

# The Enphase AC Battery

The Enphase Storage System includes the Enphase AC Battery™ and uses the Enphase Envoy-S Metered™ to measure PV production, home energy consumption, and energy storage. The system knows when it is optimal to charge or discharge battery power so that energy is stored when it is abundant and used when scarce.

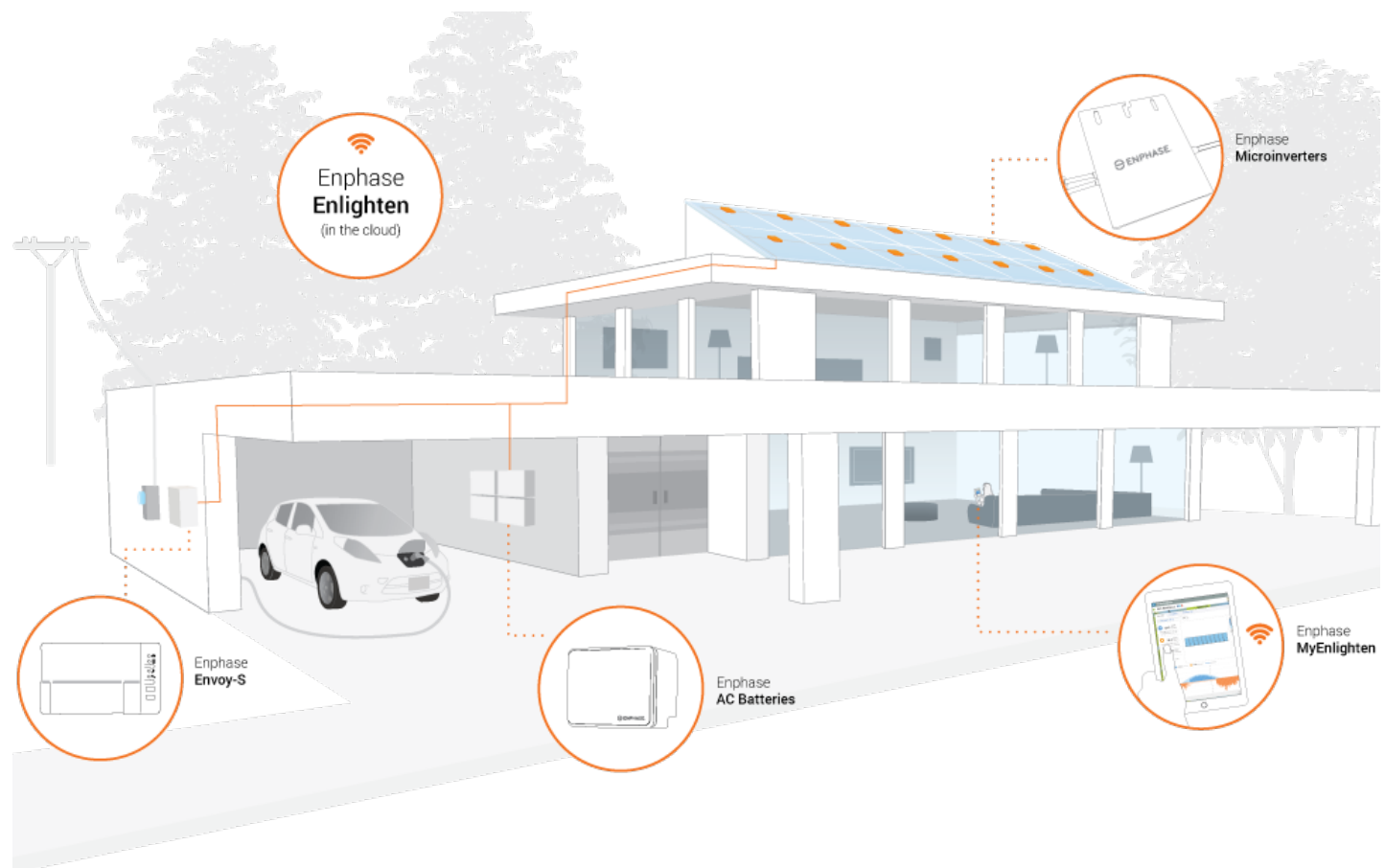
## Access Your System Online

You can view your PV solar production, your electricity consumption, and your energy storage using Enphase MyEnlighten™. Once your installer creates a profile with your email address, Enphase will email you with instructions on setting up your MyEnlighten account. Read the Enlighten terms of service at <https://enphase.com/en-us/legal/terms-of-service>.

Safety warnings are listed on the back of this guide.

- 1) Only qualified electricians shall install, troubleshoot, or replace the AC Battery.
- 2) The AC Battery contains no user serviceable parts. Do not open the AC Battery.

## Enphase Storage System



## WHERE TO PLACE THE BATTERY

A professional solar installer will mount the AC Battery on the wall and hardwire the unit into your electrical system. You and your solar installer should keep the following things in mind when choosing a location to install your AC Battery(ies).

- Choose an easily accessible, well-ventilated, and unoccupied indoor location, such as a garage. This location must be out of direct sunlight, and ambient temperature must stay between -20° C to 45° C (-4° F to 113° F).
- The AC Battery is not waterproof, so do not allow liquids to come into contact with the AC Battery. Choose a dry location unlikely to be affected by rain, humidity, or flooding. Make sure that the area stays within the 5% to 95% relative humidity, non-condensing range.
- Ensure that the wall can sustain the weight of the AC Battery and mounting bracket (28kg or 60 lbs per battery).
- Do not install the AC Battery in a way that will block the vents. The AC Battery must be installed at least 300mm (one foot) above the ground and at least 300mm (one foot) below the ceiling.
- Place the AC Battery away from moving objects such as cabinet doors, garage doors, or motor vehicles.
- Ensure that there are no pipes or electrical wires where your installer plans to drill.

## SAFETY CONSIDERATIONS

There are a few safety considerations to keep in mind once the battery is installed. The AC Battery is not designed to support additional weight, so never rest anything on top of the AC Battery. Even light objects such as drinks could condense and drip liquids onto the battery. Other objects could block the vents and cause overheating. Do not store flammable, sparking, or explosive objects near the AC Battery, and make sure there is a working smoke detector in the room. Keep moving objects that could fall onto or collide with the unit away from the AC Battery.

## INTERNET CONNECTIVITY

The Enphase AC Battery is intended to operate with an internet connection. Maintaining an internet connection is important, not only for updating software/firmware, but also for measuring the health of the battery. Failure to maintain an internet connection may have an impact on the warranty. See [enphase.com/warranty](https://enphase.com/warranty) for full terms and services.

## LED OPERATION

The AC Battery unit contains no user serviceable parts, so always contact your solar professional for assistance in troubleshooting and maintaining your Enphase system. Information about the LED is provided as a reference.



## **a** LED Overview

The LED glows red while the AC Battery boots up. If the LED remains red for more than two minutes, the battery is charging and will do so until it reaches a minimum state of charge (up to 30 minutes). After the AC Battery boot sequence is complete, the LED becomes blue or green (depending on the charge level). If the LED remains red after one hour or changes to a flashing red state, contact your installer.

**None of the following LED states presents a safety issue.**

If the LED is...	The AC Battery is...
Slowly flashing green	Charging
Slowly flashing blue	Discharging
Solid blue or green	Idle; color transitions from blue to green as state-of-charge increases*
Solid red	Starting up
Flashing red	In an error state; contact your installer
Solid amber	Not operating due to high temperature; see "Troubleshooting"
Off	Not operating; see "Troubleshooting"

\*Check MyEnlighten for charge status.

## **b** Troubleshooting

If the AC Battery LED indicates an error state, you can safely perform the following steps. For any other issues, contact your solar professional. **Do not attempt to open or repair the AC battery.**

- A) If the AC Battery LED is solid amber, check the temperature in the room and increase cooling and/or ventilation as required by the ambient temperature specification.

**NOTE:** During a brownout or blackout, the AC Battery powers down automatically and the LED will turn completely off. This is normal. When power is restored, it automatically starts up again.

- B) If you do not see current AC Battery information in MyEnlighten, check that your Envoy-S and your Internet connection are working. Information from your system may take up to 24 hours to appear in MyEnlighten.

Go to <http://enphase.com/myenlighten-help/> for more information about your storage system.

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**Want MyEnlighten on the go? Download the MyEnlighten app for iPhone or Android.**

Go to <http://enphase.com/myenlighten-help/> to learn how to maintain your system, upload photos or a description of your system, run reports, and share your system view with others.

# SAFETY

IMPORTANT SAFETY INSTRUCTIONS. SAVE THESE INSTRUCTIONS.

This guide contains important instructions that you must follow. Failing to follow any of these instructions voids the warranty ([enphase.com/warranty](https://enphase.com/warranty)).

## In Case of Fire or Other Emergency

In all cases:

- Contact the fire department or other required emergency response team.
- Evacuate the area.

In case of fire:

- When safe, use a fire extinguisher. Suitable types are A, B, and C dry chemical fire extinguishers. Additional extinguishing media include carbon dioxide or alcohol-resistant foams.




In case of flooding:

- Stay out of water if any part of the AC Battery or wiring is submerged.
- Let the area dry completely before use.













In case of unusual noise, smell or smoke:

- Ensure nothing is in contact with the AC Battery or in the venting area on top of the AC Battery.
- Ventilate the room.
- Contact your solar installation professional.










## Safety and Advisory Symbols

	<b>DANGER:</b> This indicates a hazardous situation, which if not avoided, will result in death or serious injury.
	<b>WARNING:</b> This indicates a situation where failure to follow instructions may be a safety hazard or cause equipment malfunction. Use extreme caution and follow instructions carefully.
	<b>NOTE:</b> This indicates information particularly important for optimal system operation. Follow instructions carefully.

## Safety Instructions

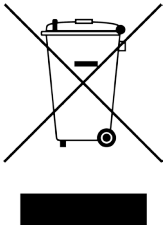
	<b>DANGER:</b> Risk of electric shock. Risk of fire. Only qualified electricians should install, troubleshoot, or replace the AC Battery.
	<b>DANGER:</b> Risk of fire or explosion. Only qualified personnel, using personal protective equipment (PPE) should transport or handle the AC Battery.
	<b>DANGER:</b> Risk of fire. During use, when stored, or during transport, keep the AC Battery in an area that is well ventilated and protected from the elements, where ambient temperature is between -20° C and 50° C, and where relative humidity is between 5 and 95 percent.
	<b>DANGER:</b> Risk of fire. If the AC Battery generates smoke, remove AC power from the Enphase System so that charging/discharging stops.
	<b>DANGER:</b> Risk of fire. In case of fire, use a standard or carbon dioxide fire extinguisher to put out the fire. See "In case of fire" above.
	<b>DANGER:</b> Risk of electric shock. Risk of fire. Do not attempt to repair the AC Battery; it contains no user-serviceable parts. Tampering with or opening the AC Battery will void the warranty. Warranty void if enclosure removed. If the AC Battery fails, contact your solar installation professional.
	<b>DANGER:</b> Risk of electric shock. Do not use Enphase equipment in a manner not specified by the manufacturer. Doing so may cause death or injury to persons, or damage to equipment.
	<b>DANGER:</b> Risk of fire. Do not allow or place flammable, sparking, or explosive items near the AC Battery.
	<b>WARNING:</b> Risk of equipment damage. During use, storage, transport, or installation, always keep the AC Battery in an upright position.
	<b>WARNING:</b> Before installing or using the AC Battery, read all instructions and cautionary markings in the technical description and on the equipment.
	<b>WARNING:</b> Do not install or use the AC Battery if it has been damaged in any way.
	<b>WARNING:</b> Do not sit on, place objects on, or insert objects into the AC Battery.

## Safety Instructions, continued

	<b>WARNING:</b> The AC Battery is not waterproof. Do not place beverages or liquid containers on top of the AC Battery. Do not expose the AC Battery to liquids or flooding.
	<b>WARNING:</b> Damage to the battery can occur from over-discharge. While in storage, the AC Battery will discharge. If the battery state of charge falls below 0%, the AC Battery can be damaged or destroyed. Because of this, the AC Battery must only be stored a limited amount of time. <ul style="list-style-type: none"><li>• The battery must be installed and energized by the "Must Energize By" date on the shipping box label.</li><li>• The battery must have a charge state of at least 30% when placed in storage.</li><li>• A new AC Battery can be stored a maximum of six months.</li><li>• After six months, the battery must be installed and/or charged.</li><li>• If the AC Battery has already been installed, a maximum storage duration of two months is allowed.</li><li>• When placing the AC Battery in storage, ensure that the DC connector is unplugged.</li></ul>
	<b>NOTE:</b> Protection against lightning and resulting voltage surge must be in accordance with local standards.
	<b>NOTE:</b> Using unapproved attachments or accessories could result in damage or injury.
	<b>NOTE:</b> To ensure optimal reliability and to meet warranty requirements, the AC Battery must be installed and/or stored according to the instructions in the <i>Enphase AC Battery Installation Manual</i> .
	<b>NOTE:</b> The AC Battery is compatible only with the Envoy-S Metered communications gateway, which is required for operation of the AC Battery. Earlier versions of the Enphase Envoy communications gateway, and non-metered gateways are incompatible.
	<b>NOTE:</b> When stored, the AC Battery is not connected to the grid and no automatic charge of the battery is possible.
	<b>NOTE:</b> Never leave the battery on its back for more than five minutes. The battery cells are meant to be in the upright position.
	<b>NOTE:</b> During use, storage, and transport, keep the AC Battery: <ul style="list-style-type: none"><li>• Properly ventilated</li><li>• Away from water, other liquids, heat, sparks, and direct sunlight</li><li>• Away from excessive dust, corrosive and explosive gases, and oil smoke</li><li>• Away from direct exposure to gas exhaust, such as from motor vehicles</li><li>• Free of vibrations</li><li>• Away from falling or moving objects, including motor vehicles</li><li>• At an elevation of fewer than 2,000m above sea-level</li><li>• In a location compliant with fire safety regulations (has a smoke detector)</li><li>• In a location compliant with local building codes and standards</li></ul>

## Environmental Protection

ELECTRONIC DEVICE: DO NOT THROW AWAY. Waste electrical products should not be disposed of with household waste. Proper disposal of batteries is required. Refer to your local codes for disposal requirements.



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