

solar**edge**

Installer Starter Guide



Welcome to the Growing Family of SolarEdge Installers

Welcome to the SolarEdge Family! Whether this is the first time you've installed SolarEdge products or not, we've put together this quick guide to help you install your system seamlessly and safely. The guide will also provide you with useful tips and best practices for the installation process prepared by our PV experts and other experienced installers. It will help make this (and future) installations easier, reduce installation time and minimize errors.

For us, safety comes first and is our number one priority. Not only do we focus on ensuring our products comply with stringent safety standards and global regulations but we remain equally committed to the safety of those who are installing our systems. Keeping them well informed about the installation process so that their safety is ensured and the system is installed safely and correctly is extremely important to us. For this reason we hope you will review this quick guide for a safe, fast and smooth experience.

/ Before You Get Started

1 Create an account in the SolarEdge monitoring platform

notice: Account approval time can be up to 72 hours.



2 Make sure you have the latest version of SetApp installed on your mobile device

Access the application store on your mobile device and download the SetApp application. Make sure that you download the latest version.



Android



iOS

3 Verify the compatibility of all of the system parts prior to installation

When planning an installation, verify the compatibility between the selected PV modules, power optimizers, inverters and other items installed. You can use datasheets to ensure specifications are correct.

4 Communication planning

It is essential to plan the site's communications before the installation. This planning should define the communications between the SolarEdge inverters and the SolarEdge monitoring platform, required for remote system monitoring. Learn more by scanning the QR code.



5 Make sure the PV design is in compliance with the SolarEdge design guidelines in order to produce the maximum power possible. Use the online designer tool to plan, build, and validate our SolarEdge systems from inception to installation.



/ Site Preparation

1 Site layout and drawings
Site mapping should be initiated immediately after your installation is completed and before commissioning. Before mapping the site, create and upload your virtual site layout to your account in the SolarEdge monitoring platform.

2 Communications
If local cellular or Internet provider are needed, verify the proper equipment and configuration (router, internet access, firewall, etc.) are made prior to installation.

3 Electricity grid
Contact your local grid operator or electricity company to obtain updated requirements for connecting your system to the grid.

Following the installation manual and installation specifications ensures a proper and functioning installation. By not following the manual or installing according to the SolarEdge design and installation guide, the warranty may be voided.



/ Power Optimizers

- 1** Position the power optimizer close enough to the module so that the cables can be connected.
- 2** Avoid using extension cables between a module and a power optimizer, and between two modules connected to the same power optimizer.
- 3** Shaded modules may cause the power optimizers connected to them to temporarily shut down. Make sure that during the pairing process, enough power optimizers in the string are operating according to the specifications.
- 4** **Equipment grounding tightening torques**
Ensure proper grounding in accordance with your local regulations. Read more:
- 5** **Heat dissipation**
Maintain a 2.5 cm / 1" clearance distance between the power optimizer and other surfaces, on all sides except the mounting bracket side.



- 6** **Ensure proper connector assembly**
Make sure the plus (+) output of the solar panel is connected to the plus (+) connector of the power optimizer. Connect the minus (-) connectors in the same manner.
- 7** **Ensure proper connection of the power optimizers in strings**
Connect the minus (-) output connector of the string's first power optimizer to the plus (+) output connector of the string's second power optimizer. Connect the rest of the power optimizers in the string in the same manner.
- 8** **Verify proper power optimizer connection** Verify the string voltage is consistent with the number of connected power optimizers. For example, if 12 power optimizers are connected in the string, the measured voltage should read +12V. Make sure of correct string polarity.

/ Inverter

- 1 Make sure the mounting surface or structure can support the weight of the inverter.
- 2 To allow proper heat dissipation, maintain minimum clearance areas between the inverter and other objects. The specification can be found in the quick guide supplied with the inverter.
- 3 Make sure to use proper conductors and wiring appropriate for the installation location according to local regulations.
- 4 Check all connection screws, DC and AC (especially the DCD units). Screws tend to loosen in transit due to vibration.
- 5 Check neutral to earth voltages before switching on the AC.



/ Communication and Peripherals

Meter and CT:

1 Positioning

Install the CTs at the grid connection point, usually directly in line and next to the grid operator's meter.

2 Installation

Install the CTs with the labeled arrow towards the grid. Make sure the CTs are installed around the correct phase as stated at the meter (e.g. L1 CT), the same goes for the voltage measurements for each phase (e.g. ØL1).

3 Verification

Turn off all the power generators in the facility (PV inverter, battery inverter, etc.). All the power status LEDs at the meter should flash green. This indicates proper import power on all phases and verifies correct installation of the CTs.

4 RS485 bus connection

When creating a communication bus between inverters, to a meter or battery, make sure to use the phases that build a twisted pair in the cable for the B (-) and A (+) connections. Any other phase in the cable may be used for the G connection. Also, use at minimum a CAT 5 cable for the connection.

/ SolarEdge Support

The SolarEdge Support team can assist you with any inquiry or technical issue before, during or after installation. Before contacting SolarEdge Support, ensure that you are equipped with the following information:

- 1 Serial numbers and models of the products in question.
- 2 System configuration information, including the type and number of modules connected and the number and length of strings.
- 3 The communication method to the SolarEdge monitoring platform.
- 4 The inverter firmware version as it appears in the ID status screen on the inverter LCD/SetApp.

Useful links:



SolarEdge
signup



Monitoring
platform



SetApp
walkthrough




Site mapper





Installer welcome course


About SolarEdge

SolarEdge is a global leader in smart energy technology. By deploying world-class engineering capabilities and a relentless focus on innovation, we create smart energy products and solutions that power our lives and drive future progress.

 SolarEdge

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