



Installation Guide

SolarEdge Nexis for North America

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Revision history

Version	Date	Description
1.1	May 2026	Updated Content

About

This installation guide is intended for installers.

Disclaimer

Important notice

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For the Patent Marking Notice, refer to https://knowledge-center.solaredge.com/sites/kc/files/se_patents.pdf. The general terms and conditions of delivery of SolarEdge shall apply.

The content of these documents is continually reviewed and amended, where necessary. However, discrepancies cannot be excluded. No guarantee is made about the completeness of these documents.

The images contained in this document are for illustration only and may vary depending on product models.

FCC compliance

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment causes harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Changes or modifications not expressly approved by the party responsible for compliance may void the user's authority to operate the equipment.

Handling and safety instructions

Safety symbols

The following safety symbols are used in this document. Familiarize yourself with the symbols and their meaning before installing or operating the system.



WARNING

Denotes a hazard. It calls attention to a procedure that, if not correctly performed or adhered to, could result in **injury or loss of life**. Do not proceed with a warning note until the indicated conditions are fully understood and met.

Dénote un risque: il attire l'attention sur une opération qui, si elle n'est pas faite ou suivie correctement, pourrait causer des blessures ou un danger de mort. Ne pas dépasser une telle note avant que les conditions requises soient totalement comprises et accomplies.



CAUTION

Denotes a hazard. It calls attention to a procedure that, if not correctly performed or adhered to, could result in **damage or destruction of the product**. Do not proceed beyond a caution sign until the indicated conditions are fully understood and met.

Dénote un risque: il attire l'attention sur une opération qui, si elle n'est pas faite ou suivie correctement, pourrait causer un dommage ou destruction de l'équipement. Ne pas dépasser une telle note avant que les conditions requises soient totalement comprises et accomplies.



NOTE

Denotes additional information about the current subject.

**IMPORTANT**

Denotes information about safety issues.

General safety instructions

Important safety instructions

Save these instructions

**WARNING**

SolarEdge products can expose you to chemicals, including antimony trioxide, which is known in the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

Les produits SolarEdge peut vous exposer à des agents chimiques, y compris trioxyde d'antimoine, identifiés par l'État de Californie comme pouvant causer le cancer. Pour de plus amples Informations, prière de consulter www.P65Warnings.ca.gov.

**CAUTION**

All units must be operated according to the technical specification datasheet provided with the unit.

Toutes les unités doivent être utilisées conformément à la fiche technique fournie avec l'unité.

**NOTE**

Use only copper conductors rated as a minimum of 75°C/167°F.

**NOTE**

The  symbol appears at grounding points on the SolarEdge equipment. This symbol is also used in this manual.

SolarEdge Nexus Solution

Solution components

SolarEdge Nexus Inverter

PN: UNX13000T-US00UCYN4



SolarEdge Nexus Battery System

Battery Link

PN: NX-LNK-4B-A-01



Battery Block

PN: UNX-BLCK-5K-A-01



Wall-mounting bracket kit

Each Nexus battery package includes adjustable feet for floor-standing installations. To wall-mount the battery, a wall-mounting bracket kit must be purchased separately PN: **IAC-NX-BLCKWMB-01**.

SolarEdge Nexus IslandDER™

PN: V1-D-SE



NOTE

The SolarEdge Nexus IslandDER™ Meter is purpose-built for the SolarEdge Nexus Solution, in partnership with ConnectDER, and is distributed exclusively through them. To place an order, [contact](#) their team directly for pricing and availability.



