

Installing the IQ Battery 5

To install the Enphase IQ Battery 5 and the wall-mount bracket, read and follow all warnings and instructions in this guide. Safety warnings are listed at the end of this guide. These instructions are not meant to be a complete explanation of how to design and install an energy storage system. All installations must comply with national and local electrical codes and standards. **Only Enphase certified installers shall install, troubleshoot, or replace the IQ Battery 5.**

The IQ Battery system includes the battery cellpack with integrated IQ Microinverters and battery management system (BMS). The system requires IQ System Controller for grid-tied and backup operations. The IQ Gateway inside IQ System Controller measures PV production, IQ Battery charge/discharge power and home energy consumption, and it senses when it is optimal to charge or discharge the battery so that energy is stored when it is abundant and used when it is scarce.

A. PREPARATION

- A) Make sure you have the following **required Enphase items**:
- One or more Enphase IQ Battery 5 and one IQ System Controller with microgrid interconnect device (MID) functionality.
 - The Enphase IQ Battery system requires an Internet connection through the IQ Gateway in the IQ System Controller. Failure to maintain an Internet connection may have an impact on the warranty. See enphase.com/warranty for full terms.
 - The IQ Battery and IQ System Controller are all connected to IQ Gateway and communicate using communication control cables. The Enphase PV system communicates to IQ Gateway using PLC.
- B) Make sure you also have the following **required items**:
- **Mounting location** that is structurally suited to bear the weight of the IQ Battery. Total weight for the IQ Battery 5, including the IQ Battery unit, cover, and wall-mount bracket, is 78.9 kg (174 lbs).

✓ **NOTE:** The wall must contain blocked studs that can bear the battery weight or can be of masonry or other suitable structure.

- **Tools:** Conduit (with fittings and fitting tools), drill, 4 mm pilot bit, screwdriver, socket wrench, torque wrench, level, wire stripper, and stud finder if installing on studs.
- **Fasteners** for wall-mount bracket and pedestal. Slots are 9.2 mm (0.36 in) for wall mount and 11.2 mm (inclined slots) for pedestal. Check with a structural engineer and local standards for requirements.
- **M8 lag bolts or screws:** A minimum of three for single stud mounting and four for dual stud mounting are required to mount the bracket on the wall.
- **M6 screws:** A minimum of two for single stud mounting and four for dual stud mounting to fasten the top shield to the wall.
- **Washers** for use between fastener heads and wall-mount bracket.
- **Copper conductors:** 6 mm² to 30 mm² (11 mm (7/16 in) strip length) copper conductors (rated at 90°C) for terminals.
- **Control communications cables:** Use Enphase recommended cables, headers and also refer to local codes for any specific local requirements.
- **Conduit fittings:** 20 mm, 25 mm or 32 mm (left and/or right side) terminators are required for all installations, and IP55 conduit fittings (terminators/raceway adapters) are needed when installing outdoors. Enphase provides raceway adapters (sold separately) of varied lengths as mentioned in later sections.
- **Over current protection:** The overcurrent protection in IQ Battery is not branch circuit overcurrent protection and cannot be relied upon for that purpose. The branch circuit overcurrent protection is located in IQ System Controller or, when combining, in a separate combiner. See the Enphase IQ System Controller Quick Install Guide for more information.
- **Personal protective equipment (PPE)** for handling lithium batteries as required by local safety standards.
- **Protective gloves** for protection against sharp edges.

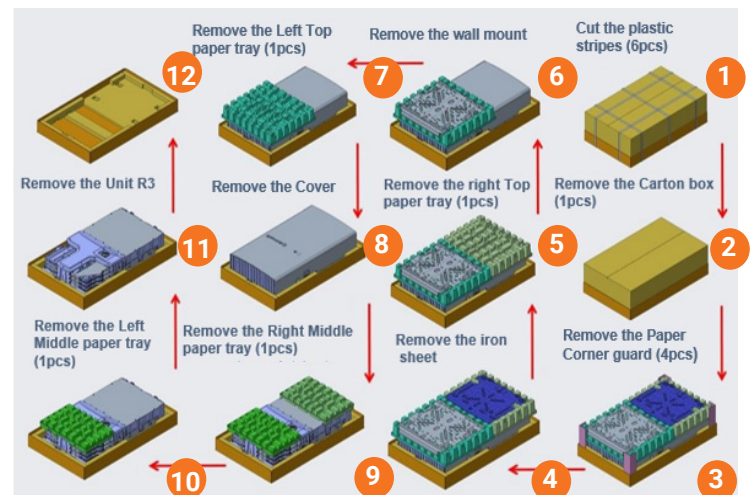
- C) Verify that main service is 230 V L-N.

✓ **NOTE:** The rated energy capacity of the battery is 4.96 kWh.

- D) Install the PV system and storage circuits into the IQ System Controller as directed by the Enphase installation manuals.

B. UNBOXING THE IQ BATTERY 5

- A) Before you unbox the IQ Battery, check the “Energize By” label on the shipping box to verify that the IQ Battery(ies) will be installed by the date shown. If the date has passed, contact your distributor for next steps.
- B) Remove the upper packaging cover and follow the steps as shown in the following image:

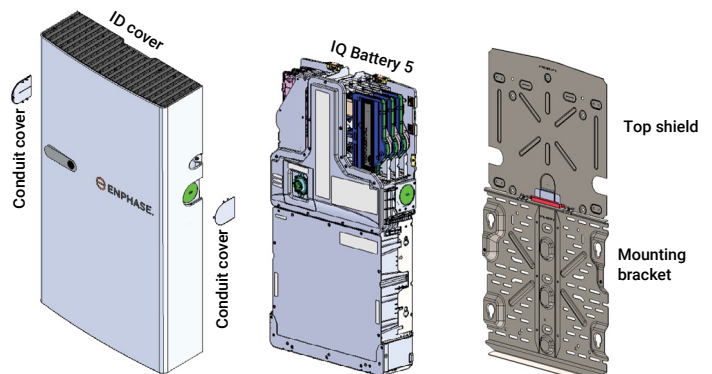


- C) Inspect the packaging and the IQ Battery(ies) for any signs of damage, such as cracks, dents, or electrolyte leaks. **Do not install or use the IQ Battery(ies) if it has been dropped or damaged in any way.** If damaged, contact your distributor for replacement.

- D) Make sure your kit includes the following IQ Battery components:

- One IQ Battery 5
- One ID cover, two conduit covers
- One mounting bracket
- One top shield

⚠ **WARNING:** Risk of injury. Take care when lifting. The IQ Battery unit is heavy (66.25 kg/146.05 lbs) and requires two people to lift it.



C. INSTALLATION

1 Plan a location for the IQ Batteries

The IQ Battery housing is IP55 rated and can be installed indoors or outdoors. The terminal blocks accept copper conductors of 6 mm² to 30 mm².

- A) **Following local standards:** Choose a well-ventilated location where the ambient temperature and humidity are within -20°C to 55°C (-4°F to 131°F) and 5% to 95% RH, non-condensing, preferably out of direct sunlight. The optimum ambient temperature range for installation location is 0°C to 30°C (32°F to 86°F). Provide smoke alarms in the residence in accordance with building, fire, and installation codes.

✓ **NOTE:** The IQ Battery location must be compliant to local standards and regulations (AS/NZ5139).

