Modbus RTU RS485 Double Angle Perc-Irradiance Sensor Datasheet

Product Name : Modbus RTU RS485 Double Angle Perc-Irradiance Sensor

Product Code : CAPIRS-MB



Overview

The sensor transmits the measured irradiance value in the standard 4–20 mA analog signal format. It can be mounted independently of the panel plane, allowing the cell to be adjusted to the desired angle. It provides critical data for energy production, efficiency analysis, and performance monitoring.

Application Areas

- Solar Power Plants
- Wind Power Plants
- Meteorological Applications
- Agricultural and Greenhouse
- Industrial Applications
- Maritime and Ports
- Forest Regions
- Highway Applications

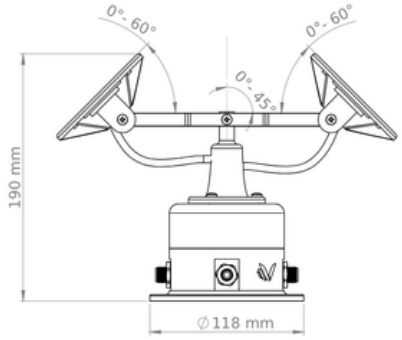
Electrical Specifications	
Measurement Range	: 0 ~ 1600 W/m²
Operating Temperature	: −35 ~ 80°C
Resolution	: 0.1 W/m²
Uncertainty	: ≤ 2%
Response Time	: 0.5 sn
Drift	: < 0.25% / yıl
Field of View	: 175°
Tilt-Azimuthal Angle	: 0°~ 0°
Moving Head Panel Angle	: 0°~ 60° (Single Direction)
Cell Head Connection Stick	: 0°~ 45° (Dual Direction)
Connection Output	: Modbus RTU RS-485
Supply Voltage	: 9-48 V DC
Current Consumption	: 10 mA @24 VDC
Cell Temperature Range	: −40 ~ +100°C (PT1000 Class 1/10)
Cell Technology	: Monocrystalline PERC Cell

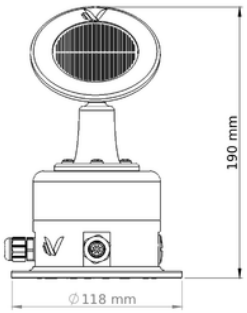
Standarts & Tests & Calibration	
Compatible Standard	: IEC 61724-1:2021 and IEC 60904
Calibration	: Calibrated under Class AAA solar simulator and natural sunlight in accordance with IEC 60904-2 and IEC 60904-4 standards.
Stability Test	: Tested under natural sunlight by comparison with reference cells calibrated by independent testing organizations
Cell Strength Test	: Tested cell manufacturer under opposite current and reported .

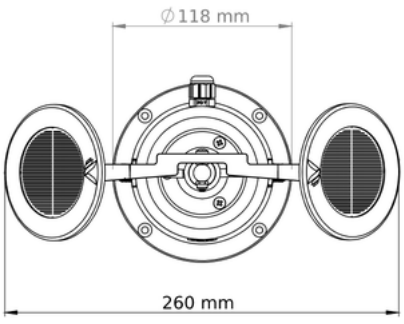
Cable and Connection Specifications		
Cable Length	: 3 m	
Connector Type	: IP 67	
White	: 9- 48 V DC (+)	○
Brown	: GND (-)	●
Yellow	: Data (+)	●
Green	: Data (-)	●

Mechanical Specifications	
Dimensions	: Ø118 x 190 x 260 mm
Housing	: Aluminum
Protection	: IP 65

Technical Specifications







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