

Digital Solar Radiation Recorder (For Global Radiation)



“Virtual” make Solar Radiation Recorder reflect state of the art in micro controller-based instrumentation design. The Global Solar Radiation Pyranometer sensor can be attached with this data logger for the collection of real time data automatically.

Features & Specifications:

- Sensor Type: Pyranometer Sensor for Global Solar Radiation
- Parameter Monitored: Date, Time, Solar Radiation (W/m²), Battery Voltage.
- Display: 16 Characters X 2 Lines alphanumeric display,
- Keyboard: 4x2 membrane keypad for onsite programming of data logger.
- Real Time Clock accuracy: Internal with ± 2 minutes / year & leap year compensation
- Number of Channels: Eight (extendable up to 16 at extra cost).
- Channels Configuration: Factory configured sensors as per purchase order.
- Memory: More than 16000 data points (extendable at extra cost). store 1 year data at user’s selectable 1 hour interval
- ADC Resolution: 16+ bits
- Unattended recording of Solar Radiation. Virtually maintenance free
- Logging Interval: 1 min to 24 Hr program log Start time within next 24 hours
- Operating Temperature: - 40 to 75 °C. Humidity: 0 to 95 % non-condensing.
- Power Supply: 12V SMF battery, Charging: Solar Panel / 220V AC (Optional).
- Battery Life: More than 1.5 Years (Easily Available in local Market)
- Solar Panel:: 12 Volt DC, Wattage: 10, 20 & 40 Watt (as per system power requirement)
- Along with Small Stainless Steel Tripod, Data Output Format: MS- Excel
- Data retrieval: Data shuttle (default) to Computer. Other options (Ethernet / GPRS) also available (at extra cost).
- Albedo Measurement is also available at Extra Cost

Global Solar Radiation Sensor:



Measurement Range 0 to 2000 W/m²
 Spectral Range approx.: 285 to 3000 x 10⁻⁹ m
 Sensitivity (nominal): 10 x 10⁻⁶ V/(W/m²)
 Operating temperature range: -40 to +80 °C
 ISO classification second class pyranometer
 Calibration uncertainty < 1.8 % (k = 2)
 Calibration traceability to WRR
 Output: Current: mV, Cable length: 3m

Application Software :

Virtualware is a user-friendly, Menu Driven, Windows based software allows you to view & save collected data from data logger to computer/laptop. Data file is saved in Microsoft’s Excel format.

Shading Ring (Optional):



Shading Ring is used for diffuse radiation measurement. Need to adjust thrice in a day. It is an optional Item and Sold at Extra Prices.

Ordering Guide:

SN	Description	Model No.	Albedo Model No.
1	Solar Radiation Recorder with Data Shuttle option	SRR-VH-GR-D	SRR-VH-GR-AB-D
2	Solar Radiation Recorder with Ethernet option	SRR-VH-GR-E	SRR-VH-GR-AB-E
3	Solar Radiation Recorder with GPRS Telemetry option	SRR-VH-GR--GPRS	SRR-VH-GR-AB-GPRS

Represented by:

****Drawing / specifications are subjected to change at any time without prior notice as per manufacturing suitability.**