Campbell SCIENTIFIC | QUICK DEPLOY GUIDE

SunVue™30

ISO 9060:2018 Class A Spectrally Flat Thermopile Pyranometer with Integrated Dome Heating

Scan for info:

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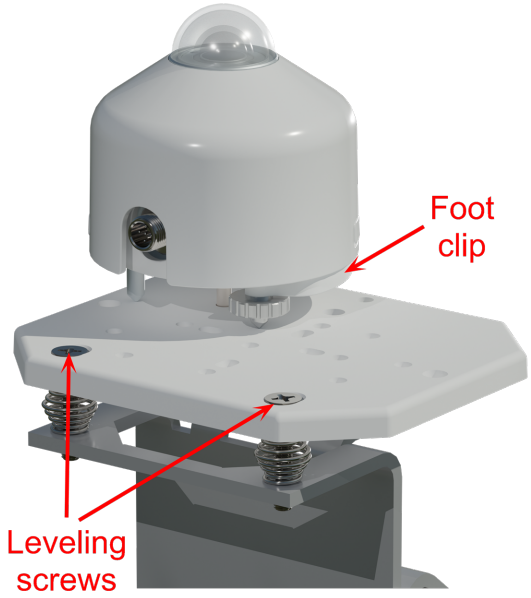
IMPORTANT NOTE: This Quick Deploy Guide is meant to be a general reference to give the installer an overview of the steps required to make this system operational. The product manual is the definitive source for detailed installation instructions and information.

Installation

Install the SunVue 30 using a Campbell Scientific CM256, CM261, CM266, CM268, or CM275 radiation sensor mount, and keep the foot clip in place during installation. The top plate shown in the following pictures is common to all of these mounts. Attach the sensor to the plate, and use the Phillips-head screws on the Campbell Scientific mount to level it.

For more details on mounting, see Solar Radiation Sensor Mounts.



Wiring

Pin-out, wire color, function, and data logger connection

Pin-out	Wire color	Function	Data logger connection[1]
1	Red	Power in (12 to 24 VDC)	12V
2	White	RS-485 (B+)	C (even)
3	Green	RS-485 ground	G[2]
4	Black	Power ground	G
5	Blue	RS-485 (A-)	C (odd)

[1] Assumes the sensor directly connects to the data logger.

[2] If the connection is RS-485 communications only, no power, then use the RG terminal; contact Campbell Scientific for more information.

NOTE:
Wire colors are for the standard Campbell Scientific cable (RS485CBL).

NOTE:
Sensor body **or** cable shield (electrically connected) need to be appropriately grounded to nearest suitable ground. (If using a Campbell Scientific RS485CBL cable with pigtail leads, the gray wire is the shield that should be connected to a suitable ground.) The ISP10 provides a suitable grounding attachment and also provides external and sacrificial protection.

NOTE:
When the SunVue 30 is properly powered, you will see an LED flashing (1 second on, 1 second off) when looking through the two holes between the two domes.

Default Modbus settings

Default settings of the Modbus protocol	
Address	1
Databits	8
Stopbits	1
Baudrate	19200
Parity	Even

Power requirements

Power consumption heated:	< 1.8 W
Power consumption unheated:	< 0.25 W
Operating voltage:	12 to 24 VDC

Cleaning

The glass dome should be inspected regularly and cleaned whenever contamination is visible. The required cleaning frequency depends on the installation environment and may range from daily inspections in harsh environments to monthly inspections in clean locations.

For cleaning, use clean water and a soft, lint-free cloth. If necessary, a mild detergent may be used to remove stubborn contamination. Avoid abrasive materials, solvents, or aggressive cleaning agents, as these may damage the optical surface and affect the instrument's performance.

After cleaning, verify that the dome is free from residues and that no scratches or other damage are present. Any damaged dome should be replaced to maintain measurement accuracy.

Routine inspection

During regular maintenance, the following items should be checked:

- Cleanliness and condition of the glass dome
- Mechanical integrity of the mounting hardware
- Proper sensor leveling and inclination
- Cable condition and connector integrity
- Absence of moisture ingress or condensation

Any abnormalities detected during inspection should be investigated and corrected before continued operation.

For more maintenance information, see help.campbellsci.com/sunvue30.