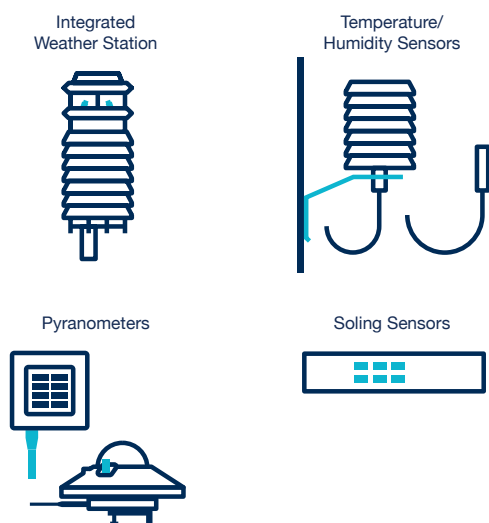


PowerMET CE: Utility grade Met station

Empowering energy stakeholders to rapidly scale and confidently optimize the clean energy portfolios, AlsoEnergy provides an edge-to-cloud platform that drives insightful decisions that improve portfolio performance. At the edge, PowerMET CE, our universal system for the measurement of ambient conditions, is capable of integrating different weather sensors into the plant communication network. The basic system offers 4 optically isolated RS485 half duplex interfaces (Modbus-RTU) for the connection of digital irradiation sensors: e.g. pyranometers and/or reference cells; or a compact weather station for recording wind, precipitation and humidity values. PowerMET CE optionally offers six RTD interfaces for the connection of analog temperature sensors type Pt100 and Pt1000. PowerMET CE ensures reliable measurement of irradiation, which is a basis for yield loss calculations. Coupling the PowerMET CE with a buffered power supply, available as an option with the PowerManager CS (PMCS), ensures operations even in the event of AC supply failure. PowerMET CE can be extended with additional options and is suitable for outdoor installation.

Product overview

Modbus RTU enabled gateway for connecting digital sensors that collect critical data for the operation and yield of PV power plants.



PowerMET CE features

- Power supply options
 - 24 V DC via data logger or other external source
 - 85-264 V AC wide range
- UV-resistant lockable plastic cabinet
- Wall mounting, module-frame, or pole mounting

Data points collected

- Irradiation
- Ambient temperature
- Module temperature
- Atmospheric pressure
- Air humidity
- Wind speed
- Wind direction
- Amount, duration and intensity of precipitation

Technical data

Hardware	RS485 Bus hub	4x RS485, opto-isolated
	RTD Measurement module (optional)	6-channel temperature measurement (Pt100, Pt1000)
	Power supply unit (optional)	85-264 V AC to 24 V DC including a AC surge protector
Electrical data	Power supply	24 V DC 85-264 V AC
	Power consumption	max. 48 W at DC supply max. 80 W at AC supply
	Interfaces	4x RS485 Bus (HD), Modbus-RTU 3xRS485 Bus (HD), Modbus-RTU, 6x RTD measurement channels, Pt100 and Pt1000
Data transfer	Protocol	Modbus-RTU
	Datarate	19,2kBit/s standard; up to 115,2 kBit/s possible
	Recommended cable for connection to PMCS	Li2YCYv (TP) 4x2x0,5
Conformity	Standards	EN 60950-1, EN 61000-6, UL 62368-1:2014 Ed.2, CSA C22.2#62368-1:2014 Ed.2
Mechanical data	Degree of protection	IP66 / NEMA 4X when mounted with mounting frames
	Dimensions, H X W X D	647 x 436 x 250 mm
	Weight	14 kg
	Cabinet	UV-resistant glass-reinforced polyester, lockable
	Mounting options	Wall mounting, pole mounting
Ambient conditions	Operation temperature	-20 °C to +50 °C / -13 °F to 140 °F
	Storage temperature	-30 °C to +70 °C / -22 °F to 158 °F
	Relative humidity	up to 95 %, non-condensing