



Digital Solar Radiation Recorder (Pyranometer)



A Pyranometer is an instrument for measuring solar radiation received from a whole hemisphere. This Pyranometer measures solar radiation (Shortwave) for a spectral response graph. This instrument is used extensively in meteorological studies, passive solar system analysis, irrigation scheduling, hydrologic studies and many other environmental studies. Albedo measurement is also provided at extra cost. The 'Virtual' make Pyranometer offers professional monitoring and good value for money. Our systems are known for their precision measurements, rugged construction, wide operating temperature range and low power consumption. An ideal Pyranometer measures the entire solar spectrum, 280 to 2800 nm. However, about 90% of sunlight energy is between 300 to 1100 nm. This sensor is calibrated to estimate all of the short wave energy (300 to 1100 nm) from sunlight. The system consists of a weatherproof enclosure, which contains the data logger and power supply, and comes complete with a solar panel, tripod stand and silicon Pyranometer sensor. Measurements can automatically store in systems memory as per user selectable logging period. Comes with integral solar panel, which will easily keep the batteries charged throughout the year. A durable hard enclosure protects the data logger from weathering. User-replaceable SMF batteries. Data file is saved in Microsoft's Excel.

Features:

Measured Parameter – Date, Time, Solar Radiation

LCD (16 X 2) to display the instrument status. Membrane Keyboard is provided for on site programming without help of computer. Adjustable Tripod Stand. User Programmable Logging Interval from 1 min to 24 Hour

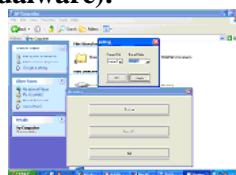
Memory range more than 4000 data sets (extendable to more at extra cost)

Rechargeable SMF batteries with integral solar panel, which will easily keep the batteries charged throughout the year. User-friendly Virtualware application software. Data retrieval by pocket size data shuttle to your computer Suitable for mounting in a variety of locations, Comes with weatherproof enclosure

Sensor Range: 0 to 2000 W m⁻², Wave Length Range: 300 to 1100 nm, Stability: 1 to 2% change over a 1 year period.

Data Retrieval options: The standard Weather Station Comes with data retrieval option through Data Shuttle. But you can also choose following data retrieval options – Thought Telephone Line Modem / GSM Modem At Extra Cost.

Application Software (Virtualware):



Virtualware is a user-friendly, Menu Driven, Windows based weather station's software allows you to view & save collected data. Data file is saved in Microsoft's Excel format.

Data Download Options: You can choose any one option given below, for data download from Pyranometer to your computer.

Data Shuttle:



The data shuttle is a pocket-sized device that can be used to download & transport the data from weather station to a computer (USB Port), allowing the instrument to stay in place for continuous monitoring/recording. The shuttle connects to a PC and is used with the “Virtualware” to download data.

Ethernet LAN :



Through Ethernet LAN to Computer. You can enter IP Address of your computer and connect to the Pyranometer. You can also get instantaneous data just press Monitor Menu. Used with the “Virtualware” software to download data.

GSM/GPRS Modem:



The GSM/GPRS Modem is a standard RS232 port based GSM modem to receive data on the PC side which sent by the logger end. This Modem works with Virtual GSM Ware Software to encoded information into database & finally into a presentable MS-Excel Report. A communication cable, Power Adopter & Antenna is shipped along with the modem. This modem too requires GSM SIM cards to function.

Following sensors can also connect with this instrument

Air Temperature & Relative Humidity Sensor

Wind Speed Sensor

Wind Direction Sensor

Rain Fall Sensor

Water temperature Sensor

Soil Temperature Sensor

Air pressure sensor (Barometer)

Water Level (Shaft Encoder Type) Sensor

Hydrostatic Submersible Level Sensor

Evaporation Sensor

Snow Gauge (Snow Water Equivalent) Sensor

Ultrasonic Snow Depth Sensor

Leaf Wetness Sensor

Soil Moisture Sensor

Electronic Tensiometer

Solar Radiation Sensor (Pyranometer)

Solar Radiation Sensor(Silicon Pyranometer)

Ultra Violet Sensor

Quantum Sensor

IR Pyranometer Sensor

Line quantum Sensor

Passive Cloud Cover Sensor

Fog Sensor

Visibility Sensor

Infrared remote Temperature Sensor

Factory: 1105/1, Salempur Rajputana Industrial Estate, Roorkee – 247667

District - Haridwar (Uttarakhand) India

Telefax: +91-1332-266186, Cell: +91-9412072697

Email: virtualroorkee@yahoo.com; vsp_roorkee@yahoo.com

Web: www.virtualweb.co.in