Connecting the Inverter Using Wi-Fi – for Installers

NOTE
For full installation and safety details, refer to the SolarEdge Installation Guide. Make sure you read, fully understand and follow the detailed instructions in it prior to each installation or service procedure. Failure to do so may result in injury or loss of life and damage to the equipment.

This quick guide describes how to connect a SolarEdge Wi-Fi device to a network.

WPS (Wi-Fi Protected Setup) is a system built into modern broadband routers which allows pairing of devices without the need for a password entry.

If the network uses a router with WPS push button security, a separate quick guide is available for homeowners (the procedure is also contained in this document).

If the broadband router does not have this feature, entering the network password is required using the inverter’s internal user buttons. This requires removing the inverter cover, which is to be performed by a qualified PV engineer as there are dangerous current levels inside the inverter.

The following figures show the inverter connectors and components, located at the bottom of the inverter. The ON/OFF switch and the LCD light button may vary depending on the inverter model:

Use the LCD button as follows:
- Short-press (one second) to scroll down to the next menu option
- Long-press (three seconds) to select the item.
- Exit the Setup mode by selecting Exit in each submenu screen or wait for the device to exit Setup mode automatically, if no buttons are pressed for more than two minutes.

Perform these steps after a broadband router change or a password change of the network.

To connect using WPS:
1. Verify that the inverter ON/OFF switch is OFF.
2. Press and hold down the LCD light button for 5 seconds (release before 10 sec have elapsed). When releasing, the main menu is displayed:

   Optimizers pairing
   Language<eng>
   Communication
   Maintenance
   Information
   Exit

3. Scroll down to the Communication submenu and select it. (Some of the menu items may vary depending on device and configuration).

   Server<LAN>
   LAN Conf
   RS 485 - 1 Conf <S>
   Wi-Fi Conf
   RS 232 Conf

4. Select the Server submenu, scroll down to the Wi-Fi option and select it.

   LAN
   RS 485
   Zigbee
   Wi-Fi
   RS 232
   None

5. Scroll down to the Wi-Fi Conf submenu and select it.
   If Wi-Fi Conf <N/A> indication appears, the Wi-Fi module is not installed correctly.
If your router supports WPS mode, you can automatically connect without entering a password as described in the next steps. If your router does not support WPS mode skip to step 9.

6 **Select WPS mode.** The status message *Waiting* is displayed.

7 On your wireless router, locate the WPS button. Push and hold it down until a LED lights up (refer to your router manual).

8 On the inverter LCD, check that the message has changed to *Connected*.

9 If connected, exit Setup mode. Otherwise, to connect to a specific network from a list, do the following:
   a. Make sure the inverter ON/OFF switch is OFF.
   b. Disconnect the AC to the inverter by turning OFF the circuit breaker or isolator supplying the inverter. Wait 5 minutes for the capacitors to discharge.
   c. Open the inverter cover’s six Allen screws and carefully pull the cover horizontally before lowering it.
   d. Turn ON the AC to the inverter.

   **WARNING!**
   ELECTRICAL SHOCK HAZARD. Do not touch uninsulated wires when the inverter cover is removed.

   e. Select the following in the LCD menus: Communication ➔ Server ➔ Wi-Fi.
   f. Select: Communication ➔ Wi-Fi Conf. ➔ Scan Networks. Wait until networks are found.
   g. Select the required network from the list of available networks.
   h. If required, enter the security key (up to 20 characters). A short press scrolls round the alphanumeric list. A long press selects the required character and moves on one space.
   i. When the security key has been entered, long-press the Enter button to accept the password. The system will start the connection process. Connection time may take up to 30sec, after which the message *Connected* is displayed on the LCD for 5 seconds.
   j. Carefully attach the inverter cover and tighten the six Allen screws with a torque of 9.0 N*m/6.6 lb*ft.
   k. Turn the inverter ON/OFF switch to ON.

Your system is now connected to the Wi-Fi network and will resume sending data to your SolarEdge monitoring portal account.