

Luxmeter Sensor *standard*



Description

Sensor for the measurement of illuminance.

A silicon photodiode captures the global radiation, the sum of both the direct and diffuse components of solar irradiance. An electrical transducer converts the raw signal into a voltage linearly dependent on incident illuminance.

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

Technical Data

Sensor

Sensing element.....	Silicon photodiode
Transducer.....	Electronical transducer with voltage output
Output signal	0..100 klx = 0..5 V
Output load	> 10 kOhm
Spectral response.....	380..780 nm
Viewing angle	2 PI steradian

Accuracy

Absolute error	± 8 %
Cosine error.....	± 6.5 % of reading 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.



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