SD Card real time data recorder, Patented
Spectral response: 400 to 1100 nm.

SOLAR POWER METER

Model : SPM-1116SD *ISO-9001, CE, IEC1010*

Lutron

LUTRON ELECTRONIC

The Art of Measurement

SD Card real time recorder

SOLAR POWER METER

Model : SPM-1116SD

FEATURES

* 3 functions : Solar power, Power integration, Transmission.
* Wide spectral range.
* Excellent long term stability.
* Select either W/m^2 or Btu / (ft^2xh) power units.
* Cosine corrected.
* Application : Meteorology agriculture solar radiation measurement solar power research physics and optical laboratories solar transmission measurement identify high performance windows
* Separate probe, easy for operation of different measurement environment.
* Both meter and probe are built the Tripod Fix Nut, easy installation.
* 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.
* Patented.

SPECIFICATIONS

Function	Solar power Transmission (%) Solar power integration	
Spectral response	400 to 1100 nm	
Measuring Unit	Solar power: W/m^2, Btu/(ft^2 x h)	
	Transmission : %	
	Solar power integration : Wh/m^2, Btu/(ft^2)	
Solar power Range/ Solar power Resolution	Range 2000 W/m^2, 634 Btu/(ft^2 x h)	
	0.1 W/m^2	<1000 W/m^2
	1 W/m^2	≧1000 W/m^2
	0.1 Btu/(ft^2 x h)	< 317 Btu/(ft^2 x h)
	1 Btu/(ft^2 x h)	≧ 317 Btu/(ft^2 x h)
Solar power Accuracy	± 10 W/m^2 typically, ± 3 Btu / (ft^2 x h) typically, or ± 5% reading, *@ whichever is greater in sunlight* *@ 23 ± 5 ℃*	
Angular accuracy	Cosine corrected <5% for angles < 60°	

Circuit	Custom one-chip of microprocessor LSI circuit.	
Display	LCD size : 52 mm x 38 mm LCD with green backlight (ON/OFF).	
Zero Adj.	By push button.	
Datalogger Sampling Time Setting range	Auto	1 second to 3600 seconds *@ Sampling time can set to 1 second, 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 setting	* Set clock time (Year/Month/Date, Hour/Minute/ Second) * Set sampling time * Auto power OFF management * Set beep Sound ON/OFF * Decimal point of SD card setting * SD memory card Format	
Data Hold	Freeze the display reading.	
Memory Recall	Maximum & Minimum value.	
Sampling Time of Display	Approx. 1 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 Temperature	0 to 50 ℃.	
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.*	
	**. If LCD backlight on, the power consumption will increase approx. 16 mA.*	
Weight	346 g/0.76 LB.	
Dimension	Main instrument : 182 x 73 x 47.5 mm (7.1 x 2.9 x 1.9 inch)	
	Sensor probe : 38 mm DIA. x 25 mm.	
Standard Accessories Included	* Instruction manual..... 1 PC * Solar sensor..... 1 PC * Hard carrying case, CA-06.....1 PC	
Optional Accessories	* SD Card (1 GB) * SD Card (2 GB) * AC to DC 9V adapter. * USB cable, USB-01. * RS232 cable, UPCB-02. * Data Acquisition software, SW-U801-WIN, SW-E802	

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