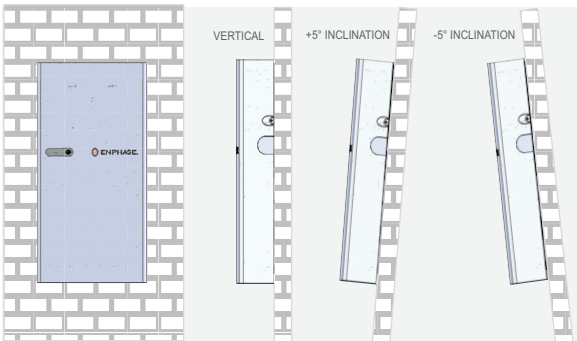
- B) **Make sure the mounting location can sustain the total weight of the IQ Batteries and mounting bracket.** Total weight for the IQ Battery 5, including the IQ Battery unit, cover and wall-mount bracket, is 78.9 kg (174 lbs).

- C) Plan the mounting location to be at least 15 cm (6 in) off the ground and from the ceiling. Keep the IQ Battery away from falling or moving objects, including motor vehicles.

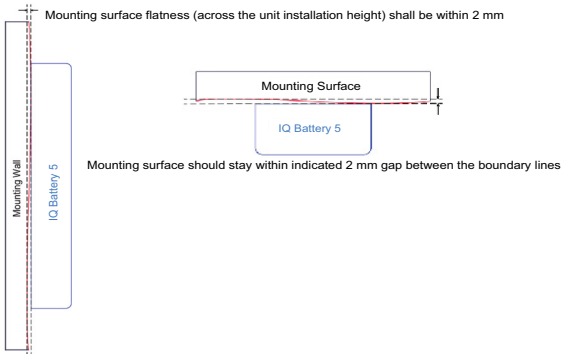
⚠ **WARNING:** If mounted in the path of a motor vehicle, we recommend a mounting height that is minimum 91 cm (36 in) above the floor.

✓ **NOTE:** Wherever local codes allow a smaller separation distance for Energy Storage installations, the minimum spacing around IQ Battery 5 MUST be at least 15 cm (6 in) from the top, bottom, left, and right side of the product.

- D) Select a location where the tilt from vertical is less than 5° as shown in the following image:



- E) Make sure the mounting surface flatness is within 2 mm between boundary lines as shown in following image:



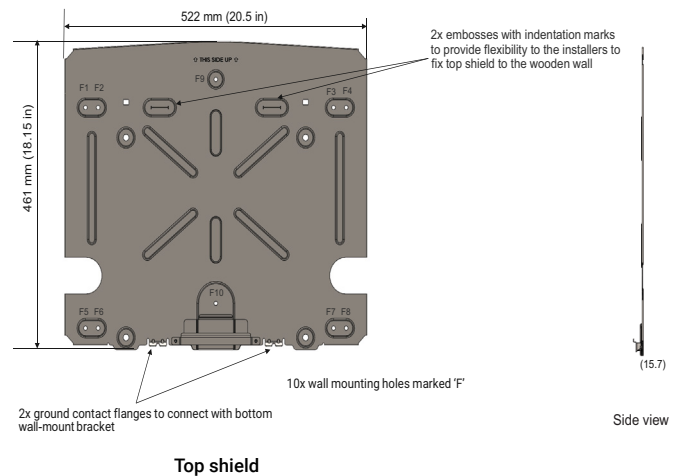
✓ **NOTE:** If the variation of the flatness is more than 2 mm, the battery might not properly sit on the wall-mount bracket through key holes. Use spacers if the variation is more than 2 mm.

- F) Make sure there are no pipes or electrical wires where you plan to drill.

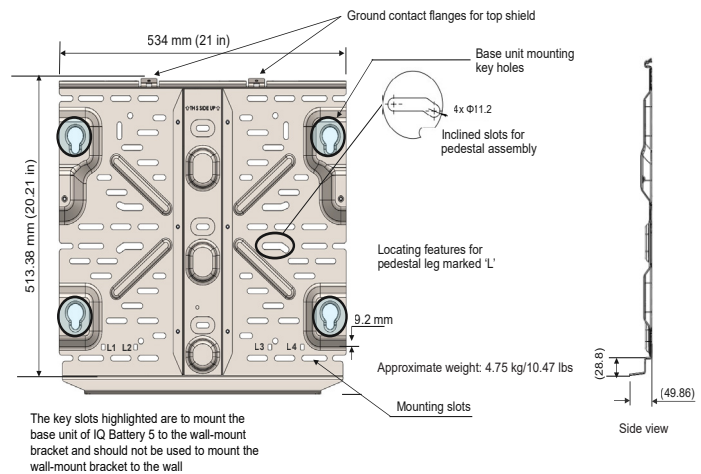
- G) Plan to maintain at least 914 mm (36 in) of clearance in front of each IQ Battery.
- H) Consider the dimensions of the IQ Batteries, easy access, height, and length of cable when selecting the location.
- I) Select a location where you can interconnect IQ Battery to the IQ System Controller.
- J) Follow all local standards and regulations set forth by Distributed Network Service Provider (DNSP).
- K) Up to four IQ Battery 5 units can be daisy chained on a single branch circuit. IQ System Controller supports up to a maximum of 80 A breaker for IQ Battery connection circuit.
- L) The maximum conductor size for IQ Battery 5 is 30 mm² and the maximum breaker rating with this conductor size is 80 A.

2 Prepare to install the wall-mount bracket

- A) Starting at installation position closest to the power source, mark a level line on the wall as a guide.
- ⚠ **WARNING:** Multiple risks. Make sure not to drill or attach into electric wiring or pipes that are in the wall.
- B) The wall-mount bracket comes in two parts- bottom bracket that carries the weight of the IQ Battery and the top shield that covers the back of the IQ Battery.

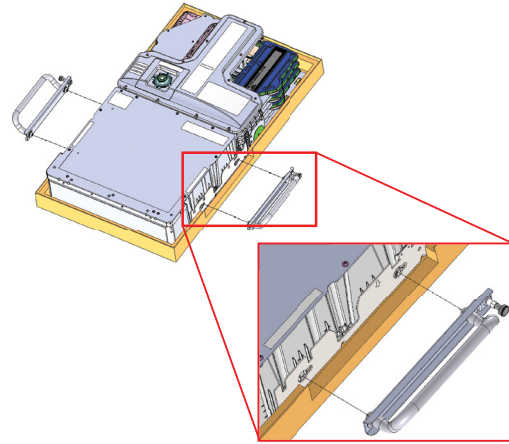
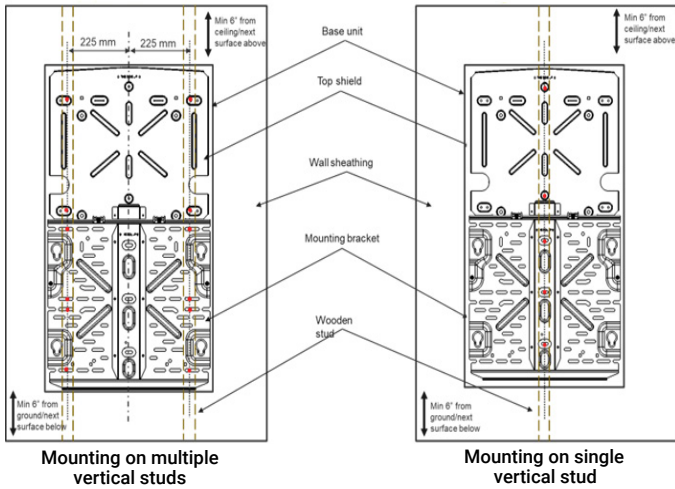
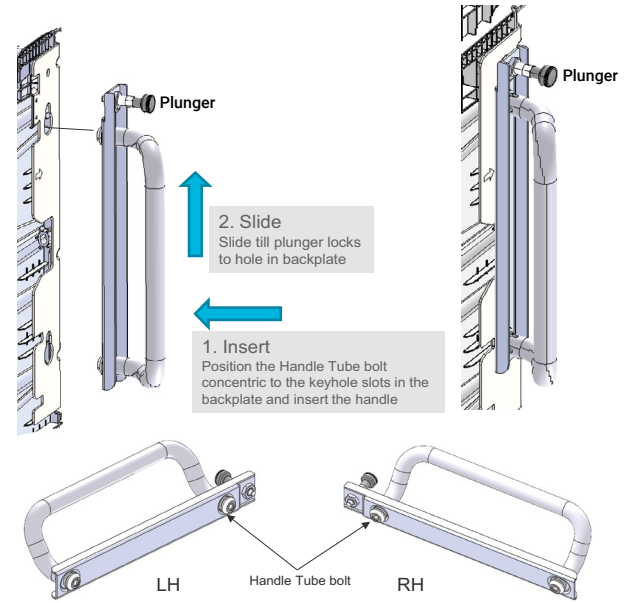
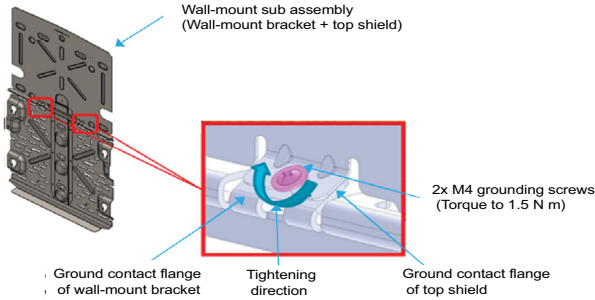


Top shield



Bottom mounting bracket

- C) Position the mounting bracket on the wall and fasten it using the mounting slots:
- D) Position the ground contact flange of the top shield on that of the mounting bracket and align the screw slot/hole.
- E) Fasten the top shield to the wall using the mounting holes shown below.
- F) Fasten top shield to the mounting bracket at the ground contact flange using two M4 screws (torque to 1.5 N m) to complete the assembly.



- G) Use M8 screws/lag bolts (or masonry attachments for masonry wall) to attach the bracket using one screw/lag bolt and washer for each slot (9.2 mm/0.36 in). Use minimum of three screws/lag bolts for single stud mounting and four screws/lag bolts for dual stud mounting. Tighten all screws to manufacturer's specified torque values.
 - H) Make sure the wall-mount bracket is solidly attached to the wall.
 - I) Use minimum two M6 screws for single stud mounting and four M6 screws for dual stud mounting to fasten the top shield to the wall.
- ⚠ WARNING:** Risk of injury and equipment damage. Do not mount an IQ Battery 5 on a bracket that is not properly mounted.

- E) Two persons together must lift the IQ Battery 5 unit from the packaging using the handles and place it in upright position on a flat surface.
- F) The IQ Battery 5 can have the field cable entry from back, left, or right side. Finalize the side from where the field cable enters and leaves the IQ Battery 5. Use the following configuration image to decide the cut-out for all the units.

⚠ DANGER Risk of electric shock. The DC control switch must be in the OFF position before performing this step.

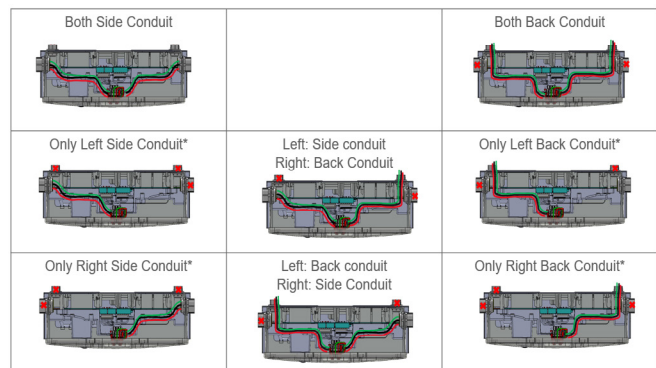
✓ NOTE: The rear entry can support the conduit with diameter of 1/2 in (13 mm) to 3/4 in (19 mm) while side entry can support the conduit with diameter of 1/2 in (13 mm) to 1-1/4 in (32 mm). Follow manufacturer recommended instructions for conduit installation.

3 Prepare to install IQ Battery on mounting bracket

- A) Remove the ID cover from the packaging and keep it aside.
- B) Use the lifting handles (sold separately) and check that the plungers are extended and ready to engage into the IQ Battery 5 slots.
- C) Align left handle on left side of the IQ Battery 5 and insert it into the slots and slide towards the top of the IQ Battery 5 enclosure until it clicks into place. Check that the handle is secure.
- D) Repeat on the other side with the right handle.

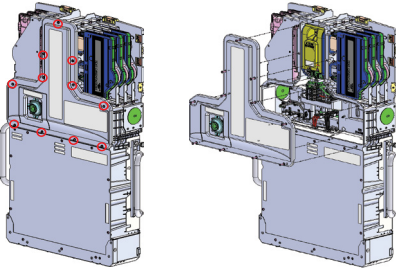
⚠ WARNING:

- Risk of injury and equipment damage. Two persons are required to lift the IQ Battery 5.
- Lift the IQ Battery from the packaging using the handles and make sure the battery's front side is facing towards you.

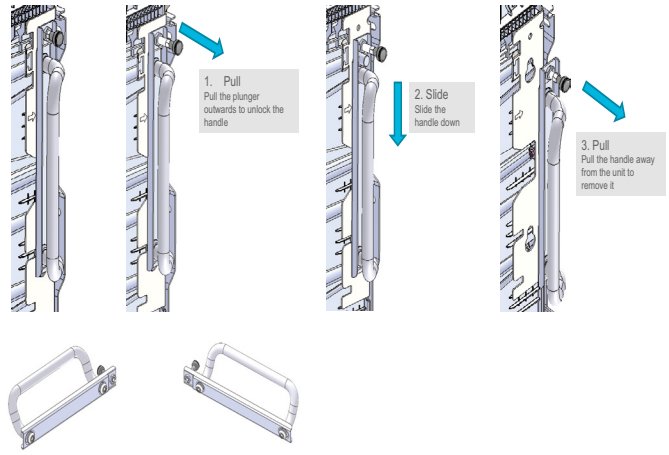


* One side conduit configuration is supported only if system has only one IQ Battery or for the unit last in the daisy chain farthest from the IQ System Controller.

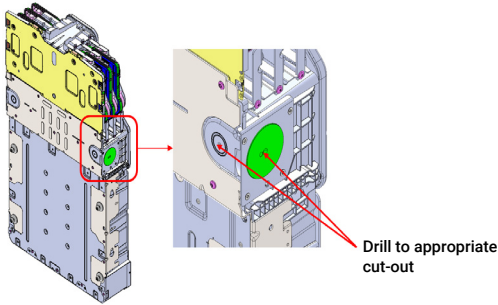
G) Open the front wiring cover by unfastening the 11 captive screws (torque to 1.5 N m) from the wiring cover. Use electric drive; do not use impact drives/impact drills.



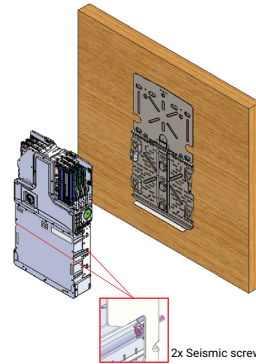
K) Remove installation handles.



H) Drill the appropriate cutout on either the back or side of the unit or on both based on configurations. The rear entry can support the conduit with diameter of 1/2 in (13 mm) to 3/4 in (19 mm) while side entry can support the conduit with diameter of 1/2 in (13 mm) to 1-1/4 in (32 mm). Use the table to decide the cutout diameter and the conductor size required for line, neutral, and ground.



L) Secure the battery unit on the wall-mount bracket using two seismic screws (torque to 5.6 N m).



WARNING: The vent or drain holes provided at the back of the unit serves the dual purpose of natural ventilation and condensation drainage. Blocking these holes can affect the functionality of the product.

IQ Battery installation configurations	Recommended wire mm ²		Minimum conduit terminator size	
			Conduit length > 60 cm (24 in)	Conduit length ≤ 60 cm (24 in)
	L & N	GND	W/CTRL*	W/CTRL*
Single unit	6 mm ²	10 mm ²	20 mm conduit	20 mm conduit
2 units daisy chaining	10 mm ²	10 mm ²	20 mm conduit	20 mm conduit
3 units daisy chaining	25 mm ²	10 mm ²	25 mm conduit	20 mm conduit
4 units daisy chaining	25 mm ²	10 mm ²	25 mm conduit	25 mm conduit

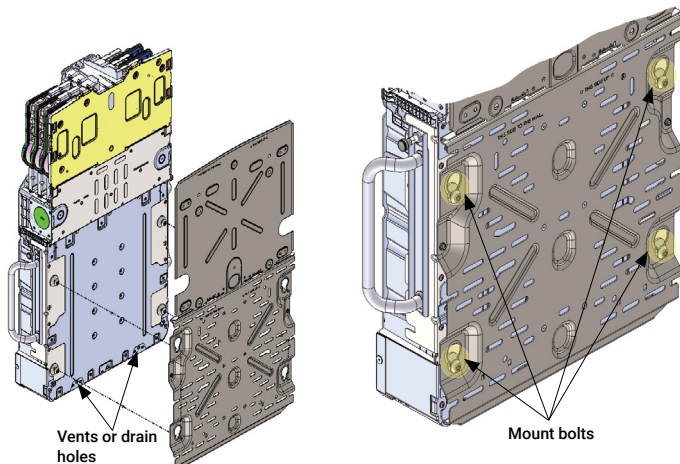
* Calculations based on Enphase recommended control communication cables (CTRL) with outside diameter ≤ 10 mm

WARNING: Ensure that drilling machine do not touch any internal components or wall.

WARNING: Ensure to clean the debris from inside the battery unit after drilling.

I) Bring the IQ Battery 5 unit to the already mounted wall-mount bracket.

J) Hold the IQ Battery straight, align, and insert 4 mount bolts on the battery unit into the mounting bracket key holes and slide it down.



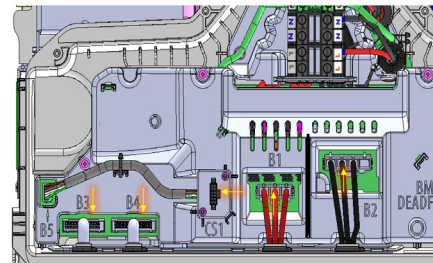
4 Prepare for field wiring

A) Connect the following connectors to the BMS board in following sequence:

- i. B3: Temperature sense connector termination
- ii. B4: Battery Voltage sense connector termination
- iii. B1: Battery DC +ve connector termination
- iv. B2: Battery DC -ve connector termination
- v. CS1: Control switch intermediate connector termination*

* The control switch cable is secured to wiring cover using cable ties. Cut the cable ties on the wiring cover to access the control switch cable.

NOTE: Ensure that all the connectors are latched properly and clicking sound is observed.



B) Fasten (torque to 1.5 N m) the 11 captive screws at the wiring cover as shown. Use electric drive; do not use impact drives/impact drills.



CAUTION! FOLLOW THE SEQUENCE SHOWN TO PARTIALLY TORQUE THE 11x SCREWS. FULLY TORQUE ALL THE SCREWS TO MAX 1.5 ± 0.15 Nm AT MAX 1000RPM, ONLY AFTER ALL OF THEM ARE IN POSITION.

INSTRUCTIONS TO REMOVE THE WIRING COVER PRIOR TO INSTALLATION / SERVICING	INSTRUCTIONS TO ASSEMBLE THE WIRING COVER AFTER INSTALLATION / SERVICING
1. LOOSEN THE 11x SCREWS TO REMOVE THE WIRING COVER FOR INSTALLATION / SERVICING. REFER QIG FOR MORE DETAILS. 2. FOR SERVICING, MOVE THE WIRING COVER GENTLY AWAY FROM THE UNIT TO FIND THE CONTROL SWITCH (CS) INTERMEDIATE CONNECTION AND UNPLUG IT FROM THE PANEL MOUNT CONNECTOR BEFORE REMOVING WIRING COVER COMPLETELY.	1. PLUG THE CONTROL SWITCH INTERMEDIATE CONNECTOR (CS) TO THE PANEL MOUNT CONNECTOR AND ENSURE THAT THE CABLE IS ROUTED INSIDE THE UNIT PROPERLY BEFORE ASSEMBLING THE WIRING COVER COMPLETELY. 2. FASTEN THE SCREWS AS PER ABOVE INSTRUCTIONS. REFER QIG FOR MORE DETAILS.

SCREW FASTENING SEQUENCE

5 Install conduit/raceway adapters and field wiring

A) When installing a single IQ Battery unit, insert the conduit in the cutouts drilled in previous step.

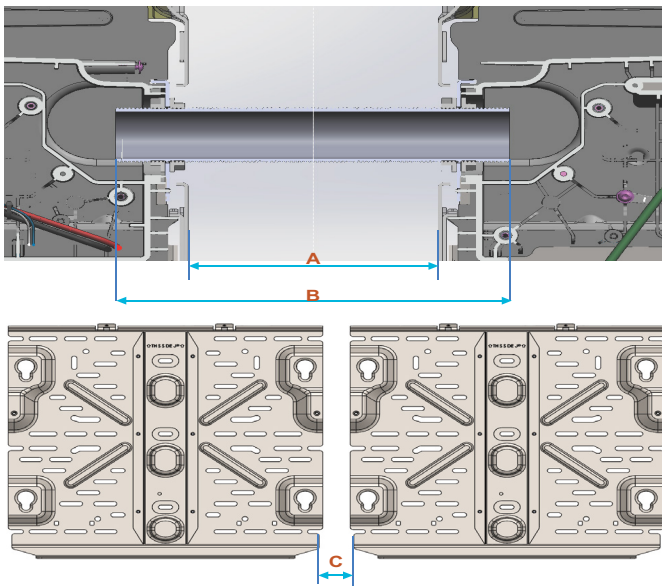
✓ **NOTE:** Use a “chase nipple” & “rigid coupling” as spacer for connecting 90° fitting to the battery. This avoids interference between the 90° fitting and battery ID cover. Make sure the joints are properly fastened and are watertight.

B) If installing more than one IQ Battery, insert the conduit on the side of the unit closest to AC disconnect. If an IQ System Controller is in line-of-sight, the breaker on IQ System Controller can service as AC disconnect.

C) Use either raceway adapter or conduit in between the IQ Battery units based on following:

- Use conduit between units if distance between units is > 165 mm (6.5 in).
- Use raceway adapter between units only if the distance between units is ≤ 165 mm (6.5 in) and are at the same level. Raceway adapters can be provided by Enphase (sold separately) and has the following configuration:

Battery spacing with cover (A)	Corrected raceway adapter length (B)	Spacing between wall-mount brackets (C)
165 mm (6.5 in)	220 mm (8.6 in)	181.1 mm (7.13 in)
152 mm (6.0 in)	220 mm (8.6 in)	168.4 mm (6.63 in)
146 mm (5.75 in)	220 mm (8.6 in)	162.05 mm (6.38 in)



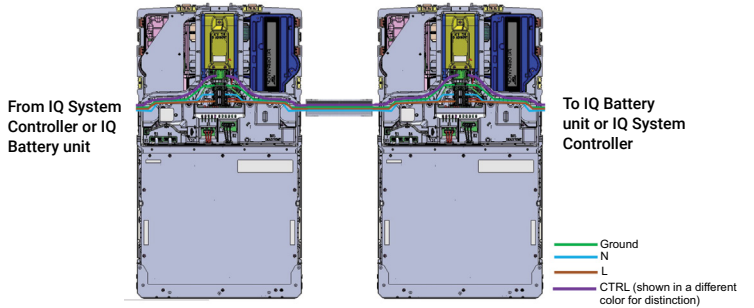
D) Starting from the unit closest to IQ System Controller, pass the power and control communication conductors through the conduit and make the ends of conductors available on the unit and IQ System Controller side.

E) Connect the power conductors and control communication cables on the terminal blocks (L, N, and Ground) and control communication connector respectively. Each terminal block accepts 6 mm² to 30 mm² conductors. Tighten L and N terminals to 2.5 N m (27 lb-in) and small Ground terminal to 1.5 N m (13.2 lb-in).

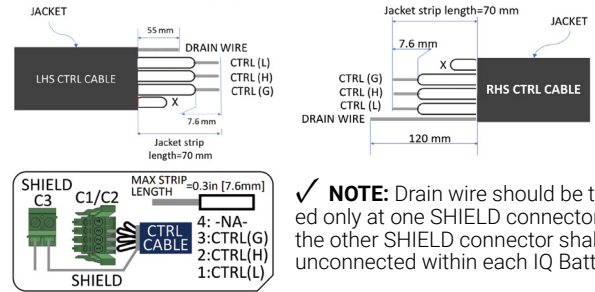
✓ **NOTE:** Do not disturb the factory termination connections on terminal blocks during field wiring.

F) If connecting more than one IQ Battery, connect power conductors between terminal blocks and control communication cables between CTRL connectors of these units such that conductors connect on right side of one unit and left side of another unit after passing through conduit or raceway adapters. Repeat these steps until you arrive at the unit that is farthest from the IQ System Controller.

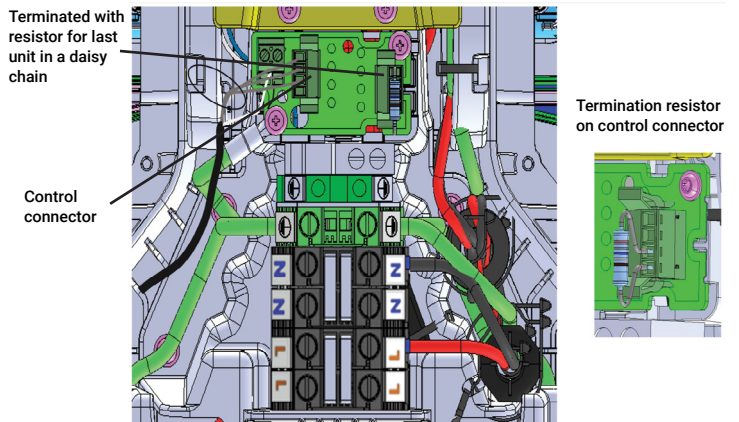
✓ **NOTE:** Power and control communication cables will run in parallel through conduits and raceway adapters.



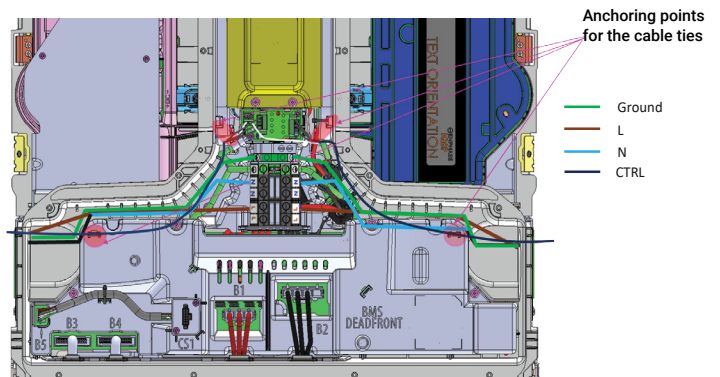
G) Follow jacket stripping length and connect the control communication wires to 4-pin connectors as shown in the following image. Remove the resistor from control connectors from all the units except the one farthest from IQ System Controller in the daisy chain.



✓ **NOTE:** Drain wire should be terminated only at one SHIELD connector while the other SHIELD connector shall remain unconnected within each IQ Battery.



H) Route the conductors between conduit and terminal blocks using anchoring points as shown in the following figure:



⚠ **WARNING:** Make sure the drain wires do not come in contact with any live connection.

- After all wires in the field wiring compartment are connected and secured, make sure there are no exposed conductors.
- Make sure the IQ Battery unit that is farthest from IQ System Controller has a cutout only on one side and all other sides are covered.
- Apply AC power to the IQ Battery circuits. Using a voltmeter, make sure voltage between L and N on the terminal blocks of each IQ Battery unit measures 230 VAC (208-253 V).
- If the voltage is within the range as required by local codes, turn off the AC power supply.

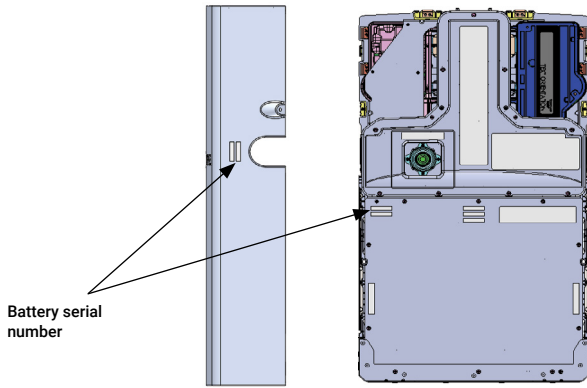
6 Cover and energize the system

⚠ WARNING: Before energizing, make sure that ALL IQ Batteries in the system are properly installed and conductors terminated.

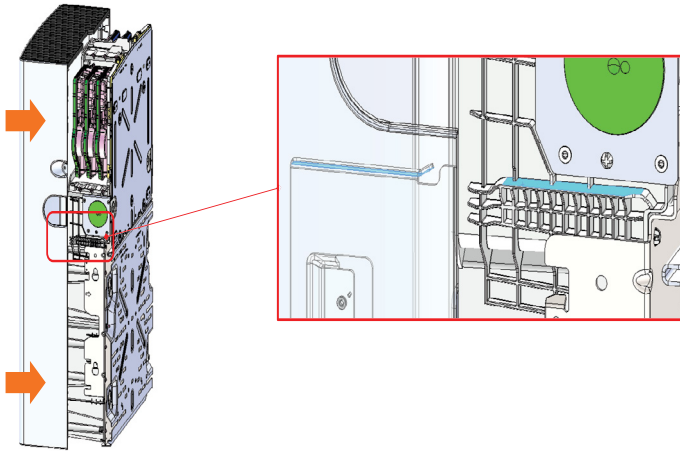
⚠ WARNING: Risk of equipment damage. Make sure no wires are pinched before replacing the cover.

A) Make sure the wiring cover(s) for all IQ Batteries in the system are closed and secured.

