

SOLARIMETER REA3



Features

- Measuring range: 0 ... 2000 W/m² or 0 ... 634 BTU/(ft² x h)
- Resolution: 0.1 W/m² or 0.1 BTU/(ft² x h)
- Accuracy: ±10 W/m² or ±3 BTU/(ft² x h) or ±5%; whichever is greatest in sunlight
- Built-in datalogging capability allows for long-term recording of measurements over time
- RS-232 data port for downloading measurement data to PC

Description

This photovoltaic (PV) light meter is used to measure solar radiation, solar energy, or solar power. The meter's easy-to-read 4-digit LCD screen clearly displays P_{tot} in W/m² or BTU/(ft² x h), while the device's auto data memory stores up to 43,000 data sets. This unit is matched so as to provide the range required to operate with the PA Hilton range of renewable units.

Learning capabilities

- Investigation of the solar irradiation level across the solar panel to be investigated and averaged.
- Investigation of the solar panel conversion efficiency (Incident radiation v Electrical power output)

Technical Specification

- Measurement range 0 ... 2000 W/m² or 0 ... 634 BTU/(ft² x h)
- Angular accuracy Cosine corrected

- Drift: Less than 2% per year
- Sampling rate 4 times per second
- Detector M1 x silicon photovoltaic sensor

Recommended Ancillaries

- Custom matched for use with PA Hilton RE540 and RE580 Renewable Energy Study Units

What's in the Box?

- 1 x photovoltaic meter with internal sensor
- 4 x AAA Li-ion batteries
- 1 x CD-ROM with Windows-compatible software
- 1 x RS-232 cable
- 1 x Carrying case

Weights & Dimensions

- Net dimensions: 111mm x 64mm x 34mm
- Net weight: 158g

Operational Conditions

- Operating temperature range: -20°C to 50°C

Ordering information

To order this product, please call PA Hilton quoting the following code: REA3 - Solarimeter