ML-02 Si-Pyranometer

Technical Specifications

ISO 9060:2018 Class C

Sub-category "Fast response"

Most compact industrial sensor

Low temperature dependency

Fast response photodiode

The ML-02 sensor (ISO 9060:2018 Class C) is made for light measurements in industrial environments. The compact dimensions of the sensor body make it easy to integrate within any application. Due to its low weight and low profile, the sensor can be easily attached to any light receiving surface. The Mono-Silicon detector with UV resistant diffuser gives a cosine response also at low solar elevation angles. Besides the effects of soiling or water deposition on top of the diffuser will be minimized due to the cone shape geometry. The sensor can be used on drones, UAV's, balloon sonds,the renewable industry where efficient energy supply systems will be integrated into building facades, automotive and wearables. Built a cost-effective PV rooftop monitoring system in combination with the ML-02, M-box (Modbus®) and PT-100 temperature sensor. We provide different mounting options to easily integrate the sensor. The ML-02 detector with high analog output and can be combined with our industrial interfaces MC-11, MC-20, A-box and M-box. The sensor has 2 years warranty and calibration compliant to the international standards defined by ISO9847.

	ML-02
ISO 9060:2018	Class C
ISO 9060:1990	Not compliant
Sub-category "Spectrally flat"	Not compliant
Sub-category "Fast response"	Compliant
Output	Analog (mV)
Response time 95%	< 1 ms
Zero off-set a) 200W/m²	0 W/m²
Zero off-set b) 5K/hr	0 W/m²
Complete zero off-set c)	0 W/m²
Non-stability change/1 year	+/- 2 %
Non-linearity at 1000W/m²	< 0.2 %
Directional response at 1000W/m²	< 10 W/m²
Spectral error	+/- 3.07 %
Temperature response -10°C + 40°C	< 0.15 %/°C
Tilt response	0 %
Sensitivity	Approx. 50 µV/W/m²
Impedance	50 Ω
Operating temperature range	-30 - 70 °C
Irradiance range	0 - 2000 W/m²
Cable length	5 m
Wavelength range	400 - 1100 nm

Specifications are subject to change without further notice.