Kipp & Zonen
SINCE 1830

SOLRAD INTEGRATOR

- Suitable for Kipp & Zonen radiometers
- Displays correct values and units in real-time
- Pre-configured SOLRAD / Radiometer packages
- Simple Windows™ software for data visualization

SOLRAD is the ideal solution for quick and easy determination of solar irradiance exactly where it is needed. It is suitable for many applications within the meteorological, agricultural, industrial and educational sectors.

When the type and calibration factor of the radiometer is programmed into the SOLRAD the read-out on the display is the real-time calibrated value in the appropriate units. On-board firmware guides the user through set-up and operation menus.

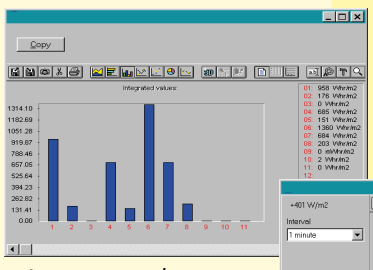
Configuration information and the measured values can be seen clearly on the 2 line 16 character display.

The display can also show integrated values over user-determined integration periods. Both manual reset and automatic reset of the integration can be selected. The automatic reset occurs at midnight (according to the internal clock). The integrated values are stored in an internal memory. Up to 31values can be stored in the memory, for example one month of daily totals.

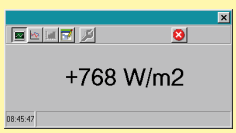
SOLRAD can be powered by a standard 9V battery that will provide approximately 25hours of operation, or from the mains through an ACadapter (included with the SOLRAD).

SOFTWARE

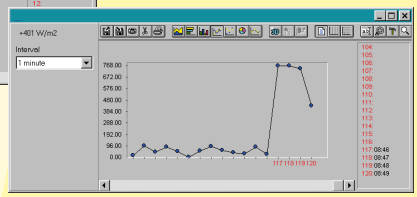
SOLRAD is supplied with a Windows™ software program and a RS-232 data cable that enables you to log measured values on disk (log interval up to 2 s), display real-time values and graphs and read-out and store the integrated values. The data format is compatible with popular spreadsheet programs such as Excel™.



Integrator values



Real-time value



Real-time Graph

SOLRAD INTEGRATOR

APPLICATIONS

- Measurement of available solar resource
- Agricultural use in greenhouses
- Threshold value determination
- Evaporation calculations
- Solar energy education

SPECIFICATIONS

Functions	Real-time or integrated value read-out Integrator reset-method: manual or automatic Internal clock Storage of last 31-measured integration values
A/D conversion	resolution 1:10.000 Offset < 5 µV over -20°C to 40°C Linearity error < 1 Least Significant Bit (LSB) Conversion rate: > 10 samples per second
Integrator	Update of integrated value every two seconds. Maximal integration value for all sensor types 2^{31}
Power supply	Standard 9 Volt battery or mains-adapter (8 - 24 VDC, 50 mA max.) Battery life-time: 25 hours minimal (Alkaline battery, type PP3)
Computer port	RS-232 standard (9600 baud)
Weight	450 g
Dimensions	100 x 197 x 50 mm (WxLxH)

The specifications of the Radiometers are available in the individual Radiometer brochures.

STANDARD DELIVERY

SOLRAD solar radiation integrator
Connector for radiometer cables
Screwdriver for mounting wires
Mains adapter 100 - 240 VAC
9 Volt battery
Manual
RS-232 cable (9/9 pin)
PC software on CD ROM

4414-319-44

SOLAR & ATMOSPHERIC SCIENCE

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