

MacSolar – Solar Measuring Devices SOL-MAC(E)



MacSolar E (economy version)

The basic version MacSolar E 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 casing.

The basic version permits measuring the 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 MacSolar E is delivered without mounting fixture as long-term measurements are not possible.

Technical data MacSolar E

Measuring range / Resolution

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

- Overall accuracy $P_{tot} < 3\% \pm 1$ digit (50...1.000W/m² / AM1,5 / normal incidence(*2) / $T_{module} = 0...+50^{\circ}\text{C}$)

- Overall accuracy T < 3K ± 1 digit (-25...+75°C)

< 1K ± 1 digit on request

- Power consumption (active Mode) 4mW
- Rated power of integr. Solar panel 180mW *1
- Operating temperature range -20 ... +50°C (Ambient temperature)
- Max. ambient humidity 90%
- Dimensions (without mounting) 130 x 90 x 30mm i.e. 5.1 x 3.5 x 1.2 inches

- Weight (without mounting) 170g i.e. 6oz

- Certification CE / EN50081, EN50082

- Calibration according to IEC904/3

Calibration certificate on request

- Warranty 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