Compatible components

- Power Optimizers
- SolarEdge Slim Current Transformers

Power Optimizers

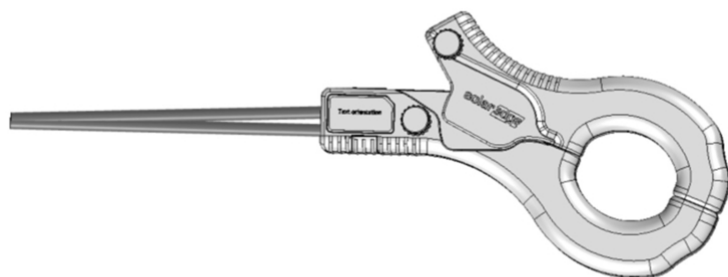
Power Optimizer PNs:

- S-series residential power optimizers, including part numbers starting with 'U'
- P-series residential power optimizers with 4-type suffixes in their part numbers, such as Pxxx-4xxxxxx
- P-series residential power optimizers with 5-type suffixes in their part numbers, such as Pxxx-5xxxxxx

SolarEdge Slim Current Transformers

- SolarEdge Slim Current Transformers (CTs) are used to measure the current flow through conductors

- In the SolarEdge Nexis Inverter, CTs are connected to the internal Modbus meter to enable accurate export and import monitoring
- The Modbus meter's power and communication connections are pre-wired. The CT sensors clamp onto the AC cable.
- SolarEdge Slim Current Transformer **PN:** CT-SECT-SPL-225A-T-20



- For more information on SolarEdge Slim Current transformers, refer to the [Datasheet](#)

Single stock-keeping unit

The SolarEdge Nexis Inverter has a single stock-keeping unit (SKU). This approach consolidates multiple power ratings and configurations under one part number (PN), simplifying logistics, installation, and inventory management.

The benefits of single SKUs are:

- **Operational efficiency:** Reduces the number of PNs per power rating. Installers use one SKU across various configurations.
- **Field flexibility:** Installers can define the nameplate rating during commissioning, using [labels](#) included in the packaging
- **Simplified logistics:** A single SKU supports PV-only, storage, and backup use cases, reducing complexity in both ordering and deployment

SolarEdge Nexis Solution compliance

For more compliance information, refer to the [SolarEdge Nexis Inverter Datasheet](#).

SolarEdge Power Control System

A SolarEdge Nexis Inverter includes Power Control System (PCS) technology, enabling the installation of PV systems with 50% more capacity without requiring costly and time-consuming main electrical panel upgrades.

With the new embedded PCS technology, SolarEdge Nexis Inverters can monitor, balance, and control the currents on the main panel busbar, enabling the installation of larger PV systems than currently permitted under the National Electrical Code 120% rule.¹

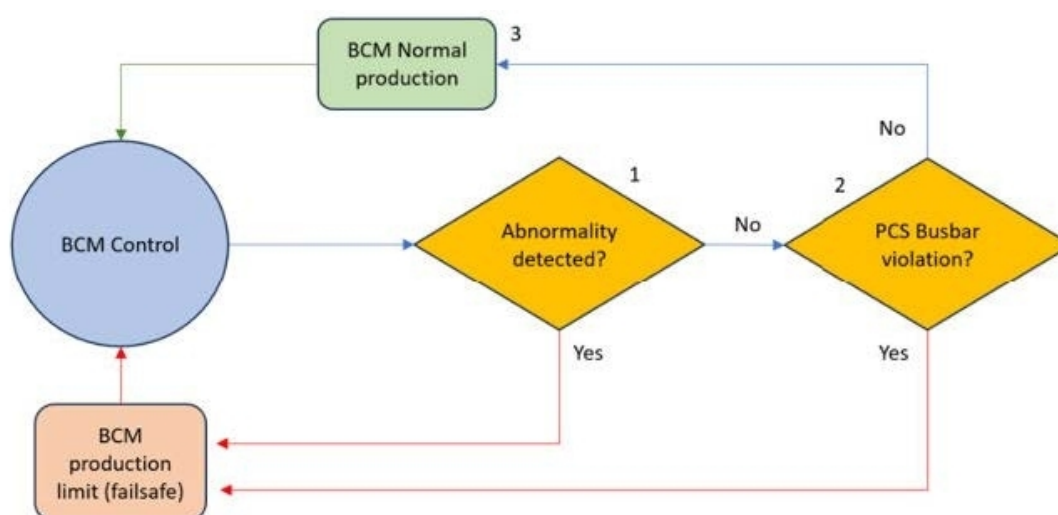
Export limit

- Monitors real-time power generation, consumption, and grid interaction
- Enforces export limits by dynamically adjusting the inverter output to stay within utility or regulatory thresholds, for example, 0 kW export
- Coordinates with Busbar Current Management (BCM) to manage current on the main panel busbar and avoid triggering main panel upgrades (MPUs)

