



ML-01 Si-Pyranometer

Technical Specifications

GHI Irradiance measurements

Excellent Cosine response

Low temperature dependency

Fast response photodiode detector

Industrial grade Si-pyranometer with removable mounting plate

ML-01 Si-pyranometer complies to ISO 9060-2018 "Fast response class C" and is made for high quality irradiance measurements. The ML-01 is an industrial grade solar sensor specially made for irradiance measurement applications for the meteorological, agricultural and environmental studies. The compact dimensions of the sensor body make it easy to integrate it within any application using it with or without a mounting plate. For global horizontal measurement applications, the sensor can be mounted in the horizontal position with a standard removable mounting plate with a spirit level and leveling feet. 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-01 pyranometers are manufactured in a consistent way followed by strict quality inspection and performance evaluation. EKO provides a unique calibration compliant to the international standards

defined by ISO/IEC17025/9847. The sensor has 2 years warranty with 2 years re-calibration interval are recommended.

	ML-01
ISO 9060:2018	Class C
ISO 9060:2018	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/m ²	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/m ²	< 0.2 %
Directional response at 1000W/m ²	< 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
Wavelength range	400 - 1100 nm (50% points)
Operating temperature range	-30 - 70 °C
Irradiance range	0 - 2000 W/m ²
Cable length	5 m

Options	ML-01
Leveling Plate	Optional

Specifications are subject to change without further notice.