

MS-020VM PYRANOMETER & MS-PAR QUANTUM SENSOR

MS-020VM PYRANOMETER



MEASUREMENT TECHNIQUE

The selected silicon transducers, specially treated filters and distinct domed glass transducer cover makes our irradiance sensors extremely stable and precise instruments. Nearly meeting the WMO's Primary Standard accuracy guide.

ASSEMBLY

Each sensor is integrated in a stainless steel mounting plate with integrated spirit levels. Adjusting is made by turning the bolt head.

OUTPUT

For flexible interfacing to any data collection device: datalogger, PC, etc., the MS-series sensors have an integrated amplifier that supplies a linear voltage output of 0..1 volt full scale. The MS-series sensors are powered by an unregulated 12..24V dc @7mA, making these sensors ideal for remote operation.

PYRANOMETER

To MS-020VM measures global irradiance and are commonly used in applications including: agriculture, photovoltaic plants, meteorology, site evaluation programs and science.

PAR-SENSOR

The MS-PAR is most commonly used to measure Photosynthetically Active Radiation (PAR) in green houses, growth chambers, photosynthesis related studies, etc.

The irradiance of the sun is an important factor to be measured in agriculture, photovoltaics, solar energy collection and for meteorological purposes. There are two series of sensors, that are the most commonly required: Pyranometer that can measure the solar irradiance within a wavelength of 400 to 1100nm, and PAR-sensor (Photosynthetically Active Radiation) configured to detect the number of photons.

MS-PAR QUANTUM SENSOR



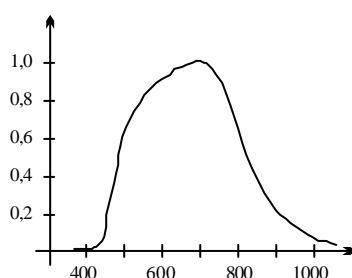
CALIBRATION

All Pyranometers are calibrated under clear natural sky at approx. 20 ambient temperature against a thermopile-pyranometer (secondary standard).

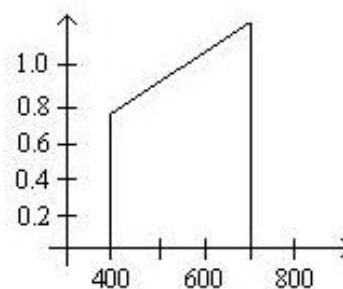
BENEFITS

- Small temperature dependence
- Integrated amplifier for voltage output
- Long-term stability
- Meets CE requirements
- Power by unregulated voltage

SPECTRAL RESPONSE



MS-020VM

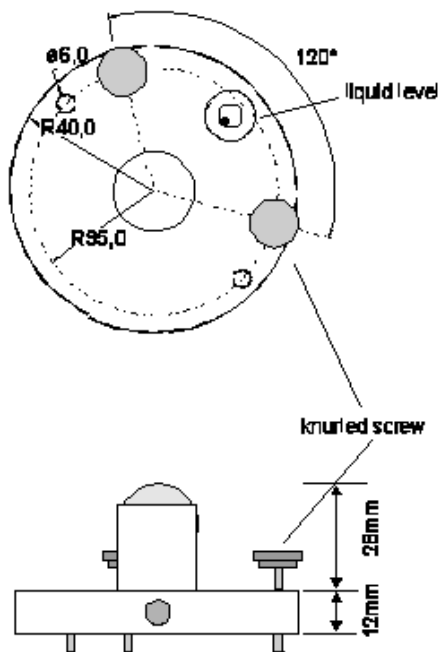


MS-PAR

DATA

	MS-020VM		MS-PAR
Measuring range	0..1400W/m ²	Measuring range	0..3000 μ mol/sm ²
Output	0..1V	Output	0..1V
Maximum load	@ >5KOhm load	Maximum load	@ >5KOhm load
Temperature drift	<0.15% /K	Temperature drift	<0.15% /K
Spectral response	400..1100nm	Spectral response	400..700nm
Accuracy	<4%	Long-term stability	<2% /Year
Long-term stability	<2% /Year	Delay	<50ms
Delay	<50ms	Power Supply	12..24V (7mA@24V)
Power Supply	12..24V (7mA@24V)	Temperature range	-40 ..+60
Temperature range	-40 ..+60	Offset	<5mV@0 μ mol/sm ²
Offset	<5mV@0W/m ²	Cosine error	<10% @80 °
Cosine error	<10% @80 °	Weight	@180g
Weight	@180g	Cable	2m
Cable	2m		

MS Mounting plate with liquid level



WIRING

