

Energy Management Control solution for Renewable Energy Type PVS1

CARLO GAVAZZI



- Solar irradiation sensor for photovoltaic applications
- No need for external power supply (auto-powered)
- Aluminium case for longer life
- UV resistant resin encapsulation
- Fast clamping system for easier installation
- Calibration process according to IEC 60904-2 and 60904-4
- Anti-ageing treatment
- Calibration certificate available (option)

Product description

PVS1 is a solar irradiation sensor based on photovoltaic technology. A crystalline silicon cell is used to measure the solar irradiation, so as to match the same typical behaviour as photovoltaic modules in terms of light wavelength response. The sensor, installed with the same tilt and azimuth of the PV modules, measures the solar irradiation and provides the measurement as

an analog electrical signal by means of its mV output to be connected to an opportune measuring device such as the environmental module (VMU-P) of the Carlo Gavazzi's Eos-Array/ Eos-Web system. PVS1 is a ruggedized sensor with an aluminium case and an UV resistant encapsulation so as to avoid issues driven by adverse weather conditions and humidity; installation is

How to order

PVS 1 V X W X X

Model	
Sensing	
Output	
Power supply	
Wiring	
Input	
Option	

fast, thanks to the clamping system designed to fit easily the photovoltaic module's frame. The 3% accuracy is stable as time goes by,

thanks to a special anti-ageing treatment. A calibration certificate according to the relevant guidelines is available on request.

Type Selection

Sensing	Output	Power supply	Wiring
1: irradiation	V: analog mV	X: auto-powered	W: wired connection
Input	Option		
X: none	X: none C: calibration certificate		

Specification

Hardware characteristics	Aluminium made UV resistant resin ⁽¹⁾ Aluminium screw-clamp for direct module-frame mounting	improved specification stability
Case Encapsulation Mounting system		
Electrical connection	3 pin male/female IP67 M8 type connector	From 0 to 1250 W/m2 STC From -10 to 80°C
Size	57 x 48 x 15 mm (not including clamp)	80 mV @ 1000 W/m2 STC ±3%
Sensor specification		Auto-powered
Sensor type Calibration	Crystalline silicon cell According to IEC 60904-2 and 60904-4	0.5m cable with 3 pin connector (male and female)
Stability	Anti-ageing treatment for	Aluminium fastening clamp with fixing screw for PV module frame mounting
		Mounting options

(1): Some inclusions may be visible into the encapsulation resin: it is a result of the resin coating process, and it does not affect the system's performances and accuracy

Specification are subject to change without notice PVS1 DS 050612