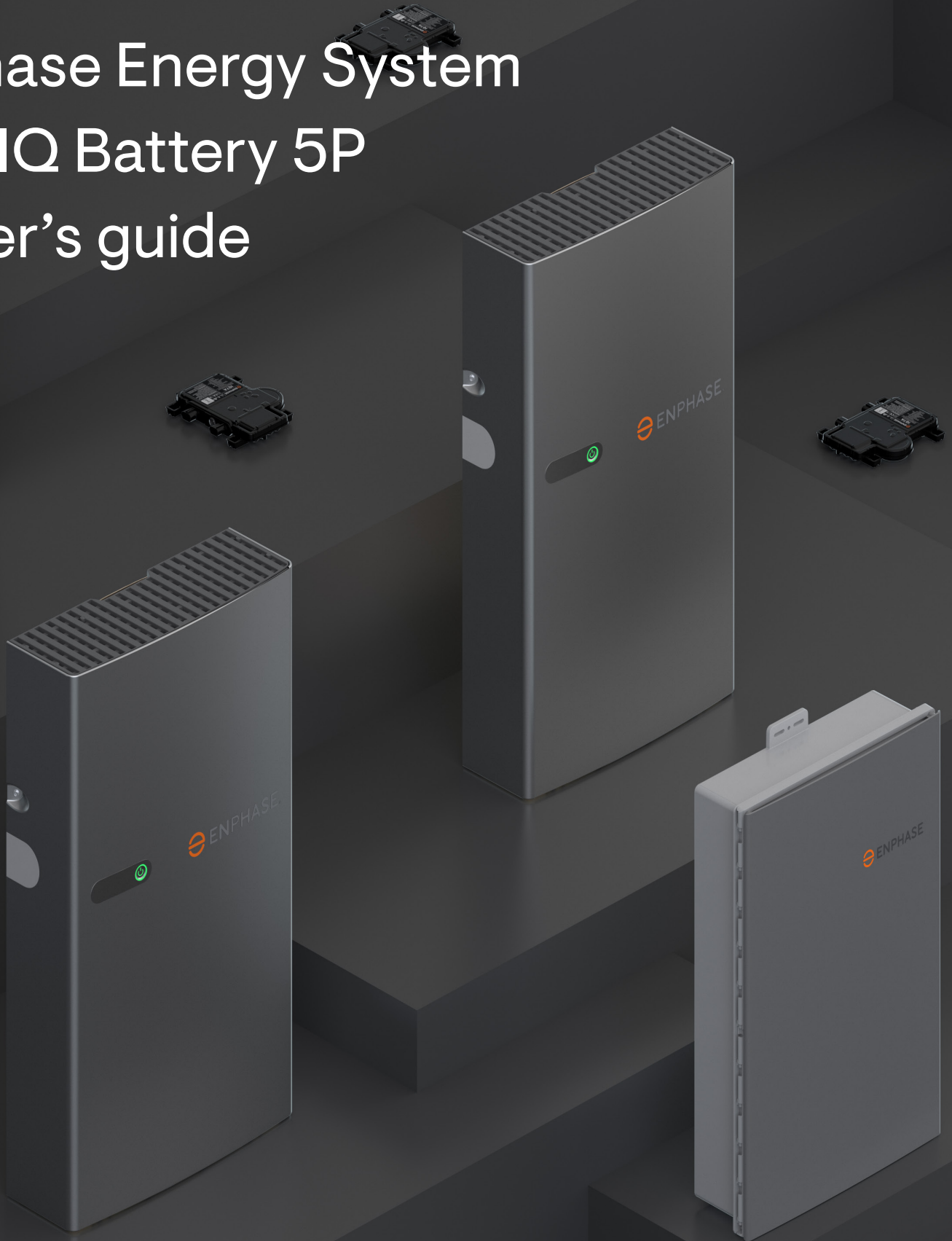




# Enphase Energy System with IQ Battery 5P owner's guide



## Corporate headquarters contact information

<https://enphase.com/en-au/support>

## Warranty

To ensure optimal performance and reliability and to meet warranty requirements, the Enphase Energy System must be installed according to the instructions in the quick install guide.

The Enphase Energy 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.

In addition, features like live status monitoring, energy and power monitoring, Storm Guard, and in-app control of appliances that have load control only work when the system has an active internet connection.

Visit <https://enphase.com/installers/resources/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 (<https://enphase.com/en-au/support>) for the latest information.

Visit <https://enphase.com/patents> for Enphase patent information.

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## Audience

This manual is intended for use by owners of Enphase Energy Systems with IQ Battery 5P.

## Environmental protection



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



**ELECTRONIC DEVICES: DO NOT THROW AWAY.**  
Do not install or use the Enphase Energy System equipment if the equipment is damaged.

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# Enphase Energy System with IQ Battery 5P



# Enphase Energy System



# System information

## System components



### **IQ Battery 5P**

IQ Battery 5P stores energy and dispatches it when you need it. IQ Battery 5P is built on a distributed architecture platform. This modular design means you can quickly and easily expand your system as your needs grow.



### **IQ Battery 5P with FlexPhase**

The IQ Battery 5P with FlexPhase is built to adapt to your specific energy needs. It supports a range of configurable power options and includes built-in three-phase backup, making home energy management simple and reliable.



### **IQ Microinverters**

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



### **Enphase App**

The Enphase App is a mobile app where you can monitor and control your system status from wherever you are and know exactly how much energy your solar system is producing. You can generate reports on energy production by day, week, month, or year.

## Grid-tied components



### Communications Kit

In grid-tied systems, the Communications Kit is used to enable communication between the IQ Battery 5P and the IQ Gateway. This device connects to IQ Gateway via a USB cable, and IQ Batteries are connected to this device via control cables.



### Current transformers

Current transformers measure the current flowing through the system. The Enphase Energy System uses one CT to measure the solar power generated on your roof and one CT to measure the electricity consumption of your entire home. These currents are measured and fed to the IQ Gateway.



### IQ Relay

The IQ Relay is a grid monitoring device that protects microinverters and batteries against grid excursion events. It senses the voltage and frequency abnormalities in the system to physically disconnect/reconnect the Enphase system to the grid.

## Backup component



### IQ System Controller 3 INT

The IQ System Controller 3 INT connects the home to the utility grid, IQ Battery 5P, and rooftop solar. The IQ System Controller 3 INT seamlessly transitions the home energy system from grid power to backup power in the event of a utility grid failure.

It also includes the Enphase IQ Gateway, a network communication device that collects production and performance data from IQ Series Microinverters, IQ Battery 5P, and the IQ System Controller 3 INT.

# Component introduction

## IQ Battery 5P and IQ Battery 5P with Flexhase



\* When installed with an IQ System Controller 3 INT

IQ Battery 5P is an AC-coupled storage system with an energy capacity of 5.0 kWh. It performs two critical functions in your system.

- The battery packs, internal to IQ Battery 5P, store energy for later use, such as night-time, lower solar production circumstances, or during a power outage\*. IQ Battery 5P can supply up to 200% overload current, enabling it to start heavy appliances even during a power outage\*.
- The IQ Microinverters, internal to IQ Battery 5P, provide the voltage and frequency necessary for the operation of your solar while running off the grid\*. These microinverters convert your stored DC energy into usable AC electricity for your house. IQ Battery 5P also communicates with the IQ Gateway through wired communication.

The IQ Battery 5P with FlexPhase is Enphase’s most advanced energy storage solution for Australia and New Zealand, designed to meet local grid requirements and deliver unmatched flexibility. The battery can be configured as single-phase or three-phase. It has a range of output models from 1.65 kVA to 3.84 kVA (single-phase) and 1.84 kVA to 3.84 kVA (three-phase), enabling compliance with strict DNSP grid connection requirements in Australia and aligning with evolving regulatory guidance in New Zealand.

| SINGLE-PHASE NOMINAL RATINGS AND MODEL NAMES |             |             | THREE-PHASE NOMINAL RATINGS AND MODEL NAMES |             |                |
|--|-------------|-------------|---|-------------|----------------|
| MODEL NAME                                   | POWER (KVA) | CURRENT (A) | MODEL NAME                                  | POWER (KVA) | CURRENT (A)    |
| IQBATTERY-5P-3P-INT-1.65-1P                  | 1.65        | 7.17        | IQBATTERY-5P-3P-INT-1.84-3P                 | 1.65        | 2.67 per phase |
| IQBATTERY-5P-3P-INT-2.50-1P                  | 2.50        | 10.87       | IQBATTERY-5P-3P-INT-2.50-3P                 | 2.50        | 3.62 per phase |
| IQBATTERY-5P-3P-INT-3.00-1P                  | 3.00        | 13.04       | IQBATTERY-5P-3P-INT-3.00-3P                 | 3.00        | 4.35 per phase |
| IQBATTERY-5P-3P-INT-3.68-1P                  | 3.68        | 16          | IQBATTERY-5P-3P-INT-3.68-3P                 | 3.68        | 5.33 per phase |
| IQBATTERY-5P-3P-INT-3.84-1P                  | 3.84        | 16.7        | IQBATTERY-5P-3P-INT-3.84-3P                 | 3.84        | 5.56 per phase |

All batteries in the system will be configured to the same power rating. Refer to the system planning guide for more configuration details.

## IQ System Controller 3 INT

The IQ System Controller 3 INT consolidates the interconnection equipment for your system and houses the following:

- Multiple PV branches and battery circuit breakers to ensure a streamlined installation and interconnection.
- IQ Gateway: This collects production and performance data from your Enphase Energy System and IQ Series Microinverters. It then transmits the data to the Enphase Cloud through Ethernet, Wi-Fi, or cellular network to make it visible in the Enphase App.
- Mobile Connect: This device reports the performance data from your microinverters, IQ System Controller 3 INT, and IQ Battery 5P units to the cloud through a cellular network in the absence of an Ethernet or Wi-Fi connection.

The IQ System Controller 3 INT also senses when the grid goes down and seamlessly transitions the home from grid power to backup power. During a grid outage, it safely disconnects the home from the utility grid and powers the backup loads using the IQ Battery 5P storage system and the PV system.



## IQ Gateway and Communications Kit

In a grid-tied system (without backup capability), the IQ Gateway collects production and performance data from your Enphase Energy System. It then transmits the data to the Enphase Cloud through Ethernet or Wi-Fi to make it visible in the Enphase App. The IQ Gateway also houses advanced algorithms that control and optimise your Enphase Energy System for the best performance. The IQ Gateway uses a Communications Kit as an accessory to enable communication with IQ Battery 5P.



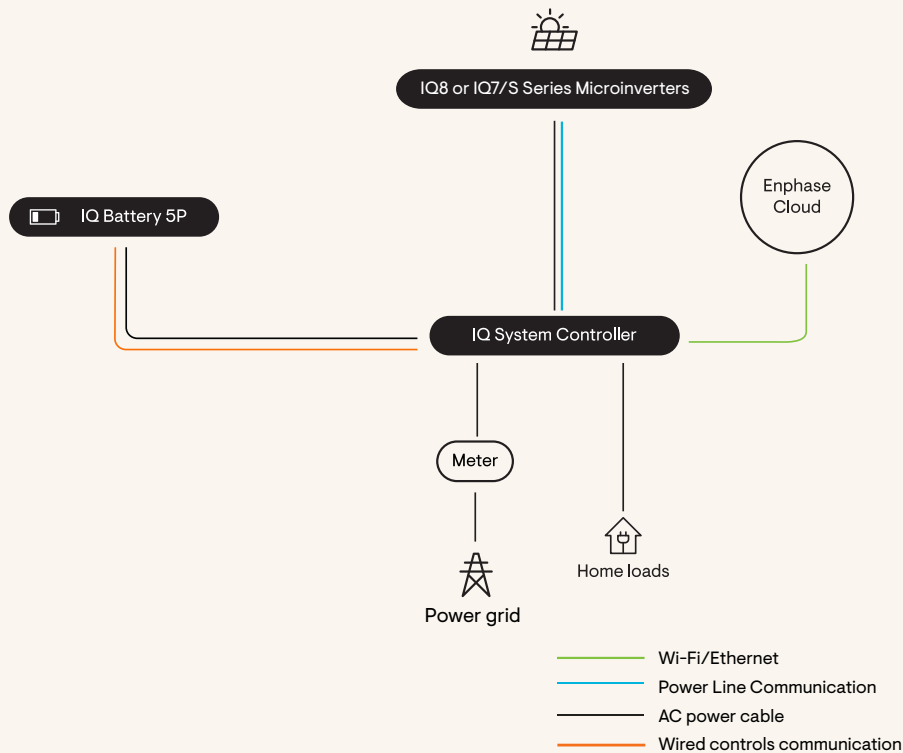
## Whole-home backup for single-phase and three-phase homes

Whole-home backup is ideal for homeowners who want all-day whole-home backup power for running appliances during a grid outage. The Enphase Energy System must be carefully sized to meet your single-phase home's specific energy needs.

Depending on your IQ Battery sizing, your Enphase Energy System may be able to sustain off-grid operation for extended periods.

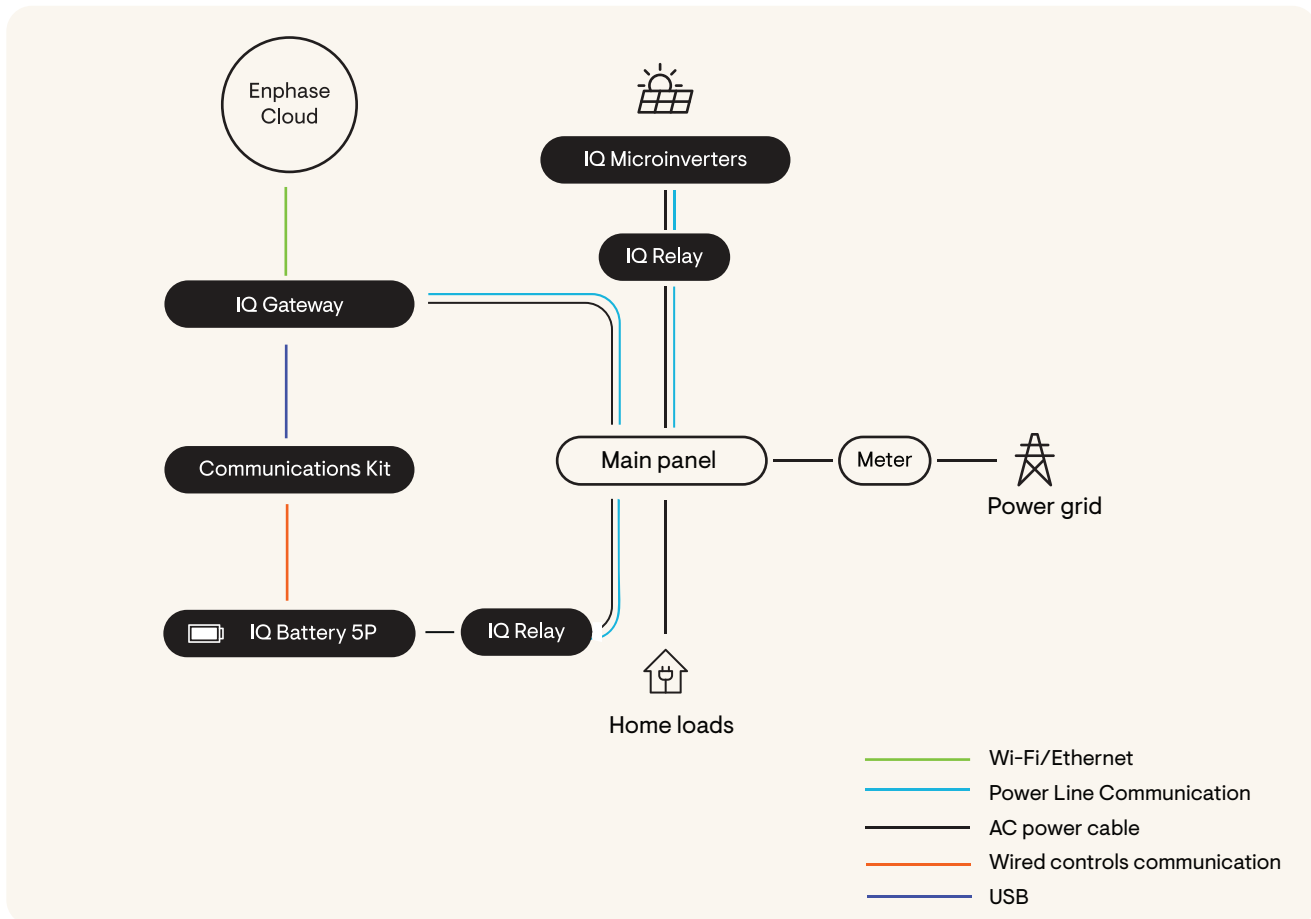
### Want to upgrade your system?

Thanks to the modular design of the Enphase Energy System, it is easy to add additional battery capacity as your needs grow over time. Contact your Enphase installer to learn more about how you can expand your system.



## Grid-tied configuration for single-phase and three-phase homes

The grid-tied solution is perfect for homeowners who have access to a reliable grid. They can harness solar energy to reduce their reliance on the grid and lower electricity bills while always staying connected to the grid. The power supply to your home can either be single-phase or three-phase. A single-phase power supply is a three-wire alternating current (AC) circuit with Line, Neutral, and Earth. A three-phase power supply is a five-wire AC circuit with Line 1, Line 2, Line 3, Neutral, and Earth. A typical home power supply has a voltage of 230 V (L-N) and a frequency of 50 Hz. Below you can find a simplified representation of your Enphase Energy System.



# System monitoring and management

Make, use, save, and export your own power right from the palm of your hand with the Enphase App. You can quickly and easily monitor and control your Enphase Energy System and modify system settings directly from the Enphase App.

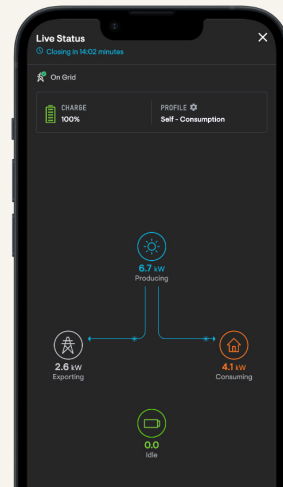
**NOTE:** Internet connectivity for your Enphase Energy System is essential to ensure that status updates are available and accurate in the Enphase App.

## Getting started

Instructions to activate your Enphase App account are sent to you at the email address you provided to your installer. Look for an email with the subject line “Activate Your Online Solar Monitoring Account” from 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 Enphase App terms of service at <https://enphase.com/en-au/legal/terms-of-service>.

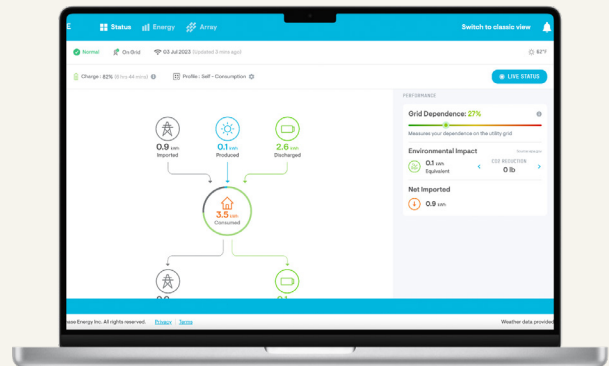
## Enphase App

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



## Enphase web application

You can access the Enphase App using your internet browser on your desktop or mobile device. Log into the Enphase App at <https://enlighten.enphaseenergy.com>.



## Setting your smart profile

Your Enphase Energy System features three preconfigured smart profiles that allow you to choose the operation that matches your energy management objectives. You can easily change your profile as your objectives change over time.

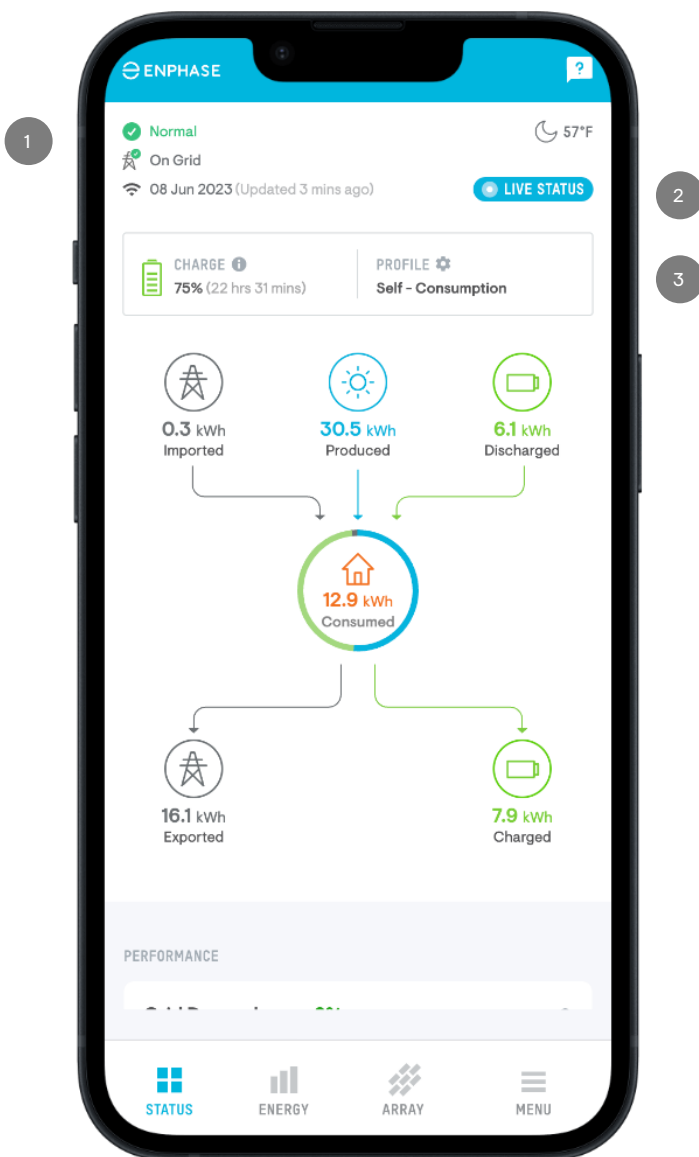
The Enphase IQ Battery offers several smart profiles tailored to meet your diverse energy needs:

Grid-tied configuration (without backup):

- Self-Consumption profile
- Savings profile

Backup-enabled configuration:

- Self-Consumption profile
- Savings profile
- Full Backup profile



1 In the upper left corner of the Status section, you can see the **operating status** of your system and whether your system is **On Grid** or **Off Grid**.

2 Tap **LIVE STATUS** on the status page to see real-time energy flows for your system.

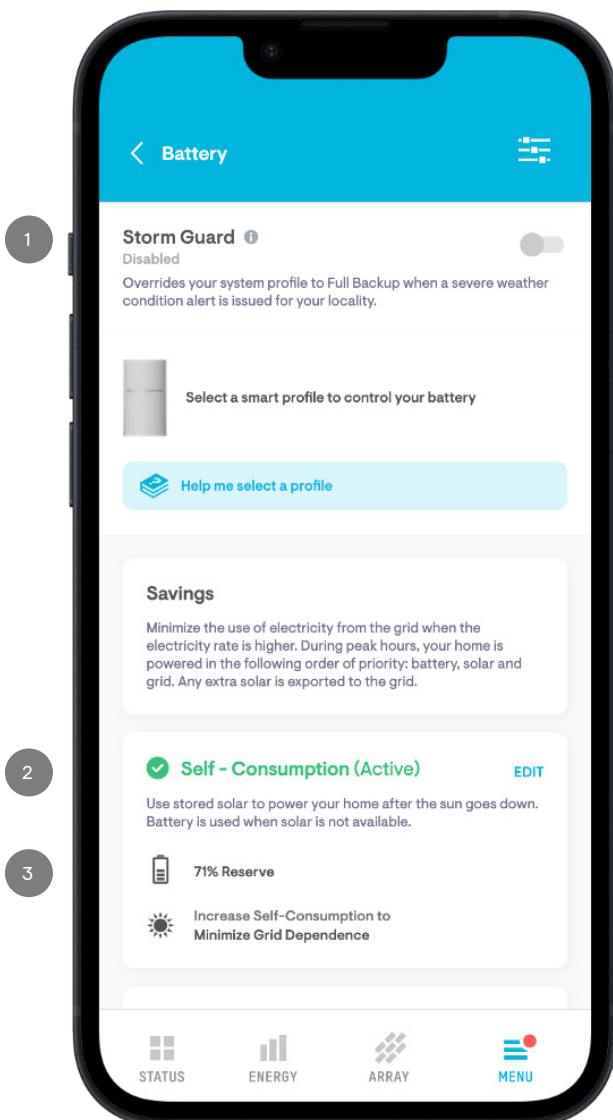
3 Your system's behavior is determined by the **smart profile** you enable.

## Self-Consumption profile

Self-Consumption profile always prioritises your consumption or storage of your produced solar energy over exporting it to the grid. To complete Self-Consumption profile configuration, you must decide how much of your Enphase IQ Battery capacity will be held in reserve for backup power in case of a grid outage. This is referred to as your reserve capacity.

In jurisdictions where solar export is not allowed, produced solar energy is never exported to the grid.

Instead, during daylight hours, your solar energy is used to power your home or charge your batteries, regardless of peak or off-peak hours.



1

In a backup-enabled system, the Enphase App comes with the **Storm Guard** feature that monitors weather conditions in your area. You can toggle on Storm Guard to automatically switch your smart profile to Full Backup profile when severe weather conditions are detected. Storm Guard automatically reverts to the previously chosen profile when the storm threat passes.

2

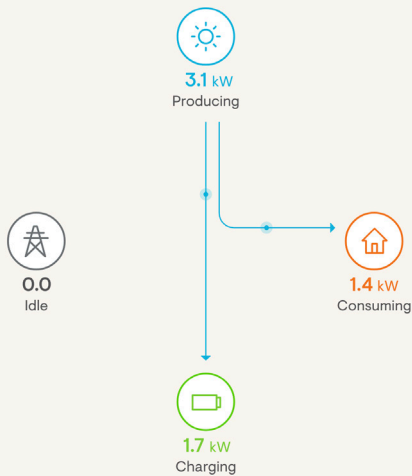
Select **Self-Consumption** profile if you wish to use as much as possible of your generated energy at home.

Self-Consumption profile is only available for Enphase Energy Systems that include compatible Enphase solar microinverters.

3

In a backup-enabled system, you can edit the **reserve capacity** of your IQ Batteries in Self-Consumption profile. The reserve capacity refers to the percentage of your battery's capacity that you want to reserve for outages. For example, if the reserve capacity is set to 30%, your IQ Batteries will not discharge below 30% unless there is an outage.

You can change your battery reserve capacity setting from the battery storage page on the Enphase App for any of the smart profile settings.



Solar production powers the home and charges the battery

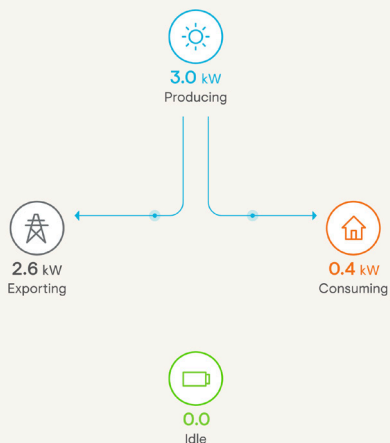
## Operation in Self-Consumption profile

Normal operation in the Self-Consumption profile always prioritises 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.

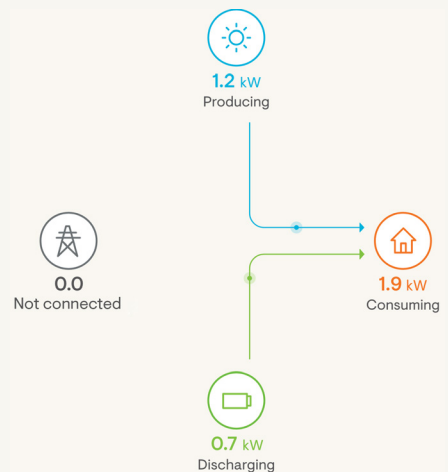
During daylight hours, energy is used to power the home or charge the batteries, regardless of peak or off-peak hours.

## What happens when an outage occurs?

In a backup-enabled system, when a grid outage occurs, your batteries discharge to power your home.



Solar production powers the home, and excess generation is exported to the grid because the battery is fully charged.

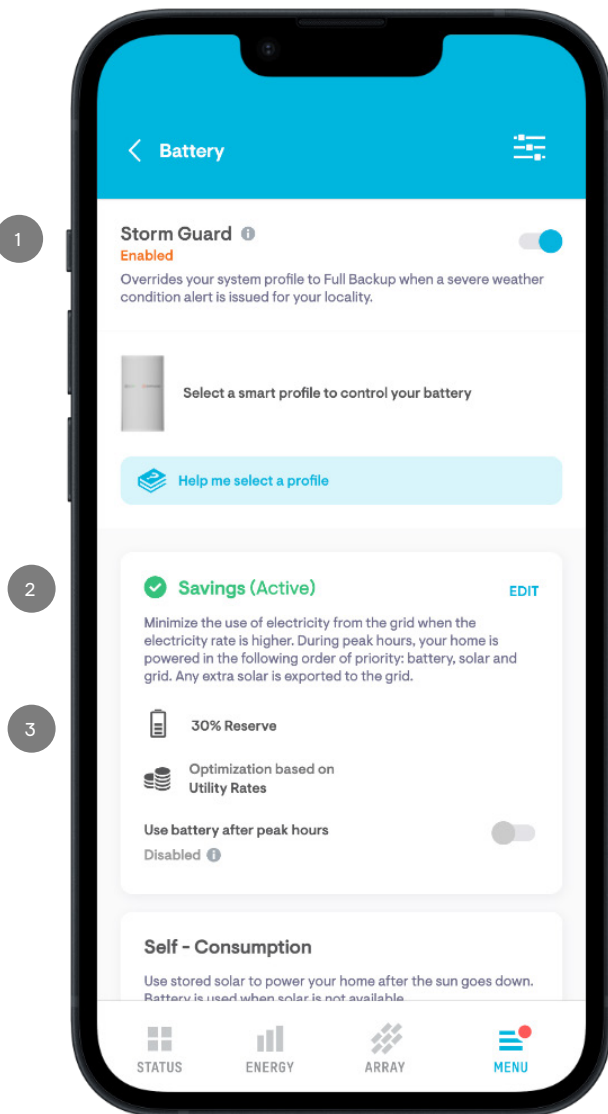


When the grid is down, solar production and battery power the home.

## Savings profile

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 less during periods of low electricity demand (off-peak hours). When you discharge your batteries during peak billing hours, you avoid importing expensive electricity from the utility by consuming the energy discharged by your batteries. In addition, while batteries supply your home's electricity demand, the solar energy produced is exported to the grid to maximise your savings.

To complete the Savings profile configuration, you will need access to the details of the electric rate schedule for your utility account. You must also decide how much of your IQ Battery capacity will be held in reserve for backup power in case of a grid outage (for backup-enabled systems). This is referred to as your reserve capacity.

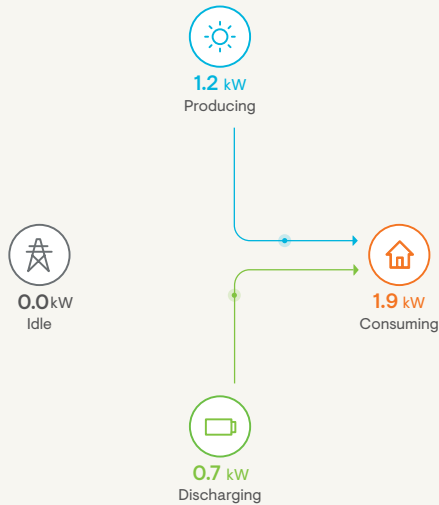


1 The Enphase App comes with the Storm Guard feature for backup-enabled systems that monitors weather conditions in your area. You can toggle on Storm Guard to automatically switch your smart profile to Full Backup profile when severe weather conditions are detected. Storm Guard automatically reverts to the previously chosen profile when the storm threat passes.

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

3 In a backup-enabled system, you can edit the reserve capacity of your IQ Batteries in Savings profile. The reserve capacity refers to the percentage of your battery's capacity that you want to reserve for outages. For example, if the reserve capacity is set to 30%, your IQ Batteries will not discharge below 30% unless there is an outage.

You can change your battery reserve capacity setting from the battery storage page on the Enphase App for any of the smart profile settings.

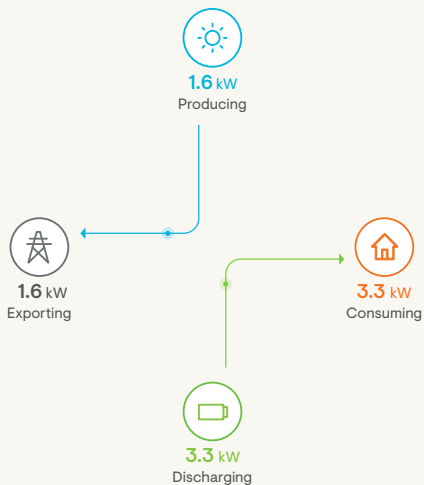


During peak hours, if the export tariff is less than the import tariff, power export is not profitable. Solar production and the battery power the home, minimising power import from the grid.

## Operation in Savings profile

During peak hours (often after sunset), if the export tariff is less than the import tariff, your energy consumption sources are prioritized as follows:

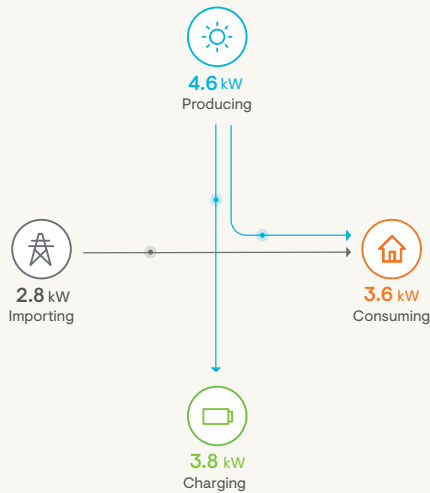
1. Solar (if available)
2. Battery discharge
3. Grid import



During peak hours, if the export tariff is equal to or higher than the import tariff, the battery powers the home, and the solar production is exported to the grid.

During peak hours (often after sunset), if the export tariff is equal to or greater than the import tariff, your energy consumption sources are prioritized as follows:

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

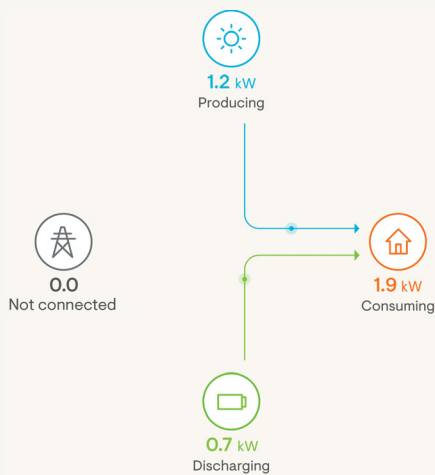


During off-peak hours, the solar panels charge the battery before powering the home. Any excess power is exported to the grid. If your home needs more power than the solar panels can provide, power is used from the grid.

During daylight, off-peak hours, the solar production is prioritised to:

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

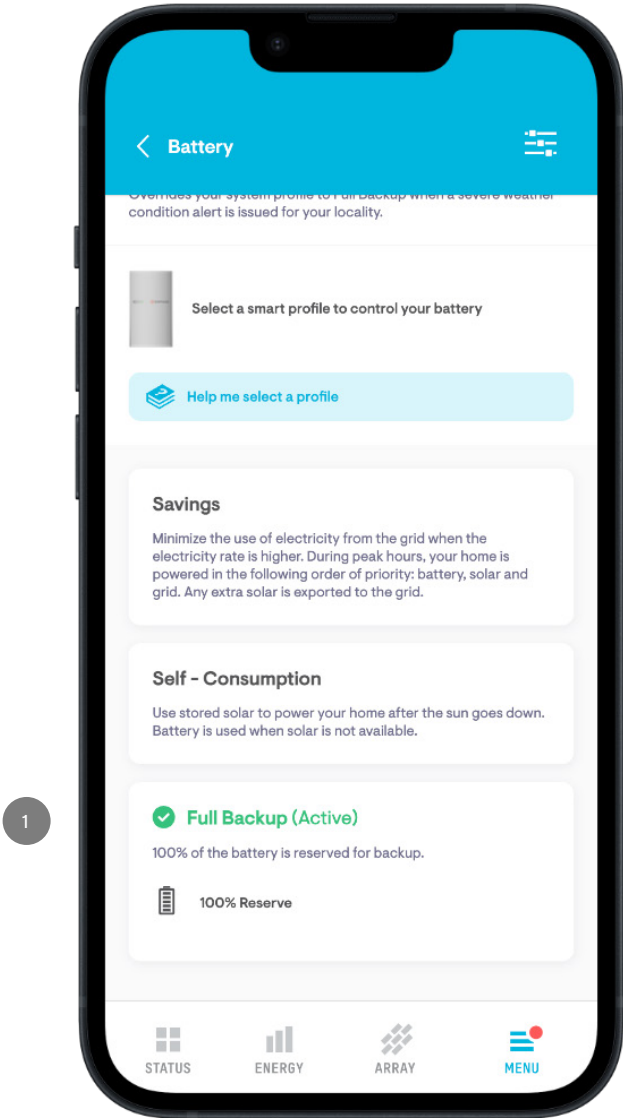
Solar production is used to charge the batteries. If batteries are fully charged, solar production powers the home, and excess generation is exported to the grid.



When the grid is down, solar and battery power the home.

### What happens when an outage occurs?

In a backup-enabled system, when a grid outage occurs, your batteries discharge to power your home.



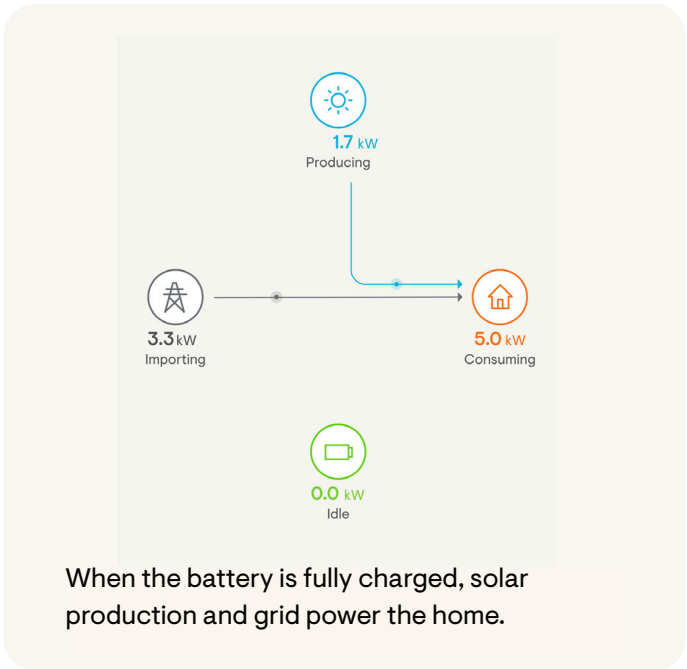
## Full Backup profile

When you enable the Full Backup profile, all your Enphase Energy System capacity is held in reserve in the event of a power outage. When this profile is set, the batteries do not charge and discharge when the grid is available.

### Reserve capacity

**NOTE:** Reserve capacity is not adjustable in the Full Backup profile. This profile is often used in areas that experience frequent grid outages without a related storm event.

1 Select **Full Backup** profile to store 100% of your battery energy for use during a grid outage at home.



### Operation in Full Backup profile

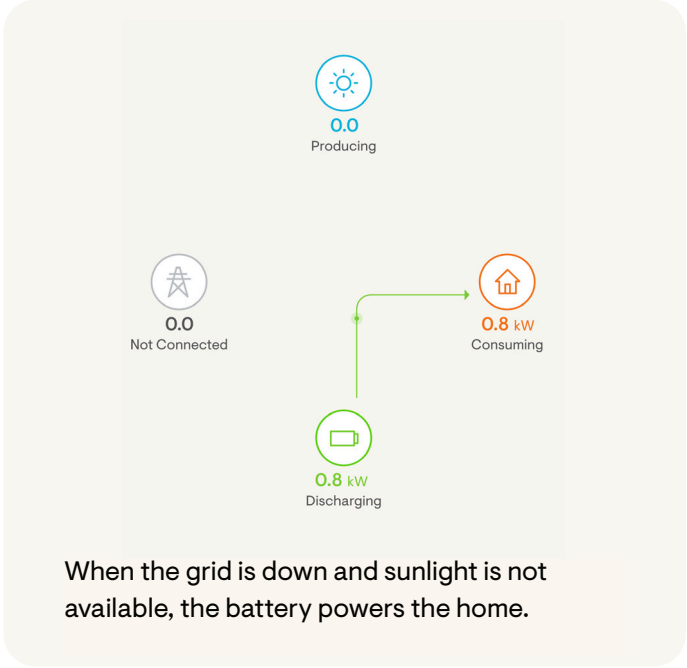
This profile prepares your system for power outages by maintaining a full charge in the battery.

During daylight or off-peak hours, the solar production is prioritised to:

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

After the battery is fully charged, electricity is imported from the grid when your home needs more power than the solar panels can provide.

When there is no sunlight, your home uses electricity from the grid.



### What happens when an outage occurs?

When an outage occurs, your batteries discharge to power your home.

# System care



The Enphase Energy System equipment is outdoor-rated. However, it should not be immersed in water.



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



Store all objects that could fall onto or collide with the unit away from the equipment.



Never rest anything on top of the equipment.



For a system installed indoors, a nearby smoke detector is recommended. For an outdoor installation, a smoke detector is not necessary.



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.



# Troubleshooting

## 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 wired communication systems, or by another equipment failure. Recovery steps following system shutdown vary depending on the cause of the shutdown.

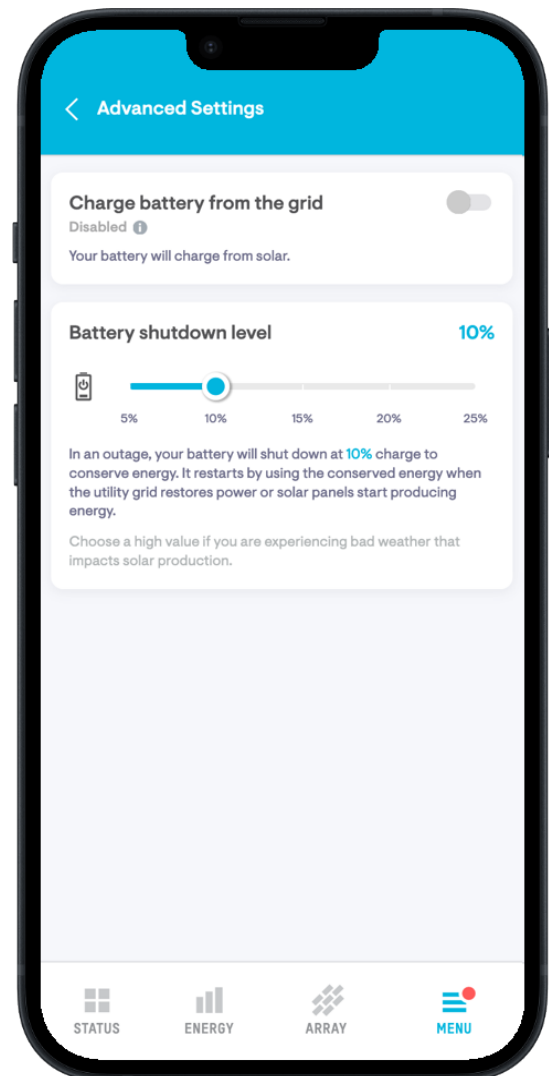
## Shutdown due to battery depletion

In a backup-enabled configuration, the Enphase App allows you to configure the **Battery shutdown level** (default is 10%) for IQ Battery 5P. In an outage, the battery shuts down at this level to conserve energy.

When the Enphase App indicates that your battery is at the configured **Battery shutdown level** or low state of charge, your battery shuts down and restarts automatically using the conserved energy when solar power is available during the daytime or when the utility grid restores power.

This works with IQ7, IQ8, or S Series Microinverters. If you have IQ8 Series Microinverters, the system automatically replenishes your batteries during the outage when solar production is greater than what your home is consuming using Sunlight Jump Start.

To facilitate system restarts and recharge, turn off all appliances and circuits, and the system automatically recovers when solar production is available. If solar production is available and the batteries do not recover, go to [page 32](#) to restart the batteries by cycling the DC switches on the IQ Battery 5P unit.



## Shutdown due to a large electrical load

If the Enphase App indicates that the charge of your IQ Battery 5P storage system is greater than the state of charge configured as your battery shutdown level, a large electrical load (or more than one simultaneous load) 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 must immediately shut off the load(s) and allow the batteries to restart automatically.

Watch the video about best practices.

<https://youtu.be/4WMhtPMSaZc>

## Managing loads to prevent system shutdowns

Well pumps, sump pumps, pressure pumps, and AC 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.

Although your Enphase Energy System may not be sized to run both loads at the same time, it can supply up to 200% overload current to be able to start large loads such as the oven and the pump together. However, if the system is unable to start both loads, one option would be to shut off the oven long enough to allow the pump to start up. After 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 the Enphase App to see how much power your home consumes during outages.



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

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

Check if the LED lights on the IQ Gateway (likely inside the IQ System Controller 3 INT) are flashing or lit solid. If they are flashing, the system is in the process of restarting.



**WARNING:** Risk of electric shock. Do not attempt to repair the Enphase IQ System Controller 3 INT, Enphase IQ Battery, or any Enphase equipment. They contain no user-serviceable parts.

If you believe the equipment has failed, contact your installer to obtain an RMA (return merchandise authorisation) number and start the replacement process.

## Shutdown due to communications system failure

This is a very unusual failure scenario because the Enphase Energy System does not shut down on communication loss between components.

If your Enphase App shows wired communications failure between system components such as IQ Batteries, the IQ System Controller 3 INT, or IQ Gateway, give the system up to 15 to 20 minutes to recover on its own. The Enphase Energy System reconnects automatically and recovers from wired communications failures.

If more than 20 minutes have elapsed and you do not see communication established, contact Enphase Support. In the event of a power outage, you can also follow the instructions on [page 32](#) to toggle the DC switch on an IQ Battery 5P to force a restart.

For information about troubleshooting IQ Gateway communication, see [page 30](#).

## Shutdown due to System Shutdown Switch activation

The System Shutdown Switch (SSD) is used together with PV and battery breakers to disconnect all PV panels and IQ Battery 5P units from the home to ensure the safety of maintenance technicians.

If the SSD Switch is activated, you must follow these steps to resume operation:

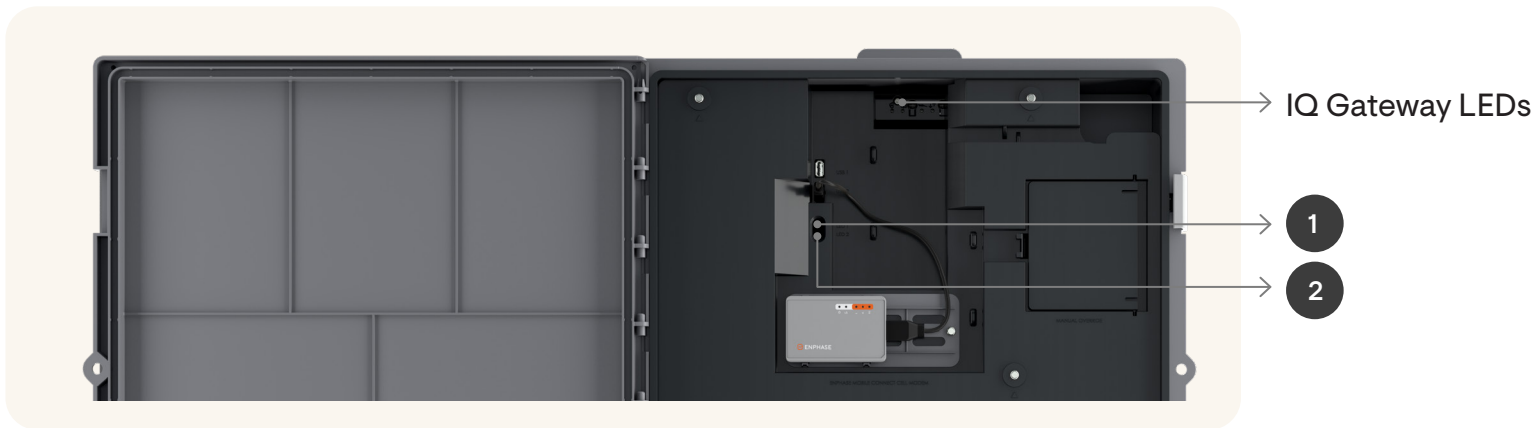
1. Turn the SSD switch to the ON position.
2. Turn the PV breakers in IQ System Controller 3 INT to the ON position.
3. Turn the IQ Battery 5P breakers in the IQ System Controller 3 INT to the ON position.
4. Press the DC switch on all IQ Battery 5P units to turn them ON.

## System shutdown using the manual override switch

In the event of an emergency, follow the instructions on the manual override switch cover to enable or disable manual override mode.

When you enable manual override mode, your system bypasses the IQ Batteries and PV. The system operates with power only from the utility grid in this mode. You should perform these steps only in the event of an emergency or if you have been instructed to do so by Enphase Support.

# IQ System Controller 3 INT LEDs



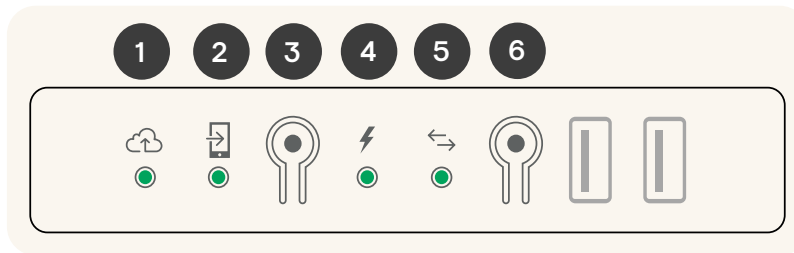
## 1 LED 1

| LED COLOUR | STATE           | DESCRIPTION  |
|------------|-----------------|--|
| =====      | Off             | Not operating                                      |
| — — —      | Flashing green  | Switched on; booting                               |
| —————      | Green           | Operational  |
| — — —      | Flashing red    | Firmware upgrade                                   |
| —————      | Red             | Error  |
| — — —      | Flashing blue   | Operational; cannot detect any IQ Battery          |
| —————      | Blue            | Operational; cannot detect at least one IQ Battery |
| — — —      | Flashing yellow | Performing state of charge recovery                |
| —————      | Yellow          | Off-grid   |

## 2 LED 2

| LED COLOUR | STATE          | DESCRIPTION                                |
|------------|----------------|--|
| =====      | Off            | Not operating                              |
| — — —      | Flashing green | Switched On; booting                       |
| —————      | Green          | Operational; on-grid                       |
| — — —      | Flashing blue  | Synchronizing to the grid                  |
| —————      | Blue           | Off-grid                                   |
| —————      | Red            | In system shutdown or manual override mode |

# IQ Gateway LEDs and buttons



## 1 NETWORK COMMUNICATION LED

| LED COLOUR | LED STATUS     | EVENT   |
|------------|----------------|---|
|            | Green          | IQ Gateway is connected to the Enphase Installer Platform (EIP) |
|            | Flashing green | Connecting to EIP or the Wi-Fi router                           |
|            | Red            | Connected to the local network only, i.e., without internet     |
|            | Off            | No network is available   |

## 2 AP MODE LED

| LED COLOUR | LED STATUS | EVENT  |
|------------|------------|--|
|            | Green      | AP mode is enabled, and the IQ Gateway Wi-Fi network is available      |
|            | Off        | AP mode is disabled<br>Default state unless the installer uses AP mode |

## 3 AP MODE BUTTON

### EVENT

To be used only by the installer to configure the system

Press to activate AP mode

## 4 POWER PRODUCTION LED

| LED COLOUR | LED STATUS     | EVENT   |
|------------|----------------|---|
|            | Flashing green | An upgrade of microinverters is in progress             |
|            | Green          | All microinverters are producing power                  |
|            | Red            | One or more microinverters have stopped producing power |
|            | Flashing red   | Microinverters are not yet detected                     |
|            | Off            | All microinverters have stopped producing power         |

Usually red at dawn/dusk, off at night, and flashing red after IQ Gateway restarts

## 5 DEVICE COMMUNICATION LED

| LED COLOUR | LED STATUS     | EVENT   |
|------------|----------------|---|
|            | Flashing green | IQ Gateway is scanning for microinverters             |
|            | Green          | All microinverters are communicating                  |
|            | Red            | One or more microinverters have stopped communicating |
|            | Off            | All microinverters have stopped communicating         |

Usually red at dawn and dusk, off at night

## 6 DEVICE SCAN BUTTON

### EVENT

To be used only by the installer to configure the system

Press to start/stop a 15-minute scan for devices over the power line

## 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 a failure of any external wiring or accessories of the system, by a failure of the wired communication systems, or any other equipment failure related to the Enphase Energy System. Recovery steps following system shutdown vary depending on the cause of the shutdown. If solar production and grid are available and the batteries still do not recover, restart the batteries by cycling the DC switches on the IQ Battery 5P unit, see [Reset the IQ Battery 5P using DC switch](#) (on page 32).

## Shutdown due to communications system failure

If your Enphase App shows "Microinverters not reporting" or "Batteries not reporting", give the system up to 15 to 20 minutes to recover on its own. The Enphase Energy System reconnects automatically and recovers from wired communication failures. If more than 20 minutes have elapsed and you do not see communication established, contact Enphase Support.

## IQ Gateway communications troubleshooting

If the IQ Gateway has stopped reporting to the Enphase App, see this webpage for more information

<https://support.enphase.com/s/article/Reconnecting-your-Envoy-S-or-IQ-Envoy>.

If the IQ Gateway is not powered on or has failed, the IQ Battery 5P units will not discharge. If the IQ Gateway fails, contact your installer to submit a warranty claim for replacement (where applicable).

The Network communications LED (LED 1) in the IQ Gateway is lit solid green when connected to the internet. If the Enphase App shows that the IQ Gateway is not reporting, and the Network communications LED on the IQ Gateway is lit red, then you may need to reconnect the IQ Gateway to the internet using Wi-Fi, hard-wired Ethernet, or a cellular network.

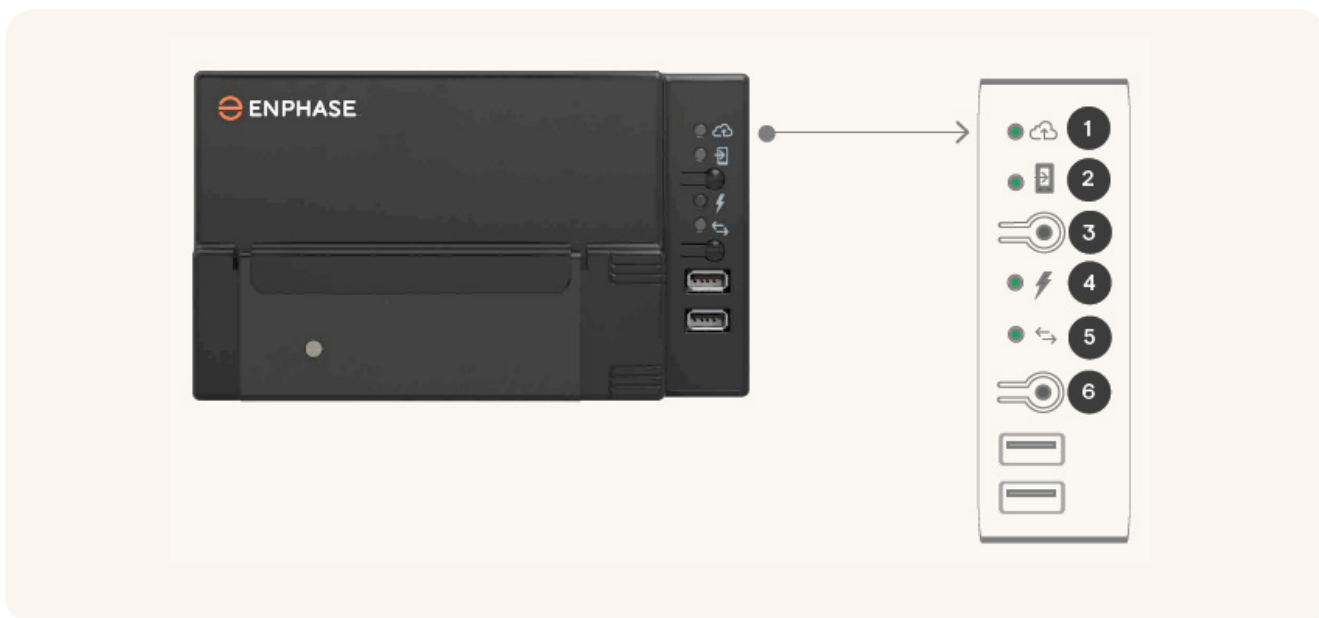
Check that the IQ Gateway is ON. If not, switch it ON.

For more information on how to access monitoring when there is no connectivity, visit





<https://support.enphase.com/s/article/Connecting-to-your-system-without-cell-connectivity>.

## IQ Gateway LEDs

You can see the IQ Gateway LEDs and buttons in the image shown below.



## 1 NETWORK COMMUNICATION LED

| LED COLOUR   | LED STATUS     | EVENT   |
|--|----------------|---|
|  | Green          | IQ Gateway is connected to the Enphase Installer Platform (EIP) |
|  | Flashing green | Connecting to EIP or the Wi-Fi router                           |
|  | Red            | Connected to the local network only, i.e., without internet     |
|  | Off            | No network is available   |

## 2 AP MODE LED

| LED COLOUR   | LED STATUS | EVENT  |
|--|------------|--|
|  | Green      | AP mode is enabled, and the IQ Gateway Wi-Fi network is available      |
|  | Off        | AP mode is disabled<br>Default state unless the installer uses AP mode |




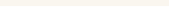
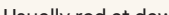
## 3 AP MODE BUTTON

### EVENT

To be used only by the installer to configure the system




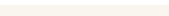
Press to activate AP mode

## 4 POWER PRODUCTION LED

| LED COLOUR   | LED STATUS     | EVENT   |
|--|----------------|---|
|  | Flashing green | An upgrade of microinverters is in progress             |
|  | Green          | All microinverters are producing power                  |
|  | Red            | One or more microinverters have stopped producing power |
|  | Flashing red   | Microinverters are not yet detected                     |
|  | Off            | All microinverters have stopped producing power         |

Usually red at dawn/dusk, off at night, and flashing red after IQ Gateway restarts

## 5 DEVICE COMMUNICATION LED

| LED COLOUR   | LED STATUS     | EVENT   |
|--|----------------|---|
|  | Flashing green | IQG is scanning for microinverters                    |
|  | Green          | All microinverters are communicating                  |
|  | Red            | One or more microinverters have stopped communicating |
|  | Off            | All microinverters have stopped communicating         |

Usually red at dawn and dusk, off at night

## 6 DEVICE SCAN BUTTON

### EVENT

To be used only by the installer to configure the system

Press to start/stop a 15-minute scan for devices over the power line

## IQ Gateway communications troubleshooting

If the IQ Gateway has stopped reporting to the Enphase App, see this webpage for more information <https://support.enphase.com/s/article/Reconnecting-your-Envoy-S-or-IQ-Envoy>.

If the IQ Gateway is not powered or has failed, the IQ Battery 5P units do not discharge while the system is on grid and may shut down after a prolonged loss of communication with the Gateway if the system is off grid. If the IQ Gateway fails, contact your installer to submit a warranty claim for replacement (where applicable).

Does the Enphase App show that the IQ Gateway is not reporting, and is the left-most LED (Network communications LED) on the IQ Gateway lit red?

The Network communications LED (left-most LED) in the IQ Gateway in the IQ System Controller 3 INT is lit solid green when connected to the Enphase App.

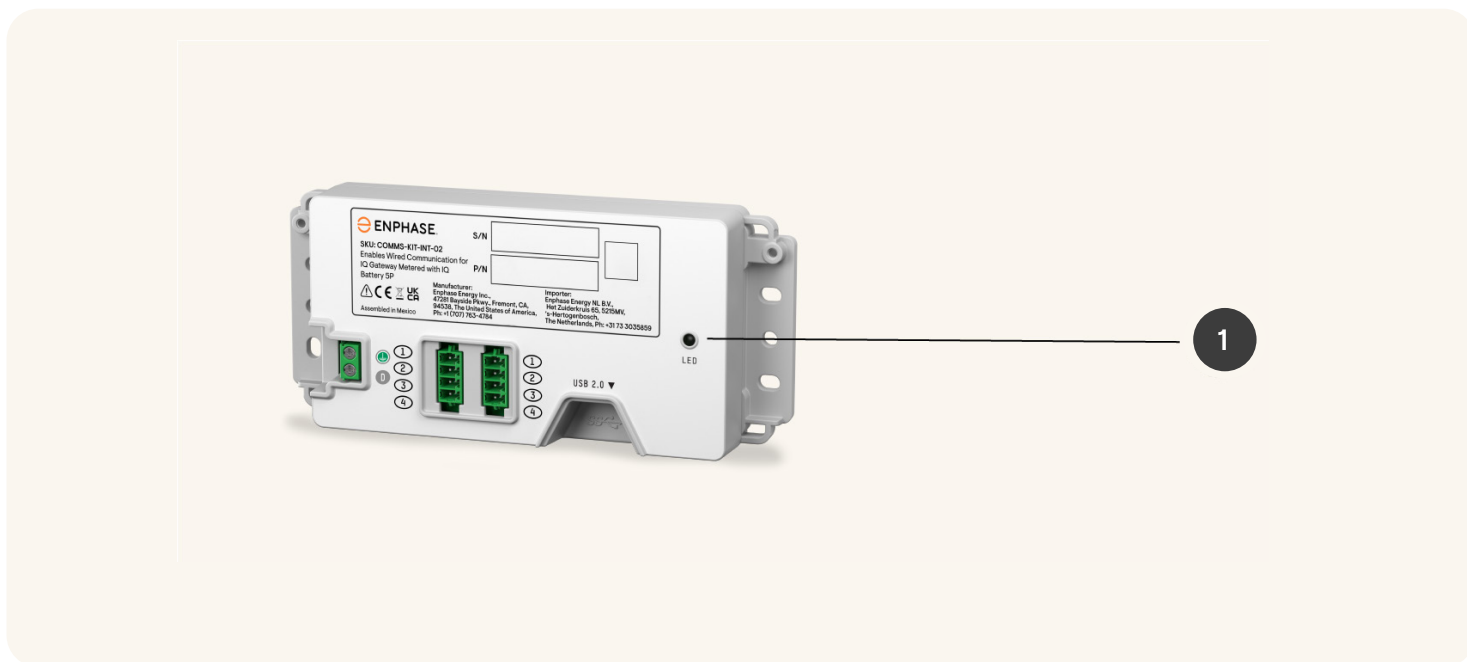
If the Network communications LED is not solid green, then you may need to reconnect the IQ Gateway to the Enphase App using Wi-Fi, hard-wired Ethernet, or a cellular network.

