

Quick Start Guide: SunPower Monitoring System with PVS5c

Follow these instructions to install, configure, and commission the PVS Supervisor 5c (PVS5c) to start receiving monitoring data. See the safety and installation manual for complete instructions.

Kit Contents

PV Supervisor 5c (PVS5c)



Power Cord



(2) Cellular Antennas



You Will Need

- Small flathead screwdriver
- RJ45 crimp tool
- Wire cutter
- Wire stripper
- Laptop with Chrome or Firefox installed
- Ethernet cable
- Your SunPower monitoring website credentials
- (Optional) Customer's Wi-Fi network and password

PVS5c Connection Diagram



PVS5c Installation Instructions

Hazardous voltage! DO NOT power up the monitoring system until after you complete Section 2.

1. Mount and Connect Power to the PVS5c

Warning! Do not power up the system until after you complete Section 2 and are ready to configure the PVS5c.

1. Select an installation location following these guidelines.
 - Indoors unless installed in a Type 4, waterproof, enclosure
 - Where it is free from moisture
 - Where it is free from extreme temperatures
 - Mounted flat with the vents free from obstruction
2. Attach the (2) provided screw-in cellular antennats to connectors.
3. Open the DIN rail retention latch with a small screwdriver.
4. Place the PVS5c flat or with the front edge facing up on DIN rail.
5. Close the DIN rail retention latch and verify that the unit is securely attached to the DIN rail.
6. Insert the provided power cord into the connector on the back of the PVS5c.



Important! Do not plug the power cord into a power outlet until you have completed Section 2.

2. Connect Communications to PVS5c

SunPower recommends connecting PVS5c **directly** to the customer's router with an Ethernet cable.

1. Connect to customer's Internet using Ethernet cable or Wi-Fi network (unless using cellular communication only).
2. To connect communication for inverters:
 - **Using Ethernet connections:** Connect an Ethernet cable from the PVS5c **LAN1** port to the appropriate inverter connection. Follow the manufacturer guidelines to daisy chain linear connection schemes from inverter to inverter.
 - **Using RS-485 Connection:** Connect the cable with a blue connector from the PVS5c **RS-485 2-WIRE** communications port (blue) and land wires in the only, or first, inverter in the daisy-chain.



3. Connect an external meter to either a RS-485 port or an Ethernet LAN port depending on the meter interface.

3. Use the PVS Management App to Commission

1. Plug the PVS5c power cord into a grounded outlet when you are ready to commission the monitoring system.
2. Turn laptop Wi-Fi off.
3. Connect an Ethernet cable from laptop to PVS5c **LAN1** port.
4. Open a browser (Chrome or Firefox) and type: www.sunpowerconsole.com.
5. Follow the instructions to set up communication, check firmware, discover devices, verify device operation, and commission the site.

Safety & Certifications

Safety Instructions

- Installation is to be performed only by qualified, trained personnel with the necessary skills and knowledge to work on this type of electrical device. No service is possible on the PVS5c except changing the Cellular SIM card.
- Perform all electrical installations in accordance with any national and local codes, such as the National Electrical Code (NEC) ANSI/NFPA 70.
- This enclosure is suitable for use indoors or when mounted inside a Type 4 Electrical Enclosure. Operating ambient from -30°C to 60°C.
- Before connecting power, the PVS5x must be securely mounted to DIN rail as described in this document.
- The PVS5x contains limited internal transient surge protection. For installations in areas at risk of surges generated by high voltage utilities, industry or by lightning, it is recommended that an external surge protective device also be installed.
- Do not attempt to repair the PVS5c. If the PVS5c fails, please return the unit to your distributor for servicing. Tampering with or opening the enclosure voids the product warranty.

Safety Certification

- UL listed for indoor use (Type 1).
- The PVS5c is not a utility meter, disconnect device, or power distribution device.

FCC Compliance

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

IMPORTANT NOTES:

Radiation Exposure Statement

This equipment complies with FCC and CE RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

Caution

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
This device and it's antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter except in accordance with FCC multi-transmitter product procedures.