



## ML-02 Si-Pyranometer

### Technical Specifications

Most compact industrial sensor

Low temperature dependency

Fast response photodiode

The ML-02 sensor 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.

	<b>ML-02</b>
<b>Output</b>	Analog (mV)
<b>Response time 95%</b>	< 1 ms
<b>Zero Offset A 200W/m<sup>2</sup></b>	0 W/m <sup>2</sup>
<b>Zero Offset B 5K/hr</b>	0 W/m <sup>2</sup>
<b>Non-stability change/1 year</b>	+/- 2 %
<b>Non-linearity at 1000W/m<sup>2</sup></b>	< 0.2 %
<b>Directional response at 1000W/m<sup>2</sup></b>	< 10 W/m <sup>2</sup>
<b>Temperature response -10°C + 40°C</b>	< 0.15 %/°C
<b>Tilt response</b>	0 %
<b>Sensitivity</b>	Approx. 50 μV/W/m <sup>2</sup>
<b>Impedance</b>	50 Ω
<b>Operating temperature range</b>	-30 - 70 °C
<b>Irradiance range</b>	0 - 2000 W/m <sup>2</sup>
<b>Cable length</b>	5 m
<b>Wavelength range</b>	400 - 1100 nm

Specifications are subject to change without further notice.