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

LIGHT METER

Model: LX-1128SD *ISO-9001, CE, IEC1010*











The Art of Measurement

SD Card real time data logger LIGHT METER + type K/J Temp.

Model: LX-1128SD

FEATURES

	EATURES		
*	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 down load 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	Custom one-chip of microprocessor LSI circuit.			
Display	LCD size : 52 mm x 38 mm LCD with green backlight (ON/OFF).			
Measurement/		UX, Feet candle (Ft-cd)		
Unit		thermometer : °C or °F.		
Light		usive photo diode & color		
Sensor	correctio	correction filter, spectrum designed to		
Structure	meet C.			
Zero Adj. * <i>Light</i>	By push	By push button.		
Datalogger	Auto	1 second to 3600 seconds		
Sampling Time		@ 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	SD memory card. 1 G to 16 G.			
Advanced	* Set clock time (Year/Month/Date,			
setting	Hour/Minute/ Second)			
		I point of SD card setting		
		ower OFF management		
	1	p Sound ON/OFF		
		rmometer type to Type K or Type J		
		perature unit to $^\circ\!\mathrm{C}$ or $^\circ\!\mathrm{F}$		
	1	npling time		
Temperature		mory card Format ic temp. compensation for the		
Compensation		thermometer.		
Data Hold		ne display reading.		
Memory Recall		n & Minimum value.		
Sampling Time		1 second.		
of Display	прргод.	2 Second.		

Data Output	RS 232/USB PC computer interface.		
-	* Connect the optional RS232 cable		
	UPCB-02 will get the RS232 plug.		
	* Connect the optional USB cable		
	USB-01 will get the USB plug.		
Operating	0 to 50 ℃.		
Temperature			
Operating	Less than 85% R.H.		
Humidity			
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.		
	* .If LCD backlight on, the power		
	consumption will increase approx.		
	16 mA.		
Weight	489 g/1.08 LB.		
Dimension	177 x 68 x 45 mm		
	(7.0 x 2.7x 1.9 inch)		
Accessories	* Instruction manual 1 PC		
Included	* Light sensor with protective		
	cover1 PC		
	* Soft carrying case (CA-05A)1 PC		
Optional	SD Card (1 GB)		
Accessories	SD Card (2 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.		
	Data Acquisition software,SW-U801-WIN.		

ELECTRICAL SPECIFICATIONS (23 \pm 5 $^{\circ}$ C)

Light meter

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

Range	Resolution	Accuracy
2,000 LUX	1 LUX	
20,000 LUX	10 LUX	± (4 %+2 dgt)
100,000 LUX	100 LUX	
200 Ft-cd	0.1 Ft-cd	
2,000 Ft-cd	1 Ft-cd	± (4 % +2 Ft-cd)
10,000 Ft-cd	10 Ft-cd	± (4 %+20 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 ℃	-50.0 to 1300.0 °C	± (0.4 % + 0.5 °C)
Type K	0.1	-50.0 to 1500.0 (± (0.4 % + 0.5 C)
		-50.1 to -100.0 ℃	± (0.4 % + 1 °C)
	0.1 °F	-58.0 to 2372.0 °F	± (0.4 % + 1 °F)
		-58.1 to -148.0 °F	± (0.4 % + 1.8 °F)
Type J	0.1 ℃	-50.0 to 1200.0 ℃	± (0.4 % + 0.5 °C)
		-50.1 to -100.0 ℃	± (0.4 % + 1 °C)
	0.1 °F	-58.0 to 2192.0 °F	± (0.4 % + 1 °F)
		-58.1 to -148.0 °F	± (0.4 % + 1.8 °F)

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