

Pyranometer (global radiation)



Description

The sensor records the global solar radiation. Due to its continuous spectral sensitivity and the temperature compensation, the sensor is also applicable under conditions with very high or low temperatures and with conditions, on which the spectrum differs strongly from the ideal solar spectrum, e.g. with clouds, under plant shading, in the case of reflection radiation or lamp light

Characteristic

- registration of the global radiation of the sun
- continuous spectral sensitivity - wide spectral region
- thermocouple
- temperature compensation
- durable, weather-resistant housing
- in compliance with ISO 9060

Technical Data

Sensor element	special SI - Photodiode
measuring range	0 ... 100 klx
output Signal	0 ... 10 mV
basic accuracy	± 7 %
non-linearity	± 3 %
Azimuth error	± 4 %
Angle noise	± 5 %
Long-term drift	< ± 2 %/a
response time	< 5 ms
Temperature coefficient	< 0,2 %/K
operating conditions	-30 ... 60 °C
degree	0 ... 100 % r.F
degree of protection	IP 65
Cable	1,40 m

Options

- Changed measuring range (e.g. 0... 10 klx, 0... 120 klx among other things.)
- Milli volt output signal up to max. 0... 100 mVs - all mV remarks do not need a current Power supply?
- Integrated transmitter for current or tension exit, e.g. 0... 10 V, 0... 5 V, 4... 20 mA operating voltage for integrated transmitter 12... 24 VDC, 24 VDC or according to its desire cable –
- Cable - Standard is PVC cable when desired in addition, UV steady silicone cable
- Cable lengths
- Output signal delimitation with connection at SPS
- poured printed circuit board for outside and greenhouse use