**Description**

Sensor for the measurement of the photosynthetically relevant portion of the solar radiation.

A silicon photodiode captures the global radiation, the sum of both the direct and diffuse components of solar irradiance. An electronical transducer converts the raw signal into a voltage linearly dependent on incident PAR (Photosynthetically Active Radiation).

An adjustable levelling plate and a bull-eye enable simple installation of the sensor.

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**Technical Data**

**Sensor**
- Sensing element: Silicon photodiode
- Transducer: Electronical transducer with voltage output
- Output signal: 0..2000 µmol/m²s = 0..5 V (PPFD)
- Output load: > 10 kOhm
- Spectral response: 400..700 nm
- Viewing angle: 2 PI steradian

**Accuracy**
- Absolute error: ± 5 %
- Cosine error: ± 6 % at 0..80° incident angle
- Long-term stability: ± 2 %/a
- Temperature coefficient: ± 0.2 %/K

**Power Supply**
- Supply voltage: 12..30 VDC
- Current consumption: 10 mA

**Casing**
- Material: Aluminium
- Protection class: IP 65, sealed electronic circuitry
- Dimensions: 65 x 59 x 68 mm
- Weight: 0.3 kg
- Mounting: The sensor mounts on a plate, central fixing screw M6, 3 adjustable screws, bull-eye level indicator
Electrical Connection

- Cable: 4 x 0.22 mm², shielded
- Cable length: 2 m
- Terminals: Open wires

Wiring

- red: (+) power supply
- blue: (–) power supply
- yellow: (+) output
- green: (–) output (ground)
- black: Cable screen

Environmental Conditions

- Operating temperature: –30..+60°C
- Relative humidity: 0..100 %

Compliance

- CE label: The sensor meets European recommendations concerning electrostatic discharge protection.