

Module temperature sensor



POSSIBLE APPLICATIONS

- Photovoltaic (PV) systems

Optimal module temperature measurement for photovoltaic systems

The Sensor 829 was specially developed for precise measurement of the module temperature of photovoltaic (PV) systems. A Pt100 measuring resistor is used as the measuring element, which is securely housed in a seawater-resistant aluminum enclosure. A special potting compound ensures optimum heat conduction between the housing and the measuring element. The temperature can be recorded in a 4-wire circuit via the permanently connected cable. This design and the shielded cable make the measurement less sensitive to external interference.

- High precision in module temperature measurement
- Robust, seawater-resistant housing
- Optimal heat conduction thanks to special casting compound
- Insensitive to external interference thanks to shielded cable



PRODUCT OVERVIEW

Module temperature sensor

Professional Line	Module temperature sensor
Ident-No.	00.08290.000030
Measuring ranges	-40...+105 °C
measurement accuracy	(0.3 + 0.005 · T)
Self-heating at 0 °C	< 0.5 kW/mW
Measuring temperature (DC) at 25 °C	1.0 mA
Areas of application	-40...+105 °C
Maximum permissible peak current at 25 °C	3.0 mA
Insulation resistance	> 10 MΩ
Measuring elements	Pt100 F 0.3 or DIN EN 60751
Dimensions	Cable length: 3000 mm; Housing thickness: 10 mm; Housing diameter: 39.5 mm
Protection class	IP67
Weight	0.4 kg
Cable	Length 3 m, shielded, with bending radius = 41 mm (UL/cUL UL-Style 20233 approval)
Accessories (order separately)	Pt100-Modbus Converter

As of June 9, 2026