

ML-01, ML-02

Small Size, Fast Response, Outstanding Versatility



Overview

The compact, industrial-grade ML-01 silicon pyranometer is made for high-quality irradiance measurements. ISO 9060:2018 Class C, fast response, light but tough, the ML-01 and its smaller sister sensor, the ML-02, both feature a mono-silicon detector with a UV-resistant cone-shaped diffuser that helps to minimise soiling and water deposition, delivering an excellent cosine response, even at low solar elevation angles.

Made in Japan and manufactured to EKO's strict quality standards, the ML-01 and ML-02 are compliant with international standards, offering a cost-effective alternative to larger thermopile-based sensors that is easy to integrate into any project or application

The ML-02 can also be combined with the M-box (Modbus®) Signal Converter and PT-100 temperature sensor to build a cost-effective PV rooftop monitoring system.

Features



20mm

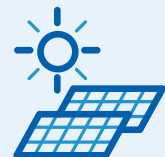
Only 20mm across, tough and easy to install



Fast response photodiode detector for always accurate measurements



<0.15%/°C Low-temperature dependency & spectral response equivalent to PV modules

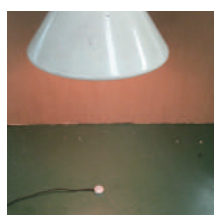


Different mounting accessories, whatever your application

	ML-01	ML-02
Measurement Range	0 ~ 2000 W/m ²	
Spectral range	400 ~ 1100 nm	
Response time	<1 ms	
Sensitivity (approx.)	50 $\mu\text{V}/\text{W}\cdot\text{m}^{-2}$	
Output (0 to 100mV Range)	0 ~100 mV	
Internal Resistance (approx.)	48 Ω	
Operating Temperature	-30 ~ +70 °C	-30 ~ +80 °C
Temperature Dependency	< 0.15 %/°C	
Directional Response (0 to 80°)	<± 5 %	
Field of view	180°	
Stability	<± 2 %/year	
Dimension	Ø22 x 28.5 mm	Ø20 x 7.5 mm
Weight	30 g	10 g
Output Cable	5m (Optional 10m, 30m, 50m)	5m

Applications

Designed for meteorological, agricultural and environmental monitoring applications, the ML-01 and ML-02 are versatile and cost-effective. Small, light, and accurate, with a range of mounting accessories, they've been fixed to drones, building exteriors, integrated into the bodywork of solar-powered vehicles, and more.



Under light



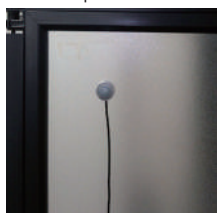
Simple albedo



Automotive



Door



Window



PV module frame

Accessory ML-01 Base Plate



QR

Use the QR code to visit our website, contact our team, or to find out more about the **ML-01** and **ML-02** pyranometers, other related products, and the full range of industry-leading EKO sensors and instruments.



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