Busbar Current Management

Busbar Current Management (BCM) is a software-controlled feature that provides the following:

- Monitors and limits the current flowing through the main panel busbar
- Helps avoid main panel upgrades (MPUs) by ensuring compliance with the NEC 120% rule
- Works with current transformers (CTs) and energy meters to dynamically adjust the inverter output



SolarEdge Nexis Solution safety and cybersecurity

SolarEdge Nexis Solution rapid shutdown

In accordance with regulations, an external rapid shutdown switch (RSD) must be installed to shut down the system in an emergency. SolarEdge does not supply the switch and must be purchased separately. The Rapid Shutdown function can also be triggered by turning off the inverter's DC disconnect switch or by disconnecting AC voltage in non-backup applications.

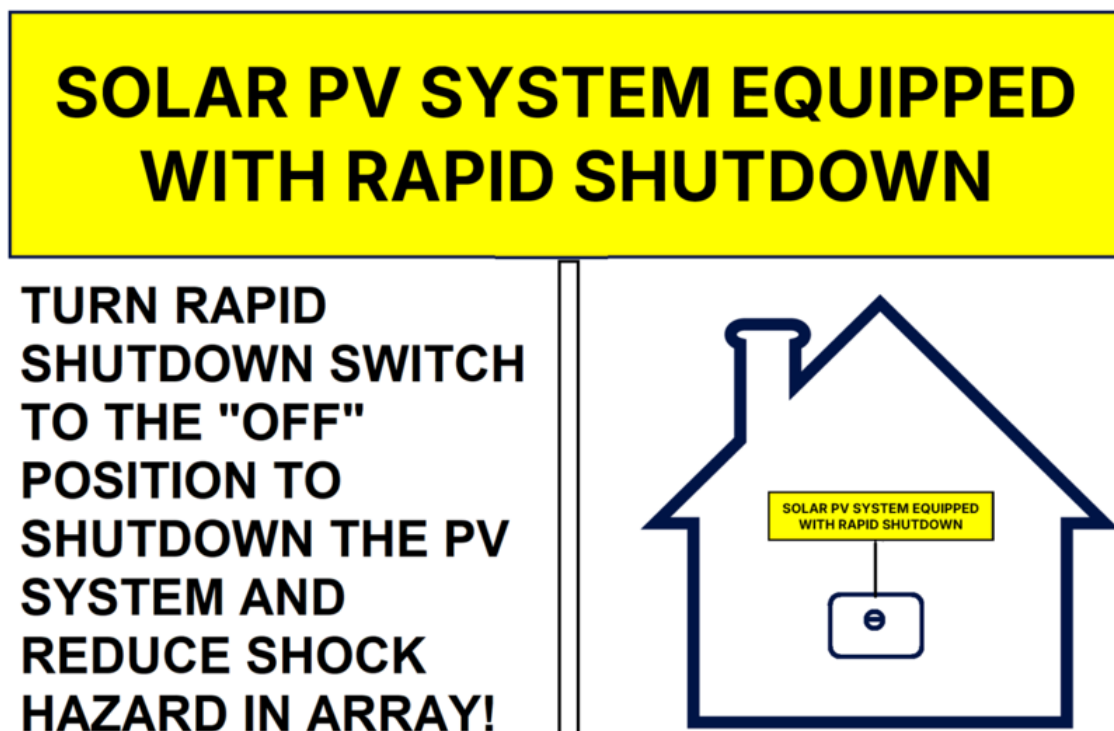
Rapid shutdown system requirements:

- Photovoltaic rapid shutdown equipment (PVRSE) does not perform all of the functions of a complete photovoltaic rapid shutdown system (PVRSS). PVRSE must be installed with

¹National Electric Code (NEC) 2020 705.12

other equipment to form a complete PVRSS that meets the requirements of NEC (NFPA 70) section 690.12, for controlled conductors outside the array. Other equipment installed in or on this PV system may adversely affect the operation of the PVRSS. It is the responsibility of the installer to ensure that the completed PV system meets rapid shutdown functional requirements. Equipment must be installed according to the manufacturer's installation instructions.

