

LM-SS Portable Light Meter For Solar Sensors



The LM-SS is a low-cost, high-performance sensor readout unit with integrated datalogger.

The sensor sensitivity can be programmed into the LM-SS such that the readout will show calibrated engineering units, rather than millivolts or microvolts.

Use of the datalogger functions and programming the sensor sensitivity, requires a USB interface which is used to connect the LM-SS to a PC.

The LM-SS accommodates many sensors including E20, LP02, SR11, PSP, LI-200S, CM3, E90, LI-190S, LI-210S, E30, PIR, TUVR, CM4, CMP series, SP-Lite, NR-Lite, PAR Lite, CUV4 and other sensors with low signal outputs.

Specifications:

A/D conversion	16 bits
Full scale input	$\pm 6.25\text{mV} \dots \pm 200\text{mV}$
	Resolution: 10 uV ($\pm 200\text{mV}$; $\pm 100\text{mV}$; $\pm 50\text{mV}$)
	Resolution: 1 uV ($\pm 25\text{mV}$; $\pm 12.5\text{mV}$; $\pm 6.25\text{mV}$)
Basic accuracy	0.1%
Temperature sensitivity	< 0.5% over the full temperature range
Offset drift	< $3\text{ }\mu\text{V}$ over the full temperature range
Operation temperature range	-10 .. +40 °C
Storage temperature range	-20 .. +60 °C
Relative humidity	< 95% RH non-condensing
Input circuit	> 2 MOhm
Input low-pass filter	5 Hz
Input connectors	2 x 4mm banana plug
Display	LCD 4 digits with sign
Decimal dot position (programmable)	8888 or 888.8 or 88.88 or 8.888
Display update	At least 1 per second
Computer interface	USB 1.1 / 2.0
Supply current	< 2 mA
Batteries	2 AA alkaline
Battery life (alkaline)	> 600 hours (25 days) continuous use
Data logger memory	3518 samples
Data logger storage interval	2 .. 65535 seconds
Logged information	Min, max and average over log interval
Software compatibility	Windows 2000, Windows XP, Windows Vista
Accessory	Carrying case included