SOLAR200 Solar Monitoring Station





Simple, Flexible, Field-Ready



Overview

The SOLAR200 is a simple solar monitoring solution for commercial and industrial installations. This turnkey station is delivered field-ready, designed for quick and easy installation and commissioning. Critical parameters solar irradiance and back of module temperature(s) are measured and reported along with data quality and station performance and operational status indication and feedback. Additional measurements; air temperature, wind speed, precipitation, and/or global horizontal irradiance are optional. The SOLAR200's data are obtained via Modbus RS-485 or TCP/IP, cellular modem, or using Campbell Scientific's LoggerNet Software package.

Benefits and Features

- High reliability and longevity with a Campbell Scientific CR200X Measurement and Control Datalogger
- Easy, turn-key installation
- > Standard, off-the-shelf, station configurations
- Customizable options to pin-point station specifications
- Complete station factory test prior to shipment maximizes field-readiness
- Battery-backed system for continuous data collection
- RS-485, TCP/IP, cellular, Wi-Fi, and other wireless communication options



Default Components

- Datalogger enclosure
- 2 Irradiance sensor
- **3** Back of module temperature sensor(s)
- 4 Quick deploy Guide (not shown)
- 5 Operations and Maintenance Guide (not shown)



Ordering

The SOLAR200 includes many options that allow you to configure the station to your project's specifications, while retaining its turn-key functionality. Order the station using the following form:

SOLAR200/Irradiance/Back of Module Temperature/Communications/Power

Options

The following is a list of the available options:

Irradiance

- > Option SS: Secondary-Standard pyranometer
- > Option FC: First-Class pyranometer
- > Option SC: Second-Class pyranometer
- > Option Ref: Reference Cell

Back of Module Temperature

- > Option Q1: One 110PV-L50 sensors with 50 ft cable
- > Option Q2: Two 110PV-L50 sensors, each with a 50 ft cable
- > Option Q3: Three 110PV-L50 sensors, each with a 50 ft cable

Communication

- > Option MRTU: Modbus RS-485
- > Option MTCP: Modbus TCP/IP
- > Option Cell: Cellular
- > Option Wi-Fi: Wi-Fi
- > Option RF: Radio

Power Supply

- > Option AC-UL: AC power (UL Certification) with battery backup
- > Option AC: AC power (non-UL) with battery backup
- > Option Solar: Solar powered with battery backup
- > Option 24VDC: 24 Vdc with battery backup

Additional MET

- > Option AT: Air temperature sensor
- > Option WS: Wind speed sensor
- > Option PPT: Precipitation gage
- > Option GHI: Global Horizontal Irradiance sensor

Examples

Example 1 SOLAR200/Ref/Q1/M-TCP/AC-UL

Orders a SOLAR200 with a reference cell, one back of module temperature sensor, configured for Modbus TCP/IP data retrieval, and AC powered with UL certification.

Example 2

SOLAR200/FC/Q2/M-TCP/24VDC/AT/PPT

Orders a SOLAR200 with a first class pyranometer, two back of module temperature sensors, configured for Modbus TCP/IP, 24 Vdc powered, air temperature sensor, and precipitation gage.



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