



ML-02 Si-Albedometer

Technical Specifications

ISO 9060:2018 Class C

Sub-category "Fast response"

Most compact industrial sensor

Low temperature dependency

Fast response photodiode

ML-02 Albedometer is a compact and cost-efficient solution for measurements of reflected irradiance and albedo. A special housing with a bubble level and 70cm mounting rod makes it easy to use in any application.

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 ML-02 detector has a high analog output and can be combined with our industrial interfaces MC-11, MC-20, A-box and M-box to convert the signal to

4-20mA or Modbus 485 RTUS. The sensor has 2 years warranty and calibration compliant to the international standards defined by ISO9847. A two-channel datalogger L-Box can be used to log the data from the albedometer.

	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/m ²
Zero off-set b) 5K/hr	0 W/m ²
Complete zero off-set c)	0 W/m ²
Non-stability change/1 year	+/- 2 %
Non-linearity at 1000W/m²	< 0.2 %
Directional response at 1000W/m²	< 10 W/m ²
Spectral error	+/- 3.07 %
Temperature response -10°C + 40°C	< 0.15 %/°C
Tilt response	0 %
Sensitivity	Approx. 50 µV/W/m ²
Impedance	50 Ω
Operating temperature range	-30 - 70 °C
Irradiance range	0 - 2000 W/m ²
Cable length	5 m
Wavelength range	400 - 1100 nm

Specifications are subject to change without further notice.