Check that the IQ Gateway breaker inside the IQ System Controller 3 INT is in the ON position. If not, flip it **ON**. For more information on IQ Gateway LEDs and buttons in IQ System Controller 3 INT, see [page 26](#).

For more information on how to access monitoring when there is no connectivity, visit <https://support.enphase.com/s/article/Connecting-to-your-system-without-cell-connectivity>.





## Communications Kit

You can see the Communications Kit LEDs in the image shown below.



### 1 Status LED

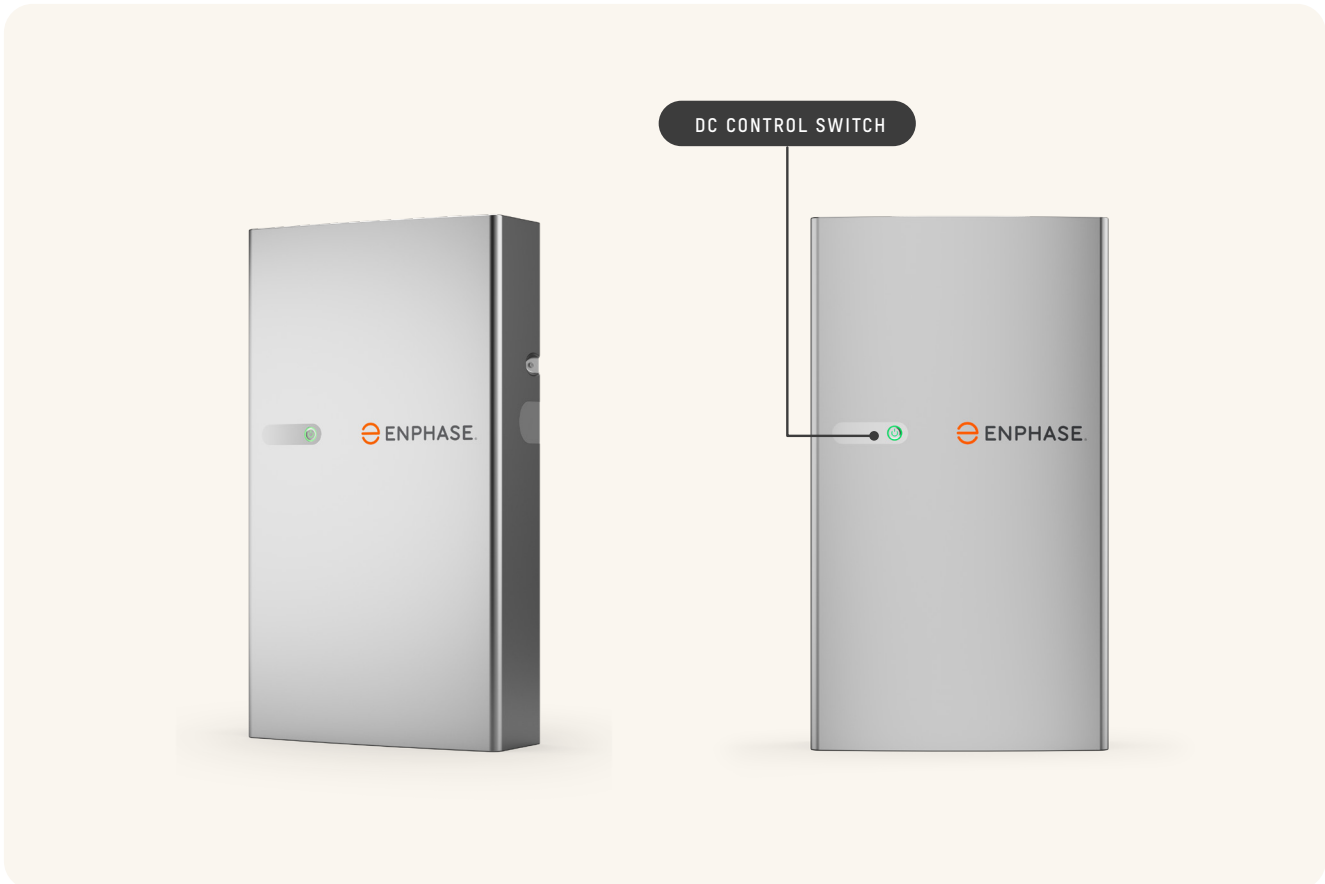
The LED on the Communications Kit indicates the connectivity status. The various states are as follows:

| LED COLOUR   | LED STATE      | EVENT                              |
|--|----------------|------------------------------------|
|  | Red            | ERROR (control or BUS error)       |
|  | Flashing green | Communications Kit firmware update |
|  | Green          | Communications Kit is operational  |
|  | Blue           | No USB communication               |

## Reset the IQ Battery 5P using the DC switch

In the unlikely event that a battery does not automatically recover from an overload or failure scenario and must be reset, you can use the DC switch in front of the IQ Battery 5P unit. To reset the DC switch, turn it OFF, wait for 30 seconds, and turn it ON.

The following images show a DC switch on the IQ Battery 5P unit.



### IQ Battery 5P LED status

You can check and record the colour of all the LEDs on the front of the IQ Battery 5P units using the following table. If the IQ Battery 5P lights are solid or pulsing green or blue, the batteries are operating normally.

| LED COLOUR     | STATE                   | DESCRIPTION  |
|----------------|-------------------------|--|
| — — — — —      | Rapidly flashing yellow | Starting up/establishing communications.   |
| —————          | Yellow                  | Not operating due to high temperature. See <a href="#">Troubleshooting</a> to restart the system   |
| — — — — —      | Soft pulse blue         | Discharging  |
| —————<br>————— | Blue or green           | Idle. Colour transitions from blue to green as the state of charge increases. Check the Enphase App/Enphase Installer Platform for charge status |
| — — — — —      | Soft pulse green        | Charging   |
| — — — — —      | Red double flash        | IQ Battery 5P is in an error state. Contact Enphase Support to troubleshoot the issue  |
| — — — — —      | Red triple flashes      | DC control switch is OFF, and the AC from the external source is present   |
| =====          | Off                     | DC control switch is OFF, and the AC from the external source is not present   |

## When to contact Enphase Support

If your system is not operating properly or has shut down unexpectedly, contact Enphase Support for guidance at <https://enphase.com/en-au/support>.

Your support agent will ask for details on the status LEDs in your system. Be prepared to provide information about the IQ Battery 5P storage system, LED indicators, and the IQ System Controller 3 INT (IQ Gateway) LED indicators.

You can check and record the color of all the LEDs on the front of the IQ Battery 5P batteries using the following table. If the IQ Battery 5P lights are solid or pulsing green or blue, the batteries are operating.

# Safety information

## Read this first

This manual describes the safe use of the Enphase Energy System with the IQ Battery 5P units for a system owner. Do not remove the dead fronts (plastic guards inside the enclosure) from the IQ System Controller 3 INT. See the [Safety data sheet](#) for safe handling.

## Safety and advisory symbols

To reduce the risk of electric shock and to ensure the safe installation and operation of the Enphase Energy 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 Energy System equipment or wiring.



If the Enphase storage equipment generates smoke, remove the AC power from the Enphase Energy System, and turn the DC switch on the IQ Battery 5P units 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 the IQ Battery 5P units in a fire or by burning.




Do not allow or place flammable, sparking, or explosive items near the Enphase Energy System equipment.





During use, when stored, or during transport, keep the IQ Battery 5P unit 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 Energy System equipment at a height that prevents water ingress.


 Do not attempt to repair the Enphase Energy System equipment; it contains no user-serviceable parts. Do not open the IQ Battery 5P unit under the cover. Doing so will void the warranty. If the Enphase Energy System equipment fails, contact your solar installation professional or Enphase at <https://enphase.com/en-au/contact>.


 The IQ Battery 5P unit 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 Energy System equipment in an upright (top side up) position.


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


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


 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 Energy System equipment must be installed and/or stored according to the instructions in Enphase Energy System equipment guides.


 Read this entire document before using Enphase Energy Systems.

 Do not sit on, place objects on, or insert objects into the Enphase Energy System equipment.

 Enphase IQ System Controller 3 INT and IQ Battery 5P are intended to operate with an internet connection. A Wi-Fi or Ethernet primary internet connection is required in addition to 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
- 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 IQ Gateway Metered in a grid-tied system must be properly fitted with Enphase Production CTs and Consumption CTs.

The IQ System Controller 3 INT with built-in IQ Gateway is required along with IQ Battery 5P units for backup configurations. The standalone IQ Gateway metered along with a Communications Kit is compatible with the IQ Battery 5P in grid-tied configuration.

# Revision history

| REVISION      | DATE           | DESCRIPTION   |
|---------------|----------------|---|
| USG-00018-4.0 | July 2025      | Updated the document with information about IQ Battery 5P with FlexPhase. |
| USG-00018-3.0 | July 2024      | Updated the document with information about grid-tied components.         |
| USG-00018-2.0 | September 2023 | Updated the "Operation in Savings profile" section.                       |
| USG-00018-1.0 | August 2023    | Initial release.  |

USG-00018-4.0

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