/100,000 LUX.
* LUX & Foot Candle unit selection with default.
* Auto range for light measurement.
* Spectrum of photo sensor meets C.I.E..
* Light measurement with zero adjustment by push button.
* Separate probe, easy for operation of different measurement environment.
* Type K, Type J thermocouple thermometer.
* Real time SD memory card Datalogger, it Built-in Clock and Calendar, real time data recorder , sampling time set from 1 second to 3600 seconds.
* Manual datalogger is available ( set the sampling time to 0 ), during execute the manual datalogger function, it can set the different position ( location ) No. ( position 1 to position 99 ).
* Innovation and easy operation, computer is not need to setup extra software, after execute datalogger, just take away the SD card from the meter and plug in the SD card into the computer, it can download the all the measured value with the time information ( year/month/date/ hour/minute/second ) to the Excel directly, then user can make the further data or graphic analysis by themselves.
* SD card capacity : 1 GB to 16 GB.
* LCD with green light backlight, easy reading.
* Can default auto power off or manual power off.
* Data hold, record max. and min. reading.
* Microcomputer circuit, high accuracy.
* Power by UM3/AA ( 1.5 V ) x 6 batteries or DC 9V adapter.
* RS232/USB PC COMPUTER interface.

**GENERAL SPECIFICATIONS**

Circuit	Circuit Custom one-chip of microprocessor LSI circuit.	
Display	LCD size : 52 mm x 38 mm LCD with green backlight ( ON/OFF ).	
Measurement/ Unit	Light : LUX, Feet candle ( Ft-cd ) Type K/J thermometer : °C or °F.	
Light Sensor	The exclusive photo diode & color correction filter, spectrum designed to meet C. I. E.	
Light Source Selection :	* Light Source Selection : L0 to L9 Light Source selection. * Measure White, Red, Yellow, Green, Blue, and Purple LED and Standard Lighting in Lux or Foot-Candle units.	
Zero Adj. * Light	By push button.	
Datalogger Sampling Time	Auto	1 second to 3600 seconds @ Sampling time can set to 1 second, Setting range but memory data may loss.
	Manual	Push the data logger button once will save data one time. @ Set the sampling time to 0 second. @ Manual mode, can also select the 1 to 99 position ( Location ) no.
Memory Card	Card SD memory card. 1 G to 16 G.	
Advanced setting	* Set clock time ( Year/Month/Date, setting Hour/Minute/ Second ) * Decimal point of SD card setting * Auto power OFF management * Set beep Sound ON/OFF * Set thermometer type to Type K or Type J * Set temperature unit to °C or °F * Set sampling time * SD memory card Format	
Temperature Compensation	Automatic temp. compensation for the type K/J thermometer.	
Data Hold	Freeze the display reading.	
Memory Recall	Maximum & Minimum value.	
Sampling Time of Display	Approx. 1 second.	

Data Output	RS232/USB PC computer interface. * Connect the optional RS232 cable * UPCB-02 will get the RS232 plug. Connect the optional USB cable
Operating Temperature	0 °USB-01 will get the USB plug.
Operating Humidity	Less than 85% R.H.
Power Supply	* Alkaline or heavy duty DC 1.5 V battery ( UM3, AA ) x 6 PCs, or equivalent. * DC 9V adapter input. ( AC/DC power adapter is optional ).
Power Current	* Normal operation ( w/o SD card save data and LCD Backlight is OFF ) : Approx. DC 6.5 mA. * When SD card save the data but and LCD Backlight is OFF ) : Approx. DC 30 mA. * AC/DC power adapter is optional, consumption will increase approx. 16 mA.
Weight	Weight 346 g/0.76 LB.
Dimension	Dimension 182 x 73 x 47.5 mm (7.1 x 2.9 x 1.9 inch)
Standard Accessories Included	* Instruction manual.....1 PC * Light sensor with protective cover.....1 PC
Optional Accessories	* SD Card ( 4 GB ) * Type K thermocouple probe. * AC to DC 9V adapter. * USB cable, USB-01. * RS232 cable, UPCB-02. * Data Acquisition software, SW-U801-WIN. * Hard carrying case, CA-06.

**ELECTRICAL SPECIFICATIONS (23± 5 °C)**

**Light meter**

Measurement	Range	Max. In-range Display
LUX @ auto range	2,000 LUX	0 - 1,999 LUX
	20,000 LUX	1,800 - 19,990 LUX
	100,000 LUX	18,000 - 99,900 LUX
Feet-candle @ auto range	200 Ft-cd	0 - 186.0 Ft-cd
	2,000 Ft-cd	167.0 - 1,860.0 Ft-cd
	10,000 Ft-cd	1,670.0 - 9,290.7 Ft-cd

Range	Resolution	Accuracy
2,000 LUX	1 LUX	± ( 4 % +2 dgt)
20,000 LUX	10 LUX	
100,000 LUX	100 LUX	
200 Ft-cd	0.1 Ft-cd	± ( 4 % +2 Ft-cd)
2,000 Ft-cd	1 Ft-cd	
10,000 Ft-cd	10 Ft-cd	

*Note : Accuracy tested by a standard parallel light tungsten lamp of 2856 K degree temperature.*

**Type K/J thermometer**

Sensor Type	Resolution	Range	Accuracy
Type K	0.1 °C	-50.0 to 1300.0 °C	± ( 0.4 % + 0.5 °C )
		-50.1 to -100.0 °C	± ( 0.4 % + 1 °C )
	0.1 °F	-58.0 to 2372.0 °F	± ( 0.4 % + 1 °F )
Type J	0.1 °C	-58.1 to -148.0 °F	± ( 0.4 % + 1.8 °F )
		-50.0 to 1200.0 °C	± ( 0.4 % + 0.5 °C )
	0.1 °F	-50.1 to -100.0 °C	± ( 0.4 % + 1 °C )
		-58.0 to 2192.0 °F	± ( 0.4 % + 1 °F )
		-58.1 to -148.0 °F	± ( 0.4 % + 1.8 °F )

\* Appearance and specifications listed in this brochure are subject to change without notice.