- SolarEdge inverters, power optimizers, and batteries installed together form a photovoltaic rapid shutdown system (PVRSS). All inputs and outputs of the inverter and power optimizers comply with photovoltaic rapid shutdown requirements for controlled conductors both inside and outside the PV array boundary. Each power optimizer outputs around 1 Vdc when rapid shutdown is initiated. The rapid shutdown time limit is 5 seconds.
- This SolarEdge system is compatible with grid support interactive functionality.
- All DC and AC conductors served by power optimizers, batteries, and inverters are controlled by the PVRSS. The AC branch circuit conductors serving the inverter may remain energized until the AC service panel is de-energized. Installers must provide signage complying with Section 690.56(C) of the NEC (NFPA 70).
- Buildings with rapid shutdown PV systems, complying with NEC 690.56(C), shall have permanent labels as described in 690.56(C)(1) through (C)(2):
 - For PV systems that shut down the array and conductors leaving the array: The title **"SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN"** must utilize capitalized characters with a minimum height of 3.8 in., in black text on a yellow background, and the remaining characters must be capitalized with a minimum height of 3.16 in., in black text on a white background, as displayed in the following image.



- An RSD must have a label placed on or within 3 ft of it that includes the wording in the following image. The label must be reflective and capitalized, with a minimum height of 3.8 in., in white text on a red background.

PV SYSTEM PV WITH RAPID SHUTDOWN

- For instructions on connecting an RSD, refer to [Rapid Shutdown](#).

Sense Connect

SolarEdge Power Optimizers, SolarEdge Nexis Inverters, and SolarEdge Nexis Batteries have built-in temperature sensors that shut down the affected circuit and send a Sense Connect alert to the SolarEdge Monitoring platform. For SolarEdge Nexis Inverters and SolarEdge Nexis Batteries, the feature is triggered if the temperature at the terminal blocks is too high.

Sense Connect alerts appear on the Monitoring platform with troubleshooting guidance for each alert. The system is proactive; it shuts down before damage can occur and helps the installer resolve the issue.



NOTE

In systems where both P-series and S-series power optimizers are connected to the same inverter unit, the Optimizers' Sense Connect feature is enabled only in the S-series connectors. Refer to the [Sense Connect Inverter Compatibility Table](#).

Cybersecurity

For more information, refer to the [Cybersecurity Solution Brochure](#).

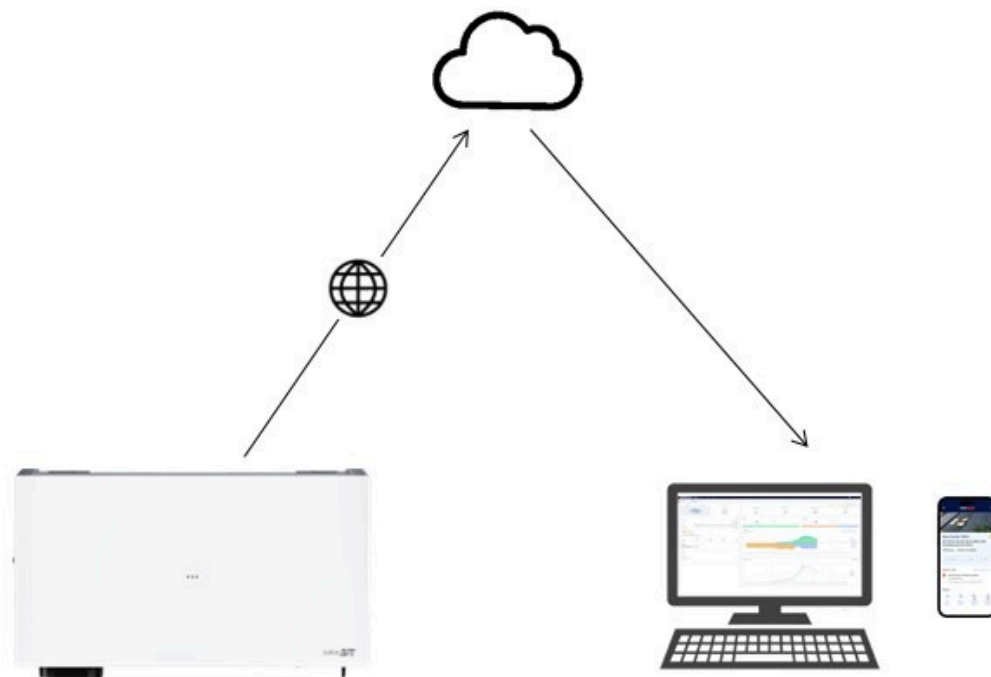
Monitoring communication

SolarEdge Nexis Inverters support robust internet-based communication methods, enabling seamless monitoring and remote management. These include:

- **Ethernet:** Provides stable, high-speed wired connectivity for continuous data transmission
- **Wi-Fi:** Offers flexible wireless access for residential installations
- **Cellular (LTE):** Ensures connectivity in remote or infrastructure-limited locations via mobile networks. The LTE communication board (**CELL-B-R05-US-S-S2**) is purchased separately.

These communication options allow real-time performance tracking, remote diagnostics, firmware updates, and integration with the SolarEdge Monitoring platform and the SolarEdge Go mobile app.

For installation instructions for Ethernet, Wi-Fi, and LTE communication, refer to [Communication wiring - Wi-Fi, LTE, and Ethernet](#).



SolarEdge Nexis smart energy management

The SolarEdge Nexis Inverter, SolarEdge Nexis Battery System, and the SolarEdge Nexis IslandDER™ work together to optimize solar energy usage, enable backup power, and support grid compliance.

Storage

SolarEdge ONE Battery Modes

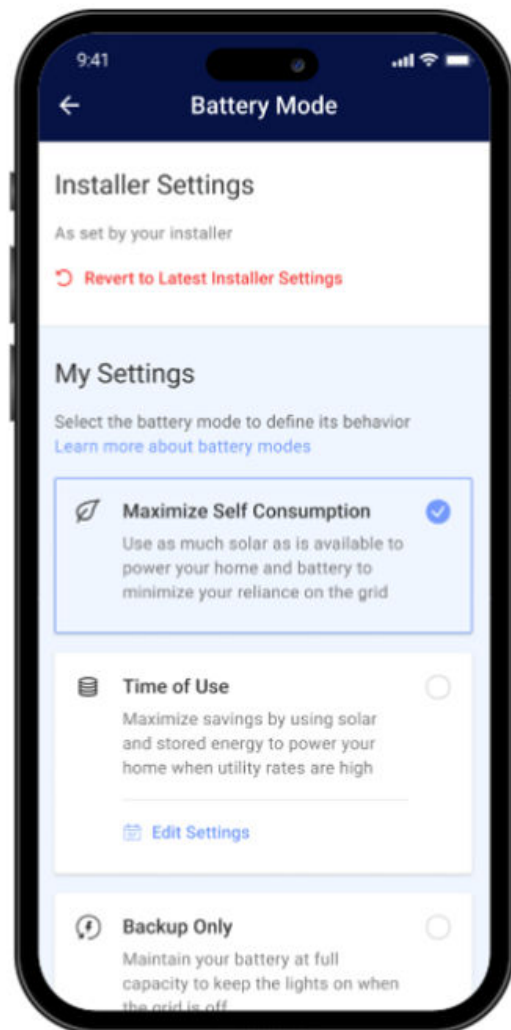
SolarEdge ONE offers AI-powered battery modes that intelligently decide when to use solar power, store it for later, or tap into the grid – all to maximize savings, backup duration, and energy independence. The modes can be configured through SolarEdge Go and mySolarEdge mobile applications or the Monitoring platform.

For information on storage modes, refer to [SolarEdge ONE Battery Modes](#).

For information on changing storage modes in my SolarEdge, refer to this [Application Note](#).

Maximize Self-Consumption

- This mode prioritizes charging the battery with locally generated solar energy before exporting any excess energy to the grid
- When solar production is insufficient, the system discharges the battery to support household loads, reducing grid imports
- The feature is enabled by default but can be adjusted in **Energy Management** settings

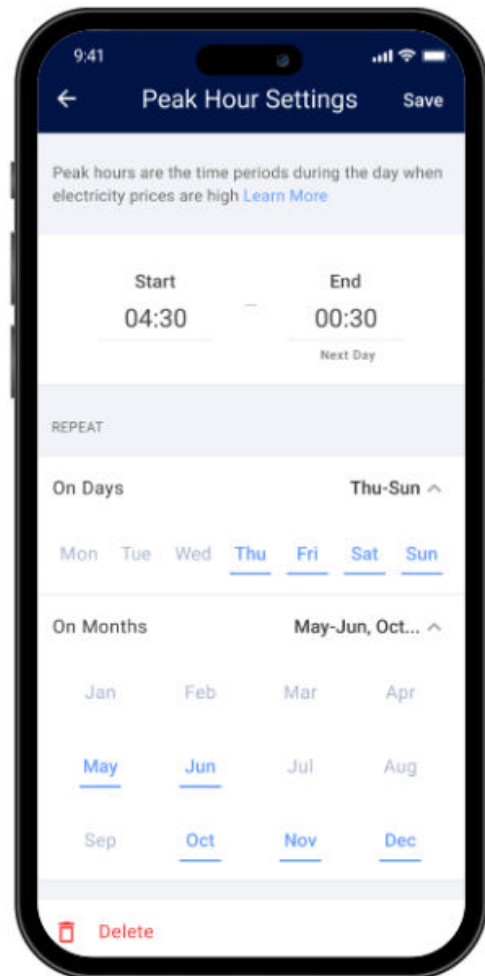


Time-of-Use Peak Hours

SolarEdge Nexis solution time-of-use (TOU) features:

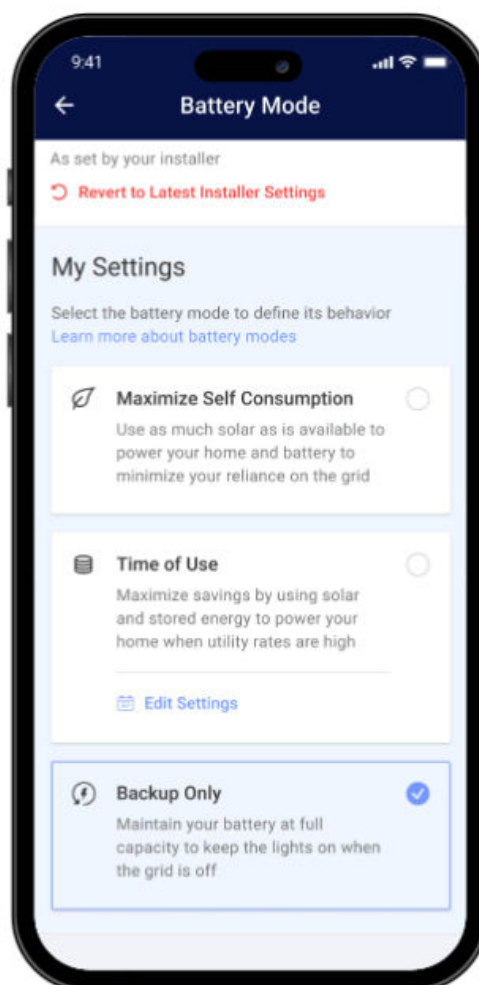
- Charge and discharge the battery based on utility rate schedules
- Store energy during off-peak hours
- Use energy during peak pricing periods

This feature must be configured by the installer or user by entering the applicable TOU rate structure.



