



EMS Brno

Data Acquisition Environment
Hardware – Software – Cloud application
www.emsbrno.cz

Global radiation sensor EMS 11

Main features:

- Low cost
- Glass diffuser – long time period between recalibrations
- Silicon semiconductor photovoltaic detector
- Connector in sensor body



Specification:

- Voltage output
- Sensitivity typically 20 mV per 1000 W m⁻²
- Calibration error under the daylight condition max. 7%
- Linearity max. 1%
- Cosine error <10% up to 85° angle of incidence
- Operating Temperature -40 to 60 °C
- Size: diameter 22 mm, length 39 mm

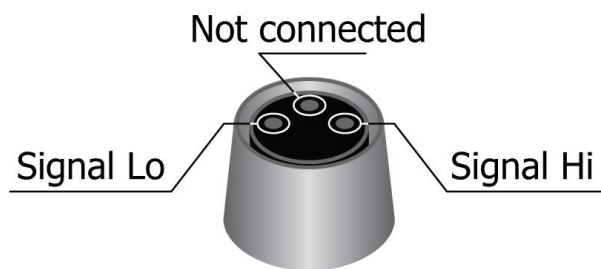


EMS 11 in AL0171 holder

Specification

Output	Voltage
Sensitivity	20 mV per 1000 W m ⁻²
Linearity	Better than 1%
Connection	Three wire Escha M8 connector female
Size (diameter x length)	22 x 39 mm
Weight	30 g
Operating environment temperature	-40 to 60 °C
Operating environment humidity	0 to 100%
Protection	IP 68

**Global radiation sensor EMS 11
- female connector wiring**



**Standard M8 male
connector cable wiring**



Brown - Signal Hi
Black - Not connected
Blue - Signal Lo

EMS 11 – cosine characteristic:

