

Data Sheet

ISM400 / ISM410

Solar Power Meter

1. FEATURES

- ◆ Wide spectral range.
- ◆ Excellent long term stability.
- ◆ Cosine corrected.
- ◆ Automatic transmission measurements.
- ◆ Select either power or transmission.
- ◆ Solar energy measurement.
- ◆ Current time setting function.
- ◆ User calibration factor setting function.
- ◆ End-mount light sensor.
- ◆ Select either W/m^2 or $Btu / (ft^2 \times h)$ units.
- ◆ Data Hold/MAX/MIN/AVG modes.
- ◆ Data Memory and Read function. (99 sets)
- ◆ Auto Data Memory and RS232 interface to PC. (ISM410)

2. APPLICATIONS

- ◆ Meteorology.
- ◆ Agriculture.
- ◆ Solar radiation measurement.
- ◆ Solar power research.
- ◆ Physics and optical laboratories.
- ◆ Solar transmission measurement.
- ◆ Identify high performance windows.

3. SPECIFICATIONS

Display	LCD display, 4 digit LCD reading
Range	2000 W/m^2 634 $Btu / (ft^2 \times h)$
Resolution	0.1 W/m^2 0.1 $Btu / (ft^2 \times h)$
Spectral response	400-1100nm
Accuracy	Typically within $\pm 10 W/m^2$ [$\pm 3 Btu / (ft^2 \times h)$] or $\pm 5\%$, whichever is greater in sunlight ; Additional temperature induced error $\pm 0.38 W/m^2/^\circ C$ [$\pm 0.12 Btu / (ft^2 \times h)/^\circ C$] from $25^\circ C$
Angular accuracy	Cosine corrected $< 5\%$ for angles $< 60^\circ$
Drift	$< \pm 2\%$ per year
Calibration	User recalibration available
Over-Input	Display shows "OL"
Sampling Rate	4 times/sec
Manual Data Memory Capacity	99 sets
Auto Data Memory Capacity	43000 sets (ISM410)
Battery	4 pcs size AAA
Battery Life	Approx. 100 hours
Operating Temp and Humidity	$0^\circ C$ to $50^\circ C$ ($32^\circ F$ to $122^\circ F$) below 80%RH
Storage Temp and Humidity	$-10^\circ C$ to $60^\circ C$ below 70%RH
Weight	Approx. 158g
Dimension	H110 x D34 x W64mm
Accessories Included	Operation Manual, 4 pcs size AAA, Tripod mounted, (RS232 Cable, CD software) → Only ISM410



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