Installing the Envoy™ Communications Gateway

Read and follow all warnings and instructions in this Guide and in the *Envoy Communications Gateway Installation and Operation Manual* at: <u>http://www.enphase.com/support/downloads</u>. Use this guide as a quick reference during installation and setup of the Envoy.



Affix the Serial Number Label to the Map

The following diagram of the Envoy and its connections shows the serial number label near the left mounting bracket. Peel this label from the Envoy and affix it to the **installation map**.



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Register the Envoy

Register the Envoy at the Enlighten website: <u>https://enlighten.enphaseenergy.com.</u>

NGT 10		List Reports Activations
ivations		
dd New System		Information
System Name	"System Type	Stage 1: Started
	Residențial	Enter basic site identification.
This is a PPA or Leased System		Tell us who your oustomer is and where this
Owner Information 😑	Location Information 🤗	SIB B CORPG
irid Name	Street Address	Installer: Joe Solar (Demo)
		L
ant Name	Street Address 2	Activation Checklist
mal	City	Stage: Started
		0% complete
Tione	codes	started @ Owner Information
		System Internation
 Owner can view modula-level information ind receive elect emails 	State/Pholpon	
	Zho Doutral Course	Envoy (EMUs) Reporting Data
		2
System Information		
nunu/EMI) Sarial Number	Enurse (FAB Status	Normally
	N/A.	Good Communication Established
		Arrays Built

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Connect Ethernet and Power Cables

- Plug the Ethernet cable into the Ethernet port on the Envoy.
- Plug the other end of the cable into a port on the broadband router.
- Plug the AC cord into a dedicated wall outlet.



"Upgrading. . . Do Not Unplug."

Do not plug the Envoy into a power strip, surge protector, or uninterruptable power supply (UPS).These devices impede power line communications.

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Find a Location for the Envoy

Locate an AC outlet close to the load center. Place the Envoy so that its AC cord can reach this outlet.



Note: Do not permanently mount the Envoy until you complete Step 7.

Add Power Line Communication Bridges (optional)

Use the included power line communication bridges *if* the Envoy needs to be located away from the broadband router. Otherwise, skip this step.

- Plug one of the bridges into the same AC outlet as the broadband router and attach an Ethernet cable to the bridge.
- Plug the other bridge into an AC outlet near the Envoy and attach the Ethernet cable to the bridge.
- Unplug the Envoy from the AC outlet, and then plug the Envoy back in to refresh the IP address.



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Check the Envoy's Progress

a. Check the Internet Connection

 Look for the + Web indication. If it does not appear within 15 minutes after connecting to the broadband router, see *Troubleshooting* a on back.

b. Check the Device Count

An automatic device scan begins to detect the microinverters.

 Check that the Envoy LCD shows a complete device count after about 30 minutes. If it does not, see *Troubleshooting* b and c on back.



c. Check the Power Line Communications

 Check the number of bars shown on the Envoy LCD (Level/Devices screen). If fewer than three bars are shown, see *Trouble-shooting* d on back.



d. Stop the Scan When All Devices are Detected

Once all devices have been detected, disable the device scan to keep it from interfering with any nearby Enphase systems.

- Press and hold the Envoy menu button (on the right side of the Envoy).
- Release the menu button when the LCD displays **Disable Device Scan**.
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Mount the Envoy to the Wall (optional)

You can wall-mount the Envoy or place it on a table top.

• Use two #8 drywall screws or wall anchors (not included) to mount the Envoy to the wall. Maximum screw head diameter is 8.9 mm (0.35 inches).

Note: Ensure that the Envoy shows three bars or more before permanently mounting the Envoy. If the level is lower, the Envoy might need to be relocated.





Build the Virtual Array in Enlighten

- Log in to Enlighten.
- Use Array Builder to create the virtual array using the installation map as your reference.
- To see the Array Builder demo, go to <u>http://enphase.com/support/videos</u>.

Add Array 1 Choose orientation of mod	dules within array
0 0	You can mix the orientation of modules and rotate them in a moment.
2 Rough shape 3 rows x	3 columns = 9 modules Once the array is created you can add, subtract and move modules easily to create an accurate plan.
3 Azimuth	 Azimuth is the difference, measured in 0-359 degrees, from true North.



View System Performance in Enlighten

If you have not done so already, log in to Enlighten to view site data.



Troubleshooting

a Internet Connection Issue

If, after 15 minutes, you see **-Web** instead of **+Web**, make sure that the broadband router is operational. Check that other devices at the site can access the Internet.

If the broadband router is operational, press and hold the Envoy menu button. Release the button when the LCD displays **Get New IP Address**. Wait for 15 minutes.

If this fails, unplug the Envoy, wait for 20 seconds, and plug it back in. Wait 15 minutes for connection.

Device Detection Slow

If, after 30 minutes (longer for large installations), the device count shown is lower than the number of microinverters installed, or if the number of bars is between zero and two, relocate the Envoy to the power outlet closest to the load center.

Device Detection Stalled

If the number of bars is three or more, but the Envoy has not detected all of the installed microinverters within 60 minutes (longer for large installations), contact Enphase Customer Support.

Dower Line Communication Level is Low

If the number of bars is fewer than two as a result of a communication check, relocate the Envoy to the AC outlet closest to the load center. (You may also need to use power line communication bridges if the load center is remote from the router).

> Refer to the Enphase microinverter installation and operation manual for information on microinverter installation and commissioning.

> > 140-00044 Rev 01