## enphase.

### Getting Started Guide: Envoy-S Internet Connectivity

This getting started guide is for the on-site electrician or foreman who is responsible for ensuring the Enphase Envoy-S<sup>™</sup> is connected to the Enphase Enlighten<sup>™</sup> web monitoring system before leaving the job site.

This guide applies to all Envoy models that look like these:

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#### **Before You Start**

Download the latest version of Enphase Installer Toolkit<sup>™</sup> before you leave the office. If you have never logged into Toolkit, use your Enlighten installer credentials to log in. This unlocks the application for your ongoing use.

This step also ensures you have the latest software upgrade package on your mobile device in case you are directed to upgrade the Envoy-S in the field.

#### Signs of Success!

When the Envoy-S is connected to the Internet and communicating with Enlighten, the Network Communications LED (topmost) on the Envoy lights solid green.

In addition, the Installer Toolkit will verify that the Envoy is connected and communicating with Enlighten.

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### Cellular Connectivity with Enphase Mobile Connect

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Complete the following steps to install the Enphase Mobile Connect<sup>™</sup> modem:

- Connect the cellular antenna to the connector labeled CELL on the modem.
- 2. Mount the modem on a wall using the slide-in-tab, or attach the rubber feet and mount on a flat surface.

If the Enphase AC Combiner Box<sup>™</sup> is installed, the modem can sit on the bottom of the box.



- First, connect the USB cable to the USB port(s) on the Envoy-S.
- 4. Then, connect the mini-USB connector to the Mobile Connect modem.

The power LED lights when the modem has power.

After about two minutes, the Link Status (LS) LED flashes to indicate a network connection.

- The Signal LEDs indicate signal strength according to the Signal LED table below.
- Signal strength of 1 bar is adequate for data transmission to Enlighten.

LEDs	Description	Indicates	
	All off	Very weak signal	
000	Bar 1 ON	Weak signal	
000	Bar 1 and 2 ON	Good signal	
	Bar 1, 2, and 3 ON	Very good signal	

Within three minutes the Envoy-S Network Communications LED lights solid green, indicating a successful connection to the Internet and to Enlighten.





#### **Wi-Fi Connection**



There are two ways to configure the Wi-Fi connection. Follow one of these methods to connect the Envoy to the Internet and Enlighten.

Method A: Use the WPS function on the router.

- 1. Verify that there is no Ethernet cable connected to the Envoy.
- 2. Confirm the homeowner's router supports WPS function. (WPS stands for Wi-Fi Protected Setup.) Look for a button on the router with a symbol like one of these.







- Once you find WPS button on the wireless router, press and hold it for a few seconds. On most routers, a WPS LED begins flashing. (Pressing the WPS button on the router activates device pairing.)
- Initiate the WPS pairing at the Envoy by pressing and holding the AP Mode button for five seconds.

**NOTE:** If the AP Mode button is held for fewer than five seconds, AP mode will be initiated, but not WPS pairing.

If AP mode is enabled accidentally, the Envoy's network will be visible on your Wi-Fi settings and the AP Mode LED will be lit solid green.

5. To disable AP mode, touch the AP Mode button for one second, then release it.

Method B: Manually configure Wi-Fi connection.

- 1. Click on the **Network** tab.
- 2. Select the homeowner's Wi-Fi network from the list of available networks.
- 3. Connect to the homeowner's Wi-Fi network. This may require that you enter the homeowner's network password.



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#### Hard-Wire Ethernet



The most reliable Internet connection, when Mobile Connect or Wi-Fi are not options, is a hard-wired Ethernet connection. In a hard-wire connection you must use an Ethernet cable (Use Cat5E or Cat6 UTP – Do not use STP cable) to connect to the homeowner's router on one end and directly to the Envoy on the other end. This is a good option when the Ethernet cable will span a distance of no more than 100m (328 feet).

If it is not physically possible to hard-wire the connection, use Ethernet bridges instead.





### Ethernet Connection Using Ethernet Bridges



Use Ethernet bridges when the distance between the Envoy and the router is too great, or when it is impractical to span the distance between them with Ethernet cable.

Complete the following steps to enable an Ethernet connection using Ethernet bridges.

#### Bridge one:

- Connect one end of the Ethernet "jumper" cable to the bridge and the other end to the Envoy.
- 2. If an AC Combiner Box is installed, plug the bridge into the outlet inside the box and then connect the cable to the Ethernet port on the bottom of the Envoy-S.



 If you are not using an AC Combiner Box, plug the bridge into a dedicated outlet near the Envoy's final install location and then connect the cable to the Ethernet port on the bottom of the Envoy-S.

#### Bridge two:

- 1. Connect one end of the Ethernet "jumper" cable to the bridge and the other end to an unused port on the router.
- 2. Plug the bridge into a dedicated outlet near the router.



Within three minutes the Envoy-S Network Communications LED lights solid green to indicate a successful connection to the Internet and to Enlighten.

#### When to Contact the Your Office

If you are unable to confirm the Envoy is communicating with Enlighten, contact your operations or installation support staff for assistance.