

Solar radiation meter Standard



Technical Specification

Measuring range / Resolution

	P _{tot}	T
Unit	W/m ²	°C
values	0 ... 1500	-40 ... +85
Resolution	1	0.1

- Overall accuracy P_{tot} < 3% ± 1 digit (50...1.000 W/m² / AM1,5 / normal incidence(*2) / T_{modul} = 0...+50 °C)
- Overall accuracy T < 3K ± 1 digit (-25...+75 °C) / < 1K ± 1 digit on request
- Power consumption (active Mode) 4 mW
- Rated power of integr. Solar panel 180 mW *1
- Working temperature range -20 ... +50 °C (Ambient tempratur)
- Max. ambient humidity 90 %
- Dimensions (without fastening bow) 130 x 90 x 30 mm or
- Weight (without fastening bow) 170 g
- Certification CE / EN50081, EN50082
- Calibration according to IEC904/3
Calibration certificate on request
- Warrenty 2 years

*1 at standard test conditions: P_{tot} = 1.000 W/m², spectrum AM1,5 , T = 25 °C

*2 as certified by FhG ISE Freiburg in Germany
04/2006, subject to change without notice

The standard version combines:

- a sensor for measuring global radiation,
- a sensor for measuring temperature,
- a display and operation unit and
- a solar power supply

in a weather-proof housing. The version permits measuring of current light intensity and temperature (direct measuring mode). In addition to this, a mode for registering maximum values is available.

Values mentioned above are necessary for calculating solar plants. Moreover, they are also useful within the field of building physics and for solar training facilities. The meter is delivered without mounting fixture as long-term measurements are not possible.

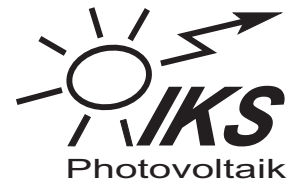


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Solar radiation meter With Datalogger / software



Technical Specification

Measuring range / Resolution

	P_{tot}	T	P_n	U_n	i_n	hour
Unit	W/m ²	°C	%	%	%	h
values	0 ... 1500	-40 ... +85	0 ... 150	0 ... 150	0 ... 150	0 ... 9999
Resolution	1	0.1	0.1	0.1	0.1	0.1 / 1

- Overall accuracy P_{tot} < 3% ± 1 digit (50...1.000 W/m² / AM1,5 / normal incidence(*2) / $T_{modul} = 0...+50$ °C)
- Overall accuracy T < 3K ± 1 digit (-25...+75 °C)
< 1K ± 1 digit on request
- Power consumption (sleep mode) 0,6 mW
- Power consumption (active Mode) 4 mW
- Rated power of integr. Solar panel 180 mW *1
- Power supply externa 9 – 12 V / 20 mA
- Data storage capacity 256 kbit
- Data transmission seriell (RS232), USB on request
- Ambient temperature range -20 ... +50 °C
- Max. ambient humidity 95 %
- Dimensions (without fastening bow) 130 x 90 x 30 mm
- Weight (without fastening bow) 170 g
- Certification CE / EN50081, EN50082, EN60068
- Calibration according to IEC904/3
Calibration certificate on request
- Warrenty 2 years

*1 at standard test conditions: $P_{tot} = 1.000$ W/m², spectrum AM1,5 , T = 25 °C

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04/2006, subject to change without notice

The extended version combines:

- a sensor for measuring global radiation,
- a sensor for measuring temperature,
- a display and operation unit,
- a solar power supply and
- a computer-assisted simulator for photo-voltaic modules

in a weather-proof housing, together with mounting fixture for wall or roof. By measuring current light intensity and temperature, typical characteristics of solar plants are simulated by the integrated computer. Thus, plumbers, architects or owners are quickly able to carry out an exact yield check of an installed solar plant.

Yield checks can be performed over any period of time by registering mean average values. Using the data-logger-method, data are periodically stored in the internal memory. Via interface cord they can be transmitted to a PC.

With the delivered software the meter is an ideal complement to simulation programs and a meaningful extension for checking the yield of solar plants.

The interface package consists of:

- D-Sub 9 cable (optional with USB-cord)
 - software SLMread (data transmission in ASCII file)
 - software SLMview (data evaluation into graphic or table)
- Software is provided on CD-ROM.

