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WHEN MEASUREMENTS MATTER

# MS-80SH-L

## Class A Spectrally Flat and Fast-Response Pyranometer with Integrated Dome Heater

## Resumen

The MS-80SH, manufactured by EKO Instruments, is an innovative, next-generation ISO 9060 Class A spectrally flat and fast-response (secondary standard) pyranometer. The pyranometer features a compact design with internal desiccation, a single dome over a quartz diffusor, a thermally isolated thermopile detector, negligible thermal offsets, ultra-low temperature dependency, and exceptional non-linearity characteristics. The MS-80SH has a five-year warranty and recalibration interval.

EKO instruments is the longest-operating ISO 17025-accredited pyranometer manufacturer in the world. This allows for the highest-quality calibration and for Campbell Scientific to comply with international standards (ISO/IEC 17025 for ISO 9847).

## Ventajas y características

- ISO 9060 Class A spectrally flat with fast response (secondary standard)
- Integrated dome heater for dew and frost mitigation as per IEC 61724-1:2021 Class A monitoring requirements
- Ability to be combined with MV-01 external heater and ventilator in more harsh conditions
- Industry-leading stability
- ISO 17025-certified calibration
- Five-year warranty and recalibration interval

## Especificaciones

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| Sensor | Internal desiccation, single-dome, isolated thermopile detector, quartz diffusor |
| Measurement Description | Monitors solar radiation for the full solar spectrum range |
| ISO Classification | ISO 9060 Class A spectrally flat and fast-response pyranometer (secondary standard)<br>ISO 17025 Class A pyranometer |

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| Output | Modbus RTU over RS-485 (digital) |
| Sensitivity | ~10 µV/W/m$^2$ |
| Response Time | < 1 s (95%) |
| Zero Offset A | < 1 W/m$^2$ (response to 200 W/m$^2$ net thermal radiation) |
| Zero Offset B | ±1 W/m$^2$ (response to 5 K/h change in ambient temperature) |
| Non-Stability | ±0.5% change per 5 years |

Para más detalles visite: www.campbellsci.es/ms-80sh-l

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|---|---|
| Non-Linearity | ±0.2% (at 1000 W/m$^2$) |
| Directional Response | ±10 W/m$^2$ (at 1000 W/m$^2$) |
| Spectral Selectivity | ±3% (0.35 to 1.5 µm) |
| Temperature Response | ❱ < 0.8% (-10° to +40°C)<br>❱ < 1% (-20° to +50°C) |

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|---|---|
| Tilt Response | < ±0.2% (0 to 90° at 1000 W/m$^2$) |
| Operating Temperature Range | -40° to +80°C |
| Irradiance Range | 0 to 4000 W/m$^2$ |
| Spectral Range | 285 to 3000 nm |
| Ingress Protection | IP67 |

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