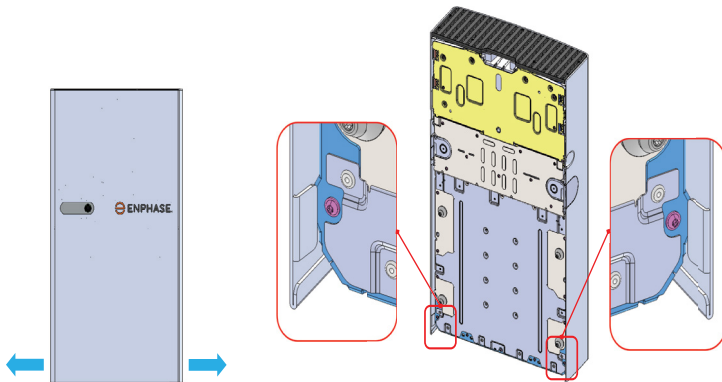
✓ **NOTE:** Ensure the serial number label on the ID cover matches with that on the heatsink before assembling ID cover.



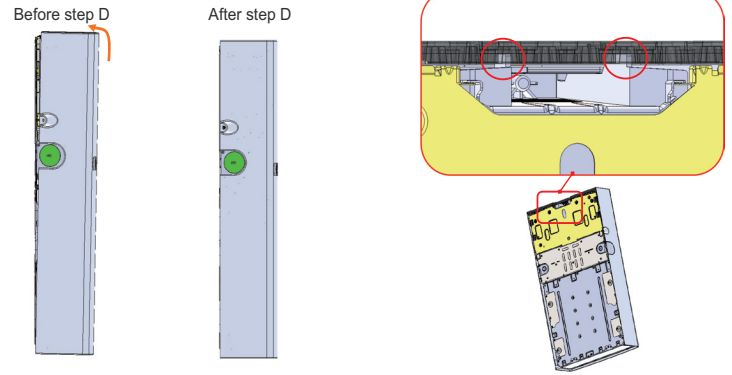
B) Slide on the IQ Battery cover in the indicated direction such that the tab of the cover in the highlighted region rests and slides on feature in the IQ Battery 5 chassis.



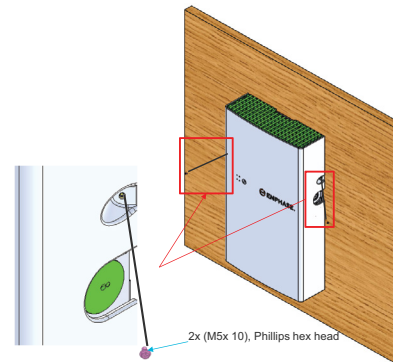
C) Before releasing, pull out the lower edges while sliding in the cover and make sure the tabs are locked to the back plate as shown in the following figure:



D) Push in the top portion of the cover as shown and make sure that the cover is locked in place as indicated.

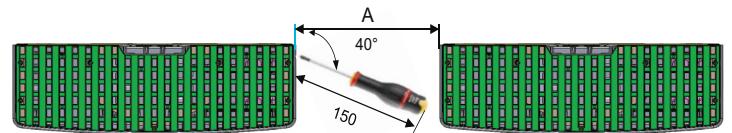


E) Fasten cover to the extension backplate using two M5 Phillips hex head screws (Torque to 3.1 N m)



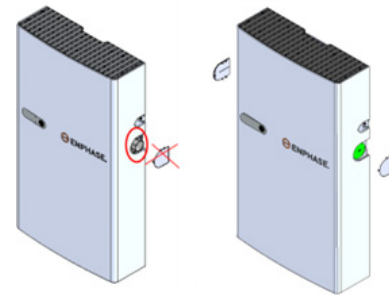
F) If the spacing 'A' between the units is < 165 mm (6.5 in), screwdriver of maximum length 150 mm should be used to fasten cover to the extension backplate.

✓ **NOTE:** The screw is accessible at 40° to the wall.



G) After installing the cover,

- If the conduit terminator is installed, the conduit cover is not necessary.
- If the conduit terminator is not installed, then the conduit cover should be installed to cover the opening in the IQ Battery cover on the other side.



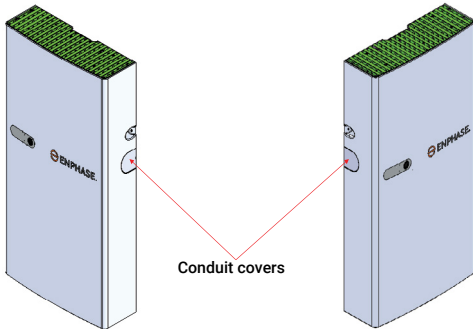
H) Apply AC power to the IQ Battery circuits.

I) Turn ON the DC control switch. A green LED will glow around the control switch. The IQ Battery is ready for commissioning.

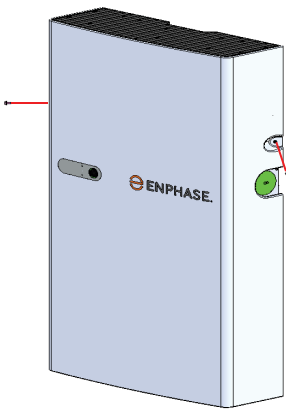
⚠ WARNING: Do not leave the DC control Switch in ON position without AC power supply available. This will deplete the battery and may lead to a condition where battery cannot be turned ON and cannot be commissioned.

7 Disassembly of the IQ Battery cover

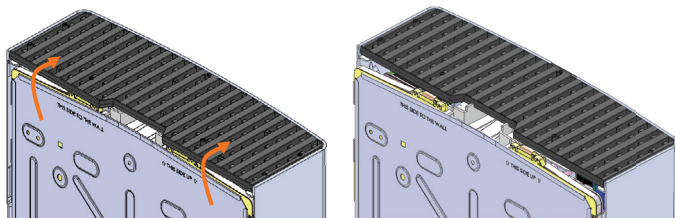
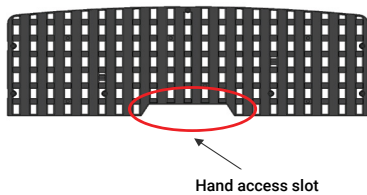
A) Remove the conduit covers from both sides of the IQ Battery cover.



B) Remove the two M5 Phillips hex head screws (torque to 3.1 N m) which are used to affix the cover to the extension backplate.

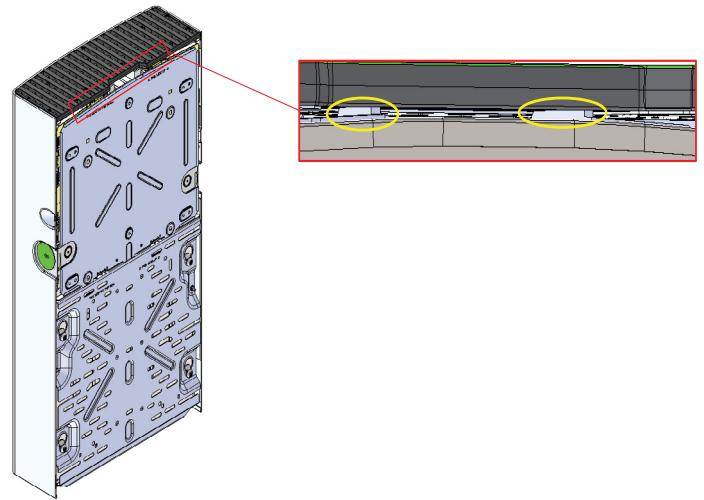


C) Using the hand access slot, pull the top plastic grill slightly in the direction shown below.

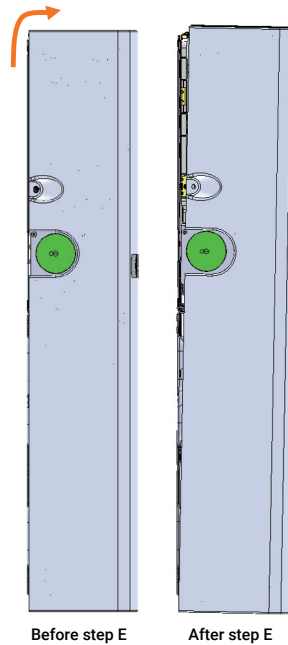


Isometric view

D) Unlock the top plastic cover from the ribs highlighted in yellow.

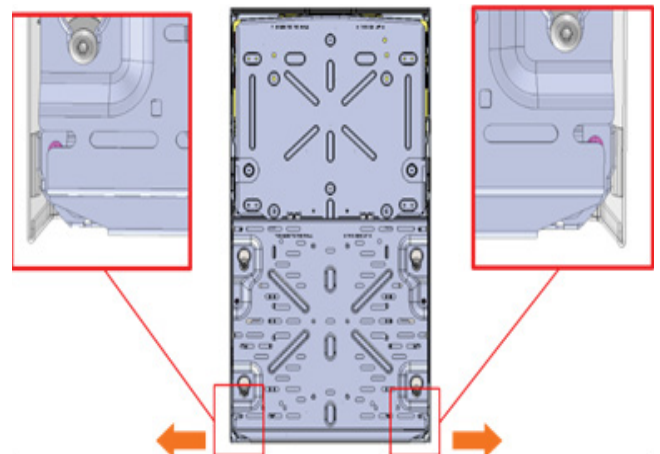


E) Make sure the cover reaches the position shown in the side view image after the completion of this step.

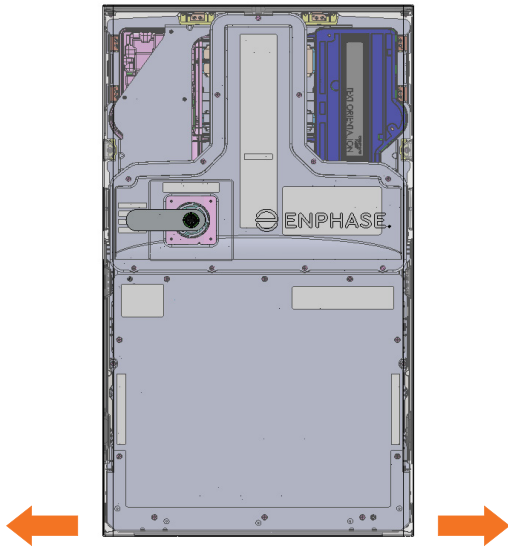


Side view

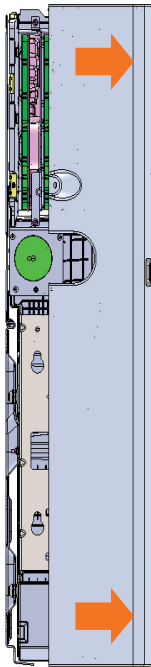
F) Pull out the lower portion of the cover (in order to unlock the highlighted angular tabs) and move it away from the wall slightly as per the directions shown the following figure. (back view).



G) Make sure the cover reaches the position shown in the front view.



H) Pull the cover off in the indicated direction.



D. CONFIGURE AND ACTIVATE

- A) Use the Enphase Installer App to commission the IQ Battery(ies). Once connected to the IQ Gateway Metered, refer to the Enphase Installer App help topics for more information.
- B) After the IQ Gateway Metered has detected the IQ Battery(ies), the IQ Battery LEDs operate as described in the following section.

E. OPERATION

a LED overview

After being commissioned, the LED flashes yellow while each IQ Battery boots up. If the LED rapidly flashes green for more than two minutes, the battery is in trickle charge mode and will remain so until it reaches a minimum state of charge (up to 30 minutes). After the IQ Battery is booted up, the LED becomes blue or green depending on the charge level. If the LED flashes yellow after one hour or changes to a flashing red state, contact Enphase Customer Support at <https://enphase.com/contact/support>

State	Description
Uncommissioned	
Flashing blue	After booting up, IQ Battery has paired with an IQ Gateway but has not passed the commissioning three-way handshake to confirm that it is an Enphase device.
Flashing green	After passing the three-way handshake with the IQ Gateway.
After commissioning (normal operation)*	
Rapidly flashing yellow	Starting up/establishing communications
Red double flash	Error. See "Troubleshooting".
Solid yellow	Not operating due to high temperature. See "Troubleshooting".
Solid blue or green	Idle. Color transitions from blue to green as state of charge increases. Check Enphase Installer Platform for charge status.
Soft pulse blue	Discharging
Soft pulse green	Charging
Soft pulse yellow	Sleep mode
Red triple flash	DC switch OFF
Red one-second flash	Rapid Shutdown mode
Off	Not operating. See "Troubleshooting".

b Operating mode and set points

IQ Battery supports multiple storage interactive system modes based on usage.

- A) Using Enphase App, select "Menu" > "Settings" > "Battery Storage".
- B) Select one of three battery modes:
 - Self-consumption mode (default, no setting change required)
 - Savings mode
 - Full backup

For more information on Operation modes, refer to the Storage System Owner's guide at <https://enphase.com/en-au>.

c Troubleshooting

If the IQ Battery(ies) are not operating correctly, do the following. If the issue persists, contact Enphase at <https://enphase.com/en-au/support/contact>.

- A) If the IQ Battery(ies) do not operate, check the temperature in the room and increase cooling and/or ventilation as required. Check that the bottom, top and sides of the IQ Battery 5 have at least 15 cm (6 in) clearance from the wall.
- B) If the IQ Battery LED is off, turn off the breaker for the branch circuit, wait for at least one minute, and turn it back on.
 - ✓ **NOTE:** IQ Battery has multiple field replaceable parts. These must be replaced by trained service personnel. Contact Enphase Customer Support before replacing any part.
 - ✓ **NOTE:** During a brownout or blackout, the IQ Battery powers down automatically. This is normal. When power is restored, it automatically starts up again.
- C) If you do not see IQ Battery information in Enphase App, check that the IQ Gateway and the Internet connection are working. If the issue persists, contact Enphase Customer Support at <https://enphase.com/en-au/support>.

F. SHUTDOWN PROCEDURE

- A) Isolate the AC power by de-energizing the AC power supply to the IQ Batteries.
- B) Using a multimeter, confirm that there is no AC power present.
- C) Ensure the DC switch is in the OFF position using the following steps:
 - If the IQ Battery LED is OFF, the DC switch is in OFF position and the IQ Battery is in shutdown mode.
 - If the IQ Battery LED (any color) is ON, press the DC switch once to turn it OFF and place the IQ Battery in shutdown mode.

Limitation of Use:

Your IQ Battery unit is not intended for use as a primary or backup power source for life-support systems, other medical equipment, or any other use where product failure could lead to injury, loss of life, or catastrophic property damage. Enphase disclaims any and all liability arising out of any such use of your IQ Battery unit. Further, Enphase reserves the right to refuse to provide support in connection with any such use and disclaims any and all liability arising out of Enphase's provision of, or refusal to provide, support for your IQ Battery device in such circumstances.

SAFETY

IMPORTANT SAFETY INSTRUCTIONS. SAVE THESE INSTRUCTIONS. This guide contains important instructions that you must follow during installation and maintenance of the Enphase IQ Battery(ies). Failing to follow any of these instructions may void the warranty (enphase.com/warranty). Refer to MSDS document and Safety Datasheet at <https://enphase.com/en-au>

In Case of Fire or Other Emergency

In all cases:

- If safe to do so, switch off the AC breaker for the IQ Battery circuit, and if an isolator switch is present, switch off the AC isolator for the IQ Battery circuit.
- 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 the water if any part of the IQ Battery(ies) or wiring is submerged.
- If possible, protect the system by finding and stopping the source of the water, and pumping it away.
- If water has contacted the battery, call your installer to arrange an inspection. If you are sure that water has never contacted the battery, let the area dry completely before use.

In case of unusual noise, smell or smoke:

- Ensure nothing is in contact with the IQ Battery(ies) or in the venting area of the IQ Battery(ies).
- Ventilate the room.
- Contact Enphase Customer Support at <https://enphase.com/contact/support>

In the event of an electrolyte leakage:

- The Enphase IQ Battery has a lithium iron phosphate (LFP) battery that contains organic electrolyte and is sealed in a protective case. Leaked electrolyte is toxic and highly flammable. Leaked electrolyte is colorless and has a sweet odor. Electrolyte fluid tends to evaporate quickly, leaving behind a white grainy substance. If an odor is obvious, proceed to the following steps:
- DO NOT TOUCH OR INGEST ANY LIQUID SUSPECTED TO BE BATTERY ELECTROLYTE.
 - Evacuate personnel to a safe area and keep unauthorized personnel away.
 - Isolate spill area to a minimum distance of 75 feet (25 meters).
 - Eliminate all ignition sources (no smoking, sparks, flames, hot equipment) in the immediate area around the spill.
 - Do not touch or walk through spilled material.
 - Avoid breathing vapors. Ensure adequate ventilation.
 - Use personal protective equipment.
 - Contact Enphase Customer Support at <https://enphase.com/contact/support> or 1800 006 374

Safety and Advisory Symbols

	DANGER: This indicates a hazardous situation, which if not avoided, will result in death or serious injury.
	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 particularly important for optimal system operation. Follow instructions carefully.

Safety Instructions

	DANGER: Risk of electric shock. Risk of fire. Only qualified electricians should install, troubleshoot, or replace the IQ Battery(ies).
	DANGER: Risk of fire or explosion. Only qualified personnel, using personal protective equipment (PPE) should transport or handle the IQ Battery(ies).
	DANGER: Risk of explosion. Do not dispose of IQ Battery(ies) in a fire or by burning. The IQ Battery(ies) can explode.
	DANGER: Risk of fire or explosion. This product is designed for stationary installation only and should be used accordingly. It is not designed for mobile applications such as installation and on vehicles and trailers and should not be used in such applications.
	DANGER: Risk of fire. During use, when stored, or during transport, keep the IQ Battery(ies) in an area that is well ventilated and protected from the elements, where the ambient temperature and humidity are within -20° C to 55° C (-4° F to 131° F) and 5% to 95% RH, non-condensing, preferably out of direct sunlight. Do not install the IQ Battery(ies) at elevations over 2,000 m (6,562 feet) above sea level.
	DANGER: Risk of fire. If the IQ Battery(ies) generate smoke, remove AC power from the Enphase System and turn the DC connect switch to the off position so that charging/discharging stops.
	DANGER: 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.
	DANGER: Risk of electric shock. Do not install the IQ Battery(ies) without first removing AC power from the photovoltaic system. Disconnect the power coming from the photovoltaics before servicing or installing.
	DANGER: Risk of electric shock. Always de-energize the AC branch circuit during an emergency and/or before servicing the IQ Battery(ies).
	DANGER: Risk of electric shock. Risk of high short-circuit current. Observe the following precautions when working on batteries: <ul style="list-style-type: none"> • Remove watches, rings, or other metal objects. • Use tools with insulated handles. • Wear insulating gloves and boots. • Do not lay tools or metal parts on top of batteries.
	DANGER: Risk of electric shock. Risk of fire. Do not work alone. Someone should be in the range of your voice or close enough to come to your aid when you work with or near electrical equipment.
	DANGER: Risk of fire. Do not allow or place flammable, sparking, or explosive items near the IQ Battery(ies).

Safety Instructions, continued

	DANGER: Risk of electric shock. In areas where flooding is possible, install the IQ Battery(ies) at a height that prevents water ingress.
	DANGER: Risk of electric shock. AC voltage is present at the output when the DC switch is on.
	DANGER: Risk of electric shock. Branch circuit protection must be off before switching DC power on or off.
	DANGER: Risk of electric shock. The DC switch must be in the OFF position for shipping and service.
	WARNING: Risks of electric shock, energy hazard, and chemical hazard. Do not disassemble.
	WARNING: Risk of equipment damage. During use, storage, transport, or installation, always keep the IQ Battery(ies) in an upright position.
	WARNING: You must install the IQ Battery(ies) only on a suitable wall using an Enphase wall-mount bracket.
	WARNING: Before installing or using the IQ Battery(ies), read all instructions and cautionary markings in this guide and on the equipment.
	WARNING: Do not install or use the IQ Battery(ies) if it has been damaged in any way.
	WARNING: Do not exceed the maximum number (1) of IQ Batteries in a 20 A AC branch circuit.
	WARNING: Do not sit on, step on, place objects on, or insert objects into the IQ Battery(ies).
	WARNING: Do not place beverages or liquid containers on top of the IQ Battery(ies). Do not expose the IQ Battery(ies) to liquids or flooding.
	WARNING: When placing the IQ Battery(ies) in storage, ensure to follow the shut-down procedure and confirm that AC power is not present and the DC switch is in the OFF position. While in storage, damage to the battery can occur from over-discharge. If the battery state of charge falls to 0%, the IQ Battery(ies) can be damaged or destroyed. Because of this, the IQ Battery(ies) must only be stored for a limited amount of time. <ul style="list-style-type: none"> • The IQ Battery(ies) must be installed and energized by the "Must Energize By" date on the shipping box label. • The IQ Battery(ies) must have a charge state of no more than 30% when placed in storage. To do this, the IQ Battery(ies) must be placed in Sleep Mode. • If the IQ Battery(ies) is already been installed, it must be placed into Sleep Mode prior to uninstalling. A battery in Sleep Mode can be stored a maximum of two months after being placed into Sleep Mode.
	NOTE: Perform installation and wiring, including protection against lightning and resulting voltage surge, in accordance with all applicable local electrical codes and standards.
	NOTE: Using unapproved attachments or accessories could result in damage or injury.
	NOTE: Install properly rated over current protection as part of the system installation.
	NOTE: To ensure optimal reliability and to meet warranty requirements, the IQ Battery(ies) must be installed and/or stored according to the instructions in this guide.
	NOTE: The Enphase IQ Battery(ies) are intended to operate with an Internet connection. Failure to maintain an Internet connection may have an impact on the warranty. See Limited Warranty for full terms and services (enphase.com/warranty).
	NOTE: When replacing Enphase IQ Battery(ies), you must replace with an IQ Battery(ies) of the same type, with the same AC current rating.
	NOTE: When disconnected and stored, no automatic charge of the battery is possible.
	NOTE: Properly mount the IQ Battery(ies). Ensure that the mounting location is structurally suited to bearing the weight of the IQ Battery(ies).
	NOTE: During use, storage, and transport, keep the IQ Battery(ies): <ul style="list-style-type: none"> • Properly ventilated • Away from water, other liquids, heat, sparks, and direct sunlight • Away from excessive dust, corrosive and explosive gases like ammonia, and oil 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. If mounted in the path of a motor vehicle, we recommend a 91 cm (36 in) minimum mounting height • At an elevation of lower than 2,000 m (6,562 feet) above sea-level • In a location compliant with fire safety regulations • In a location compliant with local building codes and standards
	NOTE: Conditions for the IQ Battery installation site apply also to storage conditions.

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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.