



# Enphase storage system owner`s guide



## Corporate Headquarters Contact Information

[enphase.com/en-us/support/contact](https://enphase.com/en-us/support/contact)

## Warranty

To ensure optimal performance and reliability and to meet warranty requirements, the Enphase storage system must be installed according to the instructions in the installation manuals and guides.

The Enphase storage system equipment is intended to operate with an internet connection. Maintaining an internet connection is important, not only for updating software and firmware but also for measuring the health of the system. Failure to maintain an internet connection may have an impact on the warranty.

Visit [enphase.com/go/warranty](https://enphase.com/go/warranty) for full terms and services.

## Other Information

Product information is subject to change without notice. All trademarks are recognized as the property of their respective owners.

User documentation is updated frequently. Check the Enphase website ([enphase.com/go/help](https://enphase.com/go/help)) for the latest information.

Visit [enphase.com/go/patents](https://enphase.com/go/patents) for Enphase patent information.

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## Audience

This manual is intended for use by owners of Enphase storage systems with Ensemble™ energy management technology.

## Environmental Protection



### ELECTRONIC DEVICES: DO NOT THROW AWAY.

Waste electrical products (including batteries) should not be disposed of with household waste. Refer to your local codes for disposal requirements.

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# Important Safety Information

## Read this first

This manual describes the safe use Enphase storage with Ensemble™ energy management technology.

Do not remove the dead fronts (plastic guards inside enclosure) from the Enpower and Combiner.

Do not open the Encharge battery unit unless to use the DC switch

## Safety and advisory symbols

To reduce the risk of electric shock, and to ensure the safe installation and operation of the Enphase storage system, the following safety symbols appear throughout this document to indicate dangerous conditions and important safety instructions.



### DANGER

This indicates a hazardous situation, which if not avoided, will result in death or serious injury. Use extreme caution and follow instructions carefully.



### WARNING

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.



### NOTE

This indicates information important for optimal system operation. Follow instructions carefully.

## Safety Instructions



A battery can present a risk of electrical shock, fire, or explosion from vented gases. Only qualified electricians should install, troubleshoot, or replace the Enphase storage equipment or wiring.



If the Enphase storage equipment generates smoke, remove AC power from the Enphase system, and turn the DC switch on Encharge battery(ies) to the OFF position, following the instructions in the manual.



In case of fire, use a standard or carbon dioxide fire extinguisher or another appropriate extinguisher to put out the fire.



Do not dispose of Encharge battery(ies) in a fire or by burning.



Do not allow or place flammable, sparking, or explosive items near the Enphase storage system equipment.



During use, when stored, or during transport, keep the Encharge battery in an area that is well ventilated, where the ambient temperature is between -15° C to 55° C (5° F to 131° F).



Risk of electric shock. In areas where flooding is possible, install the Enphase storage system equipment at a height that prevents water ingress.



Read this entire document before using Enphase storage systems.




Do not attempt to repair the Enphase storage equipment; it contains no user-serviceable parts. Do not open the Encharge battery unit under the Encharge cover. Doing so will void the warranty. If the Enphase storage equipment fails, contact your solar installation professional or Enphase at [enphase.com/en-us/support/contact](http://enphase.com/en-us/support/contact).





The Encharge battery is designed for stationary installation only. It is not designed for mobile applications such as installation on vehicles and trailers and should not be used in such applications.





Risk of equipment damage. During use, storage, transport, or installation, always keep the Enphase storage equipment in an upright (top side up) position.

 It is important to ensure that the Neutral Forming Transformer (NFT) circuit breaker is always in the ON position. This protective circuit will protect your loads, so it is best to leave the NFT breaker ON.


 Do not install or use the Enphase storage system equipment if it has been damaged in any way.


 Do not sit on, place objects on, or insert objects into the Enphase storage system equipment.


 Do not place beverages or liquid containers on top of the Enphase storage equipment. Do not immerse Enphase storage equipment in liquids or flooding.


 When placing the Encharge battery(ies) in storage, ensure that AC power is not present and that the DC switch is in the locked and open position. While in storage, damage to the battery can occur from over-discharge. If the battery state of charge falls to 0%, the Encharge battery(ies) can be damaged or destroyed. Because of this, the Encharge Battery(ies) must only be stored for a limited amount of time.


- The Encharge battery(ies) must be installed and energized by the date indicated on the shipping box label.
- The Encharge battery(ies) must have a charge state of no more than 30% when placed in storage.
- The Encharge battery(ies) placed in storage must be disconnected from AC source with DC switch turned off.
- If the Encharge battery(ies) have already been installed, they must be placed into Sleep Mode prior to uninstalling. A battery in Sleep Mode can be stored a maximum of two months in Sleep Mode.


 Protection against lightning and resulting voltage surge must be in accordance with local standards.

 Using unapproved attachments or accessories could result in damage or injury.

 To ensure optimal reliability and to meet warranty requirements, Enphase storage equipment must be installed and/or stored according to the instructions in Enphase storage equipment guides.

 Enphase Enpower and Encharge are compatible only with the IQ Envoy or Envoy S metered communications gateway properly fitted with the Ensemble Communications Kit and production and consumption CTs. An IQ Envoy or Envoy S metered is required for operation of the Encharge battery(ies) and Enpower. Earlier versions of the Enphase Envoy communications gateway are incompatible.

 Enphase Enpower and Encharge are intended to operate with an internet connection. A Wi-Fi or Ethernet internet connection is required in addition to the cellular modem connectivity to ensure consistent connectivity.

 During use, storage, and transport, keep the Enphase storage equipment:

- Properly ventilated
- Away from heat, sparks, and direct sunlight
- Away from excessive dust, corrosive and explosive gases, oil, and smoke
- Away from direct exposure to gas exhaust, such as from motor vehicles. If mounted in the direct path of a motor vehicle, mounting height minimum is 91 cm (36 inch) minimum mounting height.
- Free of vibrations
- Away from falling or moving objects, including motor vehicles
- At an elevation of fewer than 2500 meters (8200 feet) above sea-level
- In a location compliant with fire safety regulations (has a smoke detector)
- In a location compliant with local building codes and standards

# The Enphase storage system



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Understanding system operation

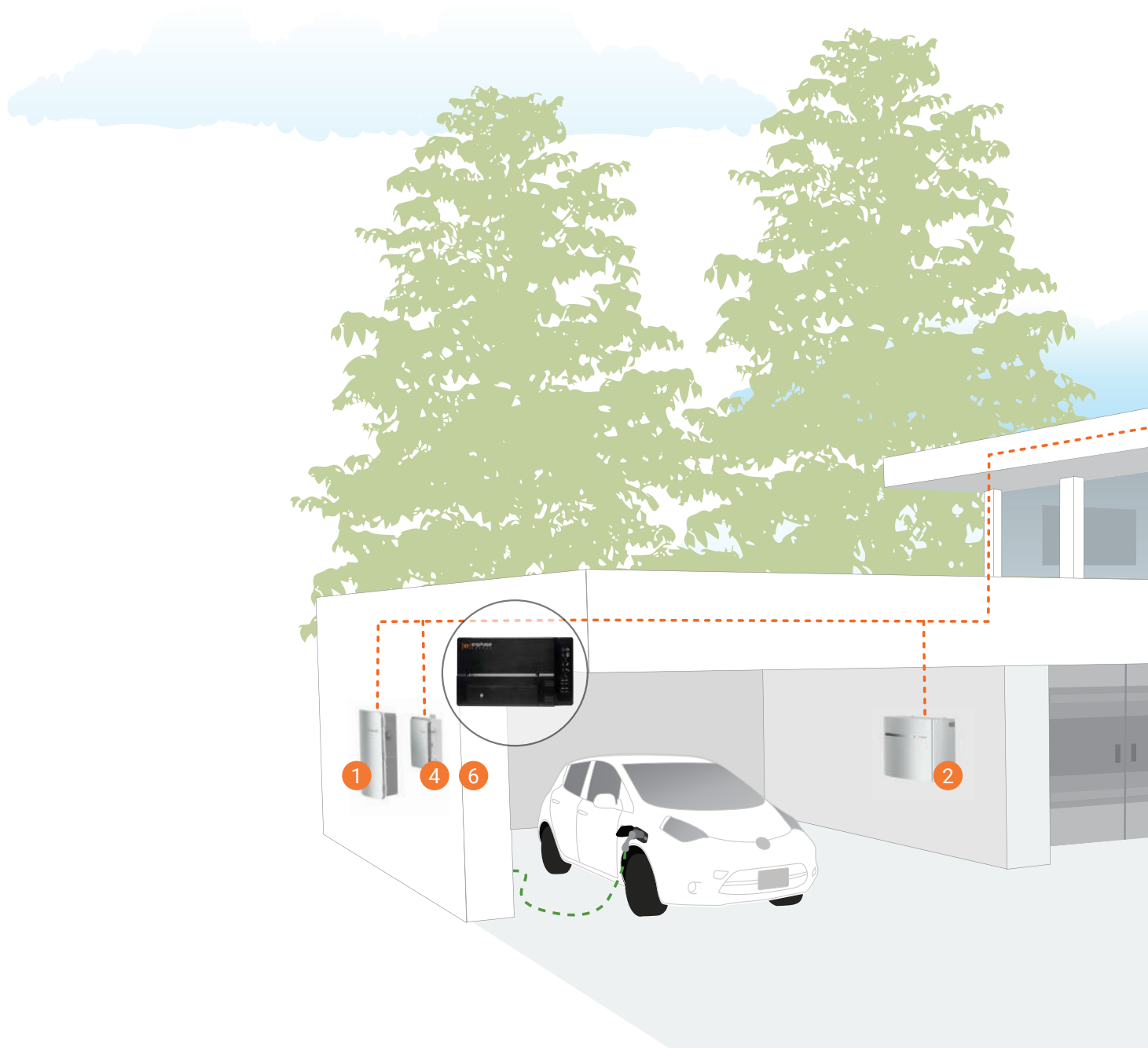
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Troubleshooting

# Enphase storage system

The Enphase storage system includes the following Enphase products





**1 Enphase Enpower™ smart switch**

The Enpower connects the home to utility grid power (grid), the Encharge storage system, and solar photovoltaics (PV). It seamlessly transitions the home energy system from grid power to backup power in the event of a utility grid failure.

**2 Enphase Encharge™ batteries**

The Encharge storage system houses the battery and microinverters used to store energy and make it available for use in your home.

**3 Enphase IQ™ series micros**

Under each solar panel, lies an Enphase microinverter that converts DC power generated by the panel into AC energy your home can use.

**4 IQ™ Combiner**

The Enphase IQ combiner consolidates interconnection equipment into a single enclosure and streamlines PV and storage installations. It also includes the **Enphase IQ Envoy™**, a network communication device that collects production and performance data from IQ series micros, Encharge batteries and the Enpower smart switch.

**5 Enphase M series micros**

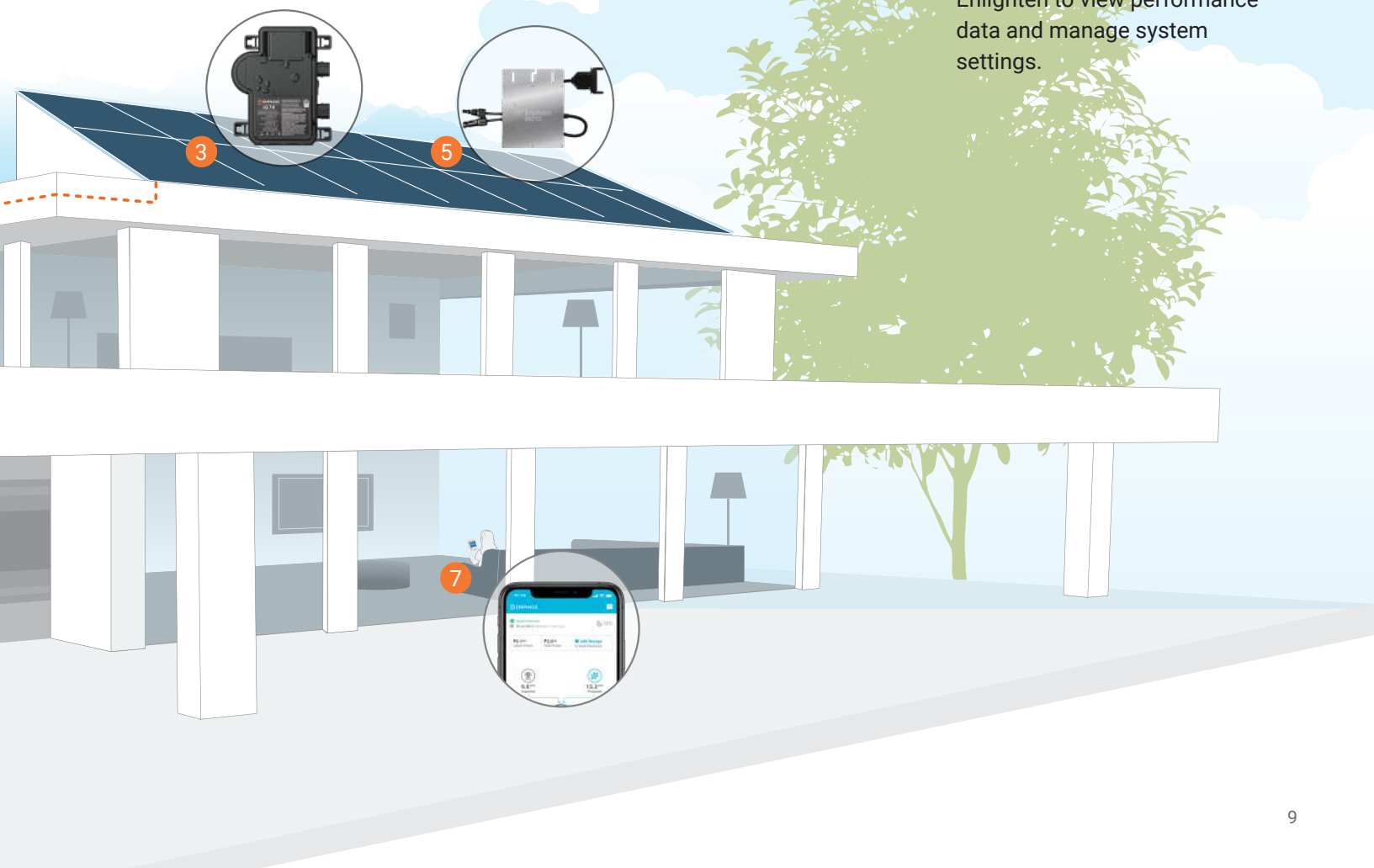
For an Enphase storage system with legacy M series microinverter, Envoy S metered is used in the system, to collect production and performance data from M series micros, Encharge batteries and the Enpower smart switch.

**6 Envoy S metered**

The Envoy S metered network communication device collects production and performance data from M series micros, Encharge batteries and the Enpower smart switch.

**7 Enphase Enlighten™**

Enlighten is a web-based monitoring and management software. Owners can use Enlighten to view performance data and manage system settings.



# Enphase storage

## Component introduction



### Enpower smart switch

The Enpower smart switch senses when the grid goes down and seamlessly transitions the home from grid power to backup power. Enpower disconnects the grid and powers the backup loads using the Encharge storage system, PV system, and the electrical service panel that houses the circuits that are powered during a grid outage. Enpower serves as the microgrid interconnect device (MID) as required by the National Electric Code (NEC) to operate without grid power. And its neutral forming transformer (NFT) provides the neutral required for electrical operations in North America to support 120V and 240V appliances. Enpower communicates with the Envoy through wireless signals.



### Encharge batteries

The Encharge storage system performs two critical functions in your system. The batteries, internal to Encharge, store energy for later use or for use during a power outage. The IQ 8X-BAT microinverters in the Encharge units provide the voltage and frequency necessary for the operation of your solar array and the electrical circuits in your home during an outage. The IQ 8X-BAT microinverters converts your harvested energy into usable AC electricity for your house. Encharge communicates with the Envoy through a mesh network of wireless signals.



### **IQ Combiner or Standalone IQ Envoy**

If you have an Enphase solar system with IQ series micros your system has an IQ Combiner with an IQ Envoy or a discrete IQ Envoy. An IQ Combiner consolidates interconnection equipment for your system and houses the following:

- **Multiple PV branch circuits** to ensure a streamlined installation and interconnection
- **IQ Envoy** – This collects production and performance data from your Ensemble storage system and from your IQ series microinverters. It then transmits the data to Enlighten through ethernet, Wi-Fi, and cellular.
- **Wireless communications kit** – This creates a wireless mesh network between Envoy, Enpower, and Encharge.
- **Cellular modem** – This device reports the performance data from your microinverters, Enpower, and Encharge units to the cloud via a cellular network in the absence of ethernet or wifi connection.



### **Envoy S metered**

For Enphase storage systems with legacy M-series (M215 or M250) microinverters your system has the Envoy S metered. This collects production and performance data from your Ensemble storage system and from your IQ series microinverters. It then transmits the data to Enlighten through ethernet, Wi-Fi, and cellular.

Performance data from your solar array is reported to the Envoy over the AC powerlines in your home. The wireless communication kit and Enphase cell modem are vital for keeping your Ensemble system online.

# Enphase storage

## Backup options

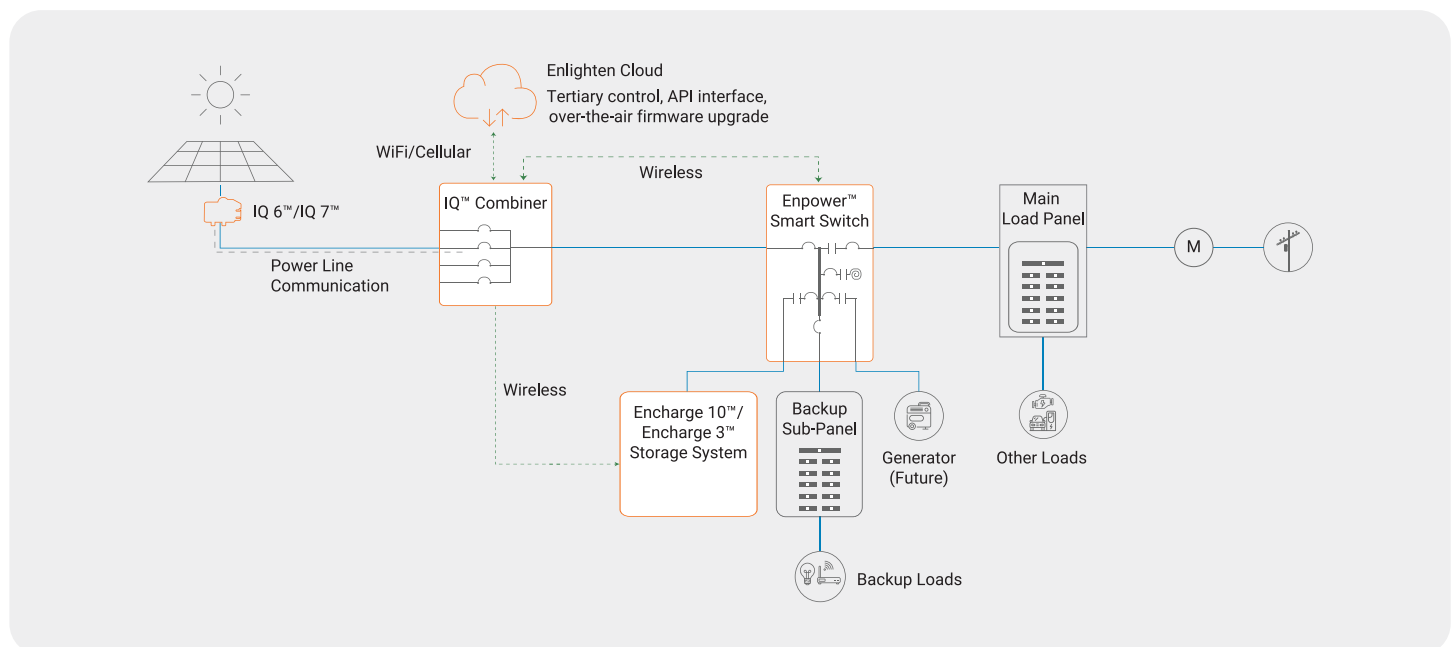
Note: The scenarios below show an IQ Combiner (with IQ Envoy) and IQ series micros. If you have legacy M series (M215 or M250) micros your system will have an Envoy S metered. The Envoy S metered may be inside a combiner box.

With an Enphase storage system, when the grid is down, you have power, and when the grid is up, you can save money. Whole home backup and partial (essential) home backup scenarios are shown in the following sections. Your system is like one of these configurations depending on whether your system is installed to provide full home backup or installed to provide power for essential loads you have identified in discussion with your installer.

### Partial home backup

This is the preferred configuration for backup of essential loads. When the grid goes down your main electrical panel will power down, and Enphase storage system will energize your back-up electrical panel. All the circuits that run through your back-up electrical panel transition to off-grid operation. Typical back-up loads panels are configured to power essential loads during an outage. Essential loads vary from home to home, but most often include refrigerators and freezers, communications and entertainment devices, lights, and electrical heat and/or air conditioning. Your installer can confirm which electrical circuits have been included in your back-up electrical panel.

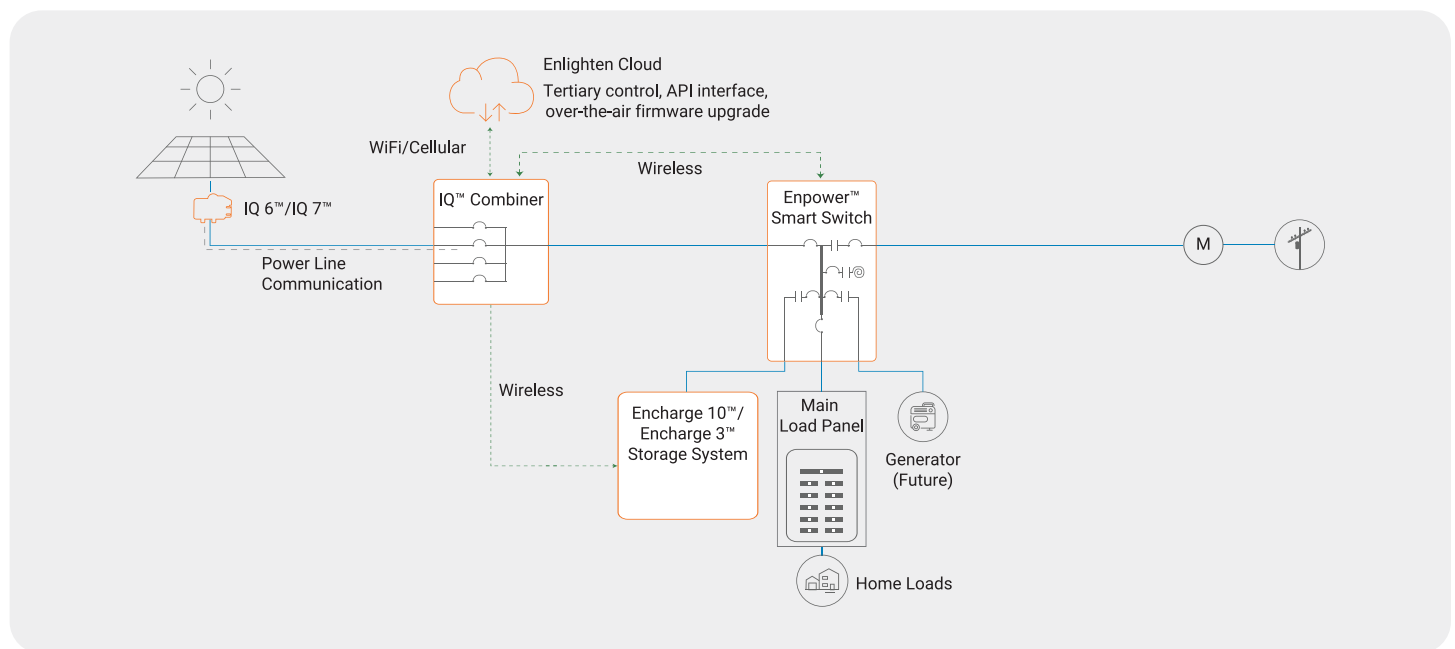
Depending on the power requirements of your various appliances, you may find that a staggered start of heavy electrical loads improves the performance of your system. For example, you may wish to run your dishwasher when you are not running your air conditioner. Your system continues to operate autonomously for as long as the sun is shining, or you have energy capacity in your Encharge storage system. You can extend the period of autonomous operation by limiting your energy usage during the period of the grid outage.



## Whole home backup

This is the preferred configuration for complete home backup. When the grid goes down, your Enphase storage system transitions all your electrical circuits to back-up power. There are no excluded circuits in an entire home back-up configuration. For this reason, you may wish to limit the simultaneous use of large electrical loads during a power outage. Depending on the power requirements of your various appliances, you may find that a staggered

start of heavy electrical loads improves the performance of your system. For example, you may wish to run your pool pump when you are not running your air conditioner. Your system continues to operate autonomously for as long as the sun is shining, or you have energy capacity in your Encharge storage system. You can extend the period of autonomous operation by limiting your energy usage during the period of the grid outage.



## Enphase storage System care

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The Enphase storage system equipment is outdoor rated. However, it should not be immersed in water.

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It is recommended to have a nearby smoke detector, if installed indoors. For an outdoor installation, a smoke detector is not necessary.

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Do not block vents or store flammable, sparking, or explosive objects near the equipment.

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Keep moving objects that could fall onto or collide with the unit away from the equipment.

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Use a slightly damp (water only) or dry cloth to clean or dust the equipment as needed. Do not use cleaning solvents or harsh chemicals on the equipment.

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Never rest anything on top of the equipment.

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# Enphase storage

## Monitoring and management

You can monitor your Enphase system and modify settings using the Enlighten website or mobile application.

Instructions to complete activation of your Enlighten account are sent to you at the email address provided to Enphase by your installer. Look for an email with the subject line "Welcome to Enphase Energy's Enlighten" from email address donotreply@enphaseenergy.com. You will also receive monthly emails from this address. Be sure to unblock this address from your spam or junk mail filters.

Read the Enlighten terms of service at [enphase.com/go/terms-of-service](https://enphase.com/go/terms-of-service)



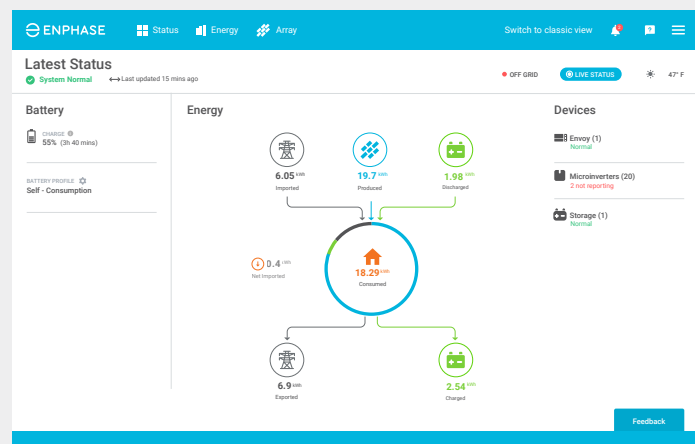
### Enphase Enlighten App

The mobile application is available for both iOS and Android devices. You can install the latest version of Enlighten from the Apple App Store or Google Play Store.



### Enphase Enlighten Website

Access the Enlighten website using the internet browser on your desktop or mobile device. Find Enlighten at [enphase.com/go/enlighten](https://enphase.com/go/enlighten)



# Enphase storage

## Understanding system operation

The Enlighten monitoring system is your guide to understanding the operation of your system and its current status. Internet connectivity of your Enphase storage system is essential to ensure that status updates are available for display in Enlighten.

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In the upper left corner of the app, you can see the operation status of your system and whether your system is connected to the grid or disconnected from the grid.

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Tap the **Live Status** on the status page to see real-time energy flows for your system.

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Normal operation for your system is determined by which **Battery smart profile** you enable.



## Battery smart profile

You can set your Enphase Encharge battery(ies) to one of three different smart profiles. Set the smart profile to match your energy management objectives. You can change your profile as your objectives change over time.

### Savings Mode

Under a time-of-use (TOU) rate schedule, your utility charges you more for electricity during the hours when electricity demand is the highest (peak hours) and credits you less for energy exported to the grid during periods of low electricity demand (off-peak hours). When you discharge your battery(ies) during peak billing hours, you avoid importing expensive electricity from the utility.

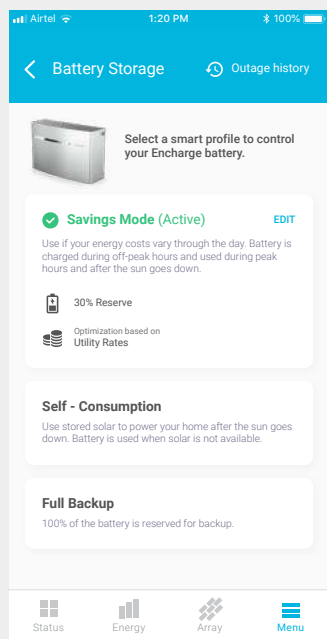
To complete Savings Mode configuration, you will need to have access to the details of the electric rate schedule for your utility account.

### Self-Consumption Mode

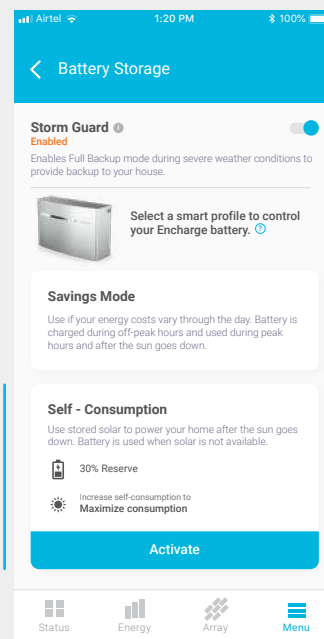
In self-consumption mode, your battery(ies) charge whenever your energy production exceeds your consumption and they discharge whenever consumption exceeds your energy production.

This mode is best for zero export applications in which your utility does not allow the export of PV production to the grid. This mode is also best when the utility provides little or no credits for PV exported energy. In those systems, the energy is more valuable when it is consumed on site. Self-consumption mode is used commonly in states such as Hawaii and California.

To complete self-consumption mode configuration, you must decide how much of your Encharge storage system capacity will be held in reserve for back-up power in case of a grid outage. This is referred to as your reserve capacity.



Select **Savings Mode** if you wish to use your stored energy when electricity rates are highest.



Select **Self-Consumption mode** if you wish to use as much as possible of your generated energy at home.



## Reserve Capacity in Self-Consumption or Savings Modes

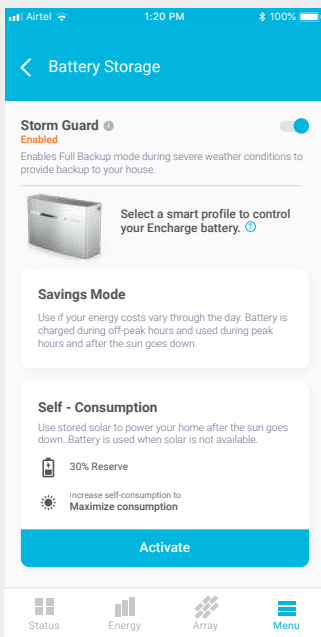
You can edit the reserve capacity of your Encharge batteries in self-consumption or savings mode. The reserve capacity refers to the percentage of your battery discharge capacity that you wish to reserve for outages. For example, if the reserve capacity is set to 30%, the batteries do not discharge below 30% unless there is an outage. You can change your battery reserve capacity setting from the battery storage page on the Enlighten mobile app and website for any of the smart profile settings.

## Full Backup Mode

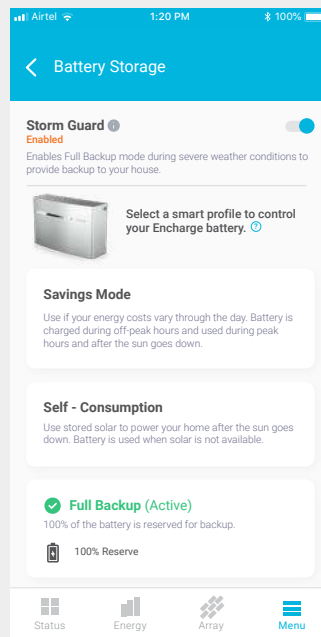
Enabling full backup mode means that all your Encharge storage system capacity is held in reserve in the event of a power outage. When this mode is set, the batteries do not charge and discharge when the grid is available. Reserve capacity is not adjustable in full backup mode. This mode is frequently used in areas that experience frequent grid outages without a related storm event.

## Storm Guard

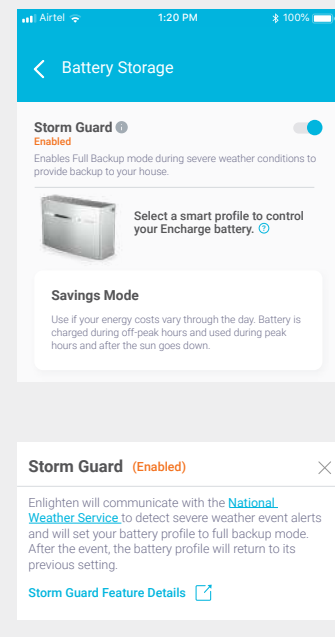
Storm Guard automatically switches your Battery Smart Profile to Full Backup mode when severe weather conditions threaten your area. Storm Guard will automatically revert to your previously selected Battery Smart Profile when the storm threat passes.



Select **Self-Consumption** mode if you wish to use as much as possible of your generated energy at home.



Select **Full Backup** mode to store 100% of your battery energy for use during a grid outage.



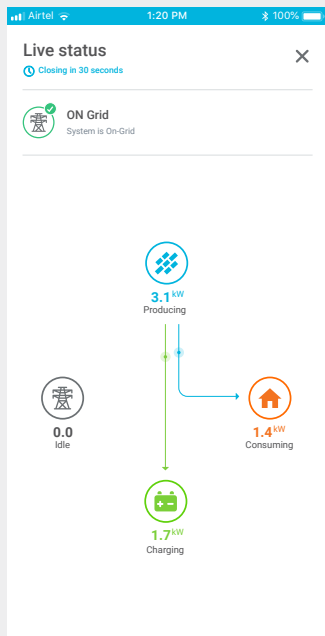
You also have the option of enabling **Storm Guard** in either **Savings** or **Self-Consumption** modes.

## Normal operation when grid power is present

### Self-Consumption Mode

Normal operation in self-consumption mode always prioritizes the consumption or storage of solar production over export to the grid. In jurisdictions where export is not allowed (zero export regulations), energy is never exported to the grid.

During daylight hours, energy is used to power the home or charge the batteries, regardless of off-peak or on-peak hours.



Solar production is powering the home and charging the batteries.



Solar production is powering the home, and because the batteries are fully charged, excess generation is exported to the grid.

## Savings Mode

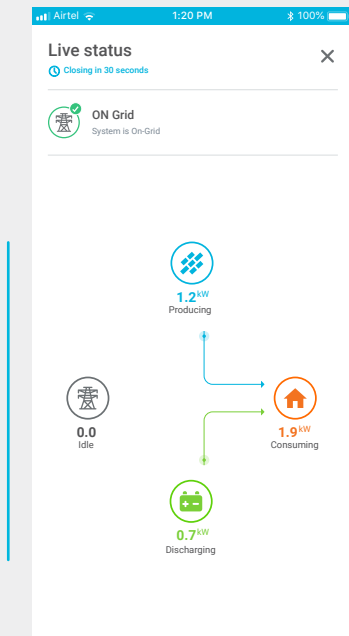
During daylight, off-peak hours, your solar production is prioritized to:

1. Power your home
2. Charge your battery(ies)
3. Export to the grid

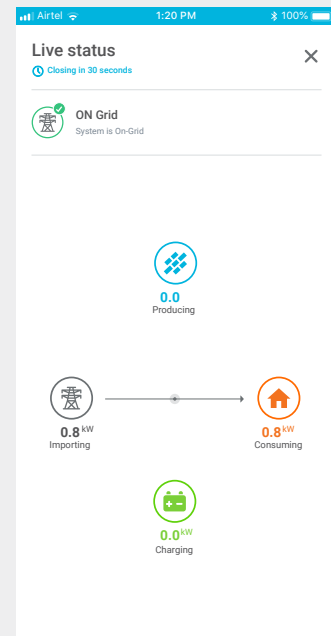
Solar production powers the home and charges the batteries. If batteries are fully charged, solar production powers the home, and excess generation is exported to the grid. The two following **Live Status** snapshots in the self-consumption mode section (previous) also apply here.

During peak hours (often after sunset), your energy consumption sources are prioritized as follows:

1. Solar (if available)
2. Battery discharge
3. Grid import



Solar production and battery discharge are powering the home.



The battery has reached its minimum reserve capacity and can no longer be used to power the home, so energy is being imported from the grid.

### Normal operation when a grid outage occurs

Regardless of the Battery Smart Profile selected, during daylight hours your solar production is prioritized to:

1. Power the home
2. Recharge your batteries

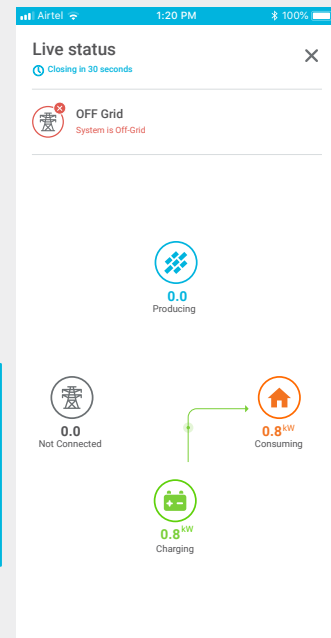
Regardless of the Battery Smart Profile selected, during nighttime hours (or during daytime hours with no solar production) your batteries will discharge to power your home.



Solar production is powering the home only.



Solar production is powering the home and charging the batteries.



The battery is powering the home.

# Enphase storage

## Troubleshooting

Follow all the safety measures described throughout this manual. Use the following troubleshooting steps if the system does not operate correctly.



**WARNING:** Risk of electric shock. Do not attempt to repair the Enphase Enpower, Enphase Encharge, or any Enphase equipment. They contain no user-serviceable parts. If you believe that the equipment has failed, contact Enphase customer support to obtain an RMA (return merchandise authorization) number and start the replacement process.

### System recovery after shutdown

Your system has experienced a shutdown if it is no longer providing power to your home.

System shutdowns may be caused by the batteries becoming fully discharged during a power outage, by a large electrical load overloading the batteries, by a failure of the wireless communication systems, or another equipment failure. Recovery steps following system shutdown vary depending on the cause of the shutdown.

#### Shutdown due to battery depletion (offgrid)

If Enlighten indicates that your battery is at a 0% state of charge, the stored energy in your batteries has been exhausted. The next potential to replenish your batteries during the outage is when solar production is greater than what your home is consuming. To facilitate this recharge, turn off all appliances and circuits, and the system will automatically recover when solar production is available. If solar production is available and the batteries do not recover, you can go to page 20 to restart the batteries by cycling the DC switches on Encharge.

#### Shutdown due to large electrical load (offgrid)

If Enlighten indicates that your Encharge storage system is greater than 0% state of charge, a large electrical load (or more than one simultaneous loads) may have caused your microgrid to collapse. If the shutdown occurred quickly after a large appliance or motor started up, this is the most probable scenario. Air conditioners and electric dryers are two examples of appliances that require a great deal of power to start.

**If you suspect that a specific load or a combination of loads is overloading the batteries, you should immediately shut off the load(s) and allow the batteries to automatically restart.**

If the loads causing the overload condition are turned off immediately after the overload occurs, the system will restart within five minutes.

Check if the LED lights on the IQ Envoy (likely inside the IQ Combiner) are flashing or lit solid. If they are flashing, the system is in the process of restarting.

#### Managing loads to prevent system shutdowns

Well pumps, sump pumps, pressure pumps, and electric motors can be some of the most challenging loads to run. This is due to the large start-up power surge requirements.

One challenge with pumps is that they often turn on when other large loads are also running. For example, during cooking, it is common to run large electric loads like ovens while also using a lot of water in the kitchen. Your Encharge storage system may be sized to run the oven on its own and it may be able to start the pump, but it may not be sized to run both loads at the same time. One option would be to shut off the oven long enough to allow the pump to start up. Once the pump is started, it may be possible to turn the oven back on.

As your needs and energy consumption change over time with, for example, the introduction of new appliances or the addition of new members of your household, you may wish to verify that your system is sized to handle your new energy demands. You can better understand what is required for large loads by accessing **Live Status** in Enlighten to see how much power your home is consuming during outages.

### Shutdown due to communications system failure

This is an unusual failure scenario and can be identified very simply using Enlighten.

Does Enlighten show that the Envoy is not reporting and/or is the left-most LED (Network communications LED) on the Envoy lit red?

The Network Communications LED (left-most LED) in the IQ Envoy in the IQ Combiner is lit solid green when connected to Enlighten.

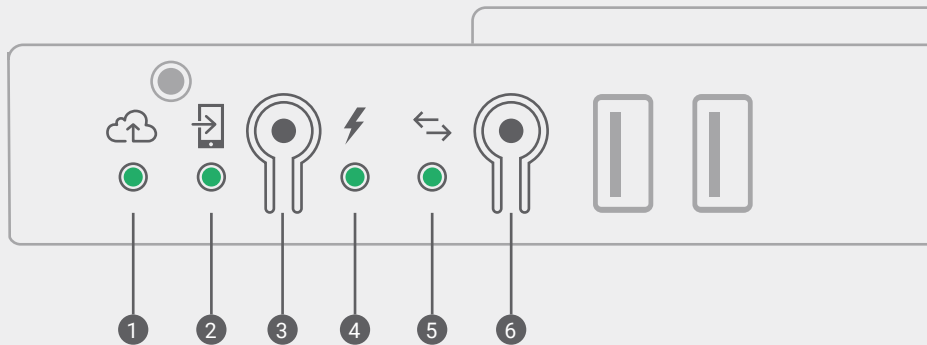
If the Network Communications LED is not solid green, then you may need to reconnect the Envoy to Enlighten using Wi-Fi, hard-wired Ethernet, or cellular.

Check that the Envoy breaker inside the Combiner is in the on position. If not, flip it on.

### Envoy breaker inside the Combiner



### Envoy LEDs and buttons inside the Combiner



**1** **NETWORK COMMUNICATIONS LED**  
Green when IQ Envoy is connected to Enlighten.

**2** **AP MODE LED**  
Green when Envoy's AP Wi-Fi network is available.

**3** **AP MODE BUTTON**  
Press to enable the AP Mode for connecting to a mobile device. Hold for 5 seconds to start WPS connection to a router.

**4** **POWER PRODUCTION LED**  
Green when microinverters are producing power.

**5** **DEVICE COMMUNICATIONS LED**  
Green when devices are communicating with IQ Envoy.

**6** **DEVICE SCAN BUTTON**  
Press to start/stop 15-minute scan for devices over the power line.

### Envoy LEDs and buttons in Standalone Envoy

For systems with a stand-alone IQ Envoy not installed in an IQ Combiner or an Envoy S metered the Network Communications LED is the top LED of the four LEDs.



- 1 NETWORK COMMUNICATIONS LED**  
Green when IQ Envoy is connected to Enlighten™.
- 2 AP MODE LED**  
Green when Envoy's AP Wi-Fi network is available.
- 3 AP MODE BUTTON**  
Press to enable Envoy's AP Mode for connecting with a mobile device.

- 4 POWER PRODUCTION LED**  
Green when microinverters are producing power.
- 5 DEVICE COMMUNICATIONS LED**  
Green when devices are communicating with IQ Envoy.
- 6 DEVICE SCAN BUTTON**  
Press to start/stop 15-minute scan for devices over the power line.

### Envoy communications

If the Envoy has stopped reporting to Enlighten, see this webpage for more information [enphase.com/go/envoy-offline](http://enphase.com/go/envoy-offline)

If the Envoy is no longer powered on or has failed, the system will shut down. If the Envoy fails, contact your installer to submit a warranty claim for replacement (where applicable).

If the Wireless communications kit (highlighted on the right) has been unplugged or has failed, the system will shut down. Verify that the Ensemble communications kit is plugged in.



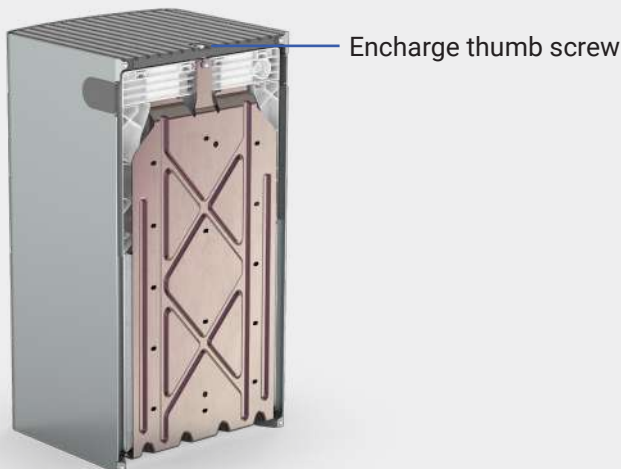
### Removing the Encharge battery cover to access the DC switch

Encharge includes no readily accessible consumer controls. In the unlikely event that a battery does not automatically recover from an overload or failure scenario and must be reset, you must access the DC switch for the battery. To reset the DC switch, turn it OFF, wait for 30 seconds, and turn it ON.

The battery cover is attached to the Encharge batteries with a quarter turn thumbscrew. Place a finger inside the cover at the conduit entry opening,

and gently pull the cover away from the battery while pulling the cover away from the wall. Do this on both sides of the battery. Once the battery cover is two inches from the wall on both sides, the cover can be easily removed.

The following images show an Encharge 3 cover with a thumbscrew and the Encharge DC switch. There are two thumbscrews on the Encharge 10 covers and three DC switches.





### When to contact customer support

If your system is not operating properly or has shut down unexpectedly, contact Enphase Customer Support for guidance at [enphase.com/go/contact-support](https://enphase.com/go/contact-support)



Your support agent will ask for details on the status LEDs in your system. Be prepared to provide information about the Encharge storage system LED indicators and the IQ Combiner (Envoy) LED indicators.

You can check and record the color of all the LEDs on the front of the Encharge batteries using the following table. If the Encharge lights are solid or pulsing green or blue, the batteries are operating.

## Encharge LED State

### During installation and commissioning

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	<b>FLASHING BLUE</b> After booting up, when Encharge has paired with an IQ Envoy and is awaiting three-way handshake to confirm that it is an Enphase device
	<b>FLASHING GREEN</b> After passing the three-way handshake with the IQ Envoy

### During normal operation

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	<b>RAPIDLY FLASHING YELLOW</b> Starting up / Establishing communications
	<b>RED FLASHES IN SEQUENCES OF 2</b> Error
	<b>SOLID YELLOW</b> Not operating due to high temperature
	<b>SOLID BLUE OR GREEN</b> Idle. Color transitions from blue to green as state of charge increases. You can check Enlighten for charge status
	<b>SLOWLY FLASHING BLUE</b> Discharging
	<b>SLOWLY FLASHING GREEN</b> Charging
	<b>SLOWLY FLASHING YELLOW</b> Sleep mode activated
	<b>OFF</b> Not operating

## Envoy LED State

All

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### FLASHING AMBER IN UNISON

The IQ Envoy is booting up



### FLASHING GREEN SEQUENTIALLY

Software upgrade in progress



## Network Communications

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### SOLID GREEN

Communicating with Enlighten



### FLASHING GREEN

WPS connection in progress or the IQ Envoy is attempting to connect to Enlighten



### SOLID AMBER

Local network connection only



### OFF

No network connection



## Power Production

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### SOLID GREEN

All communicating microinverters are producing



### FLASHING GREEN

Microinverter upgrade in progress



### SOLID AMBER

At least one microinverter is not producing



### OFF

Microinverters are not producing or communicating (low light or night time)



## AP Mode

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### SOLID GREEN

AP mode enabled:  
IQ Envoy Wi-Fi network available



### OFF

AP mode disabled:  
IQ Envoy Wi-Fi network unavailable



## Device Communications

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### SOLID GREEN

All devices are communicating



### FLASHING GREEN

Device scan in progress



### SOLID AMBER

At least one device is not communicating



### OFF

Devices are not communicating  
(low light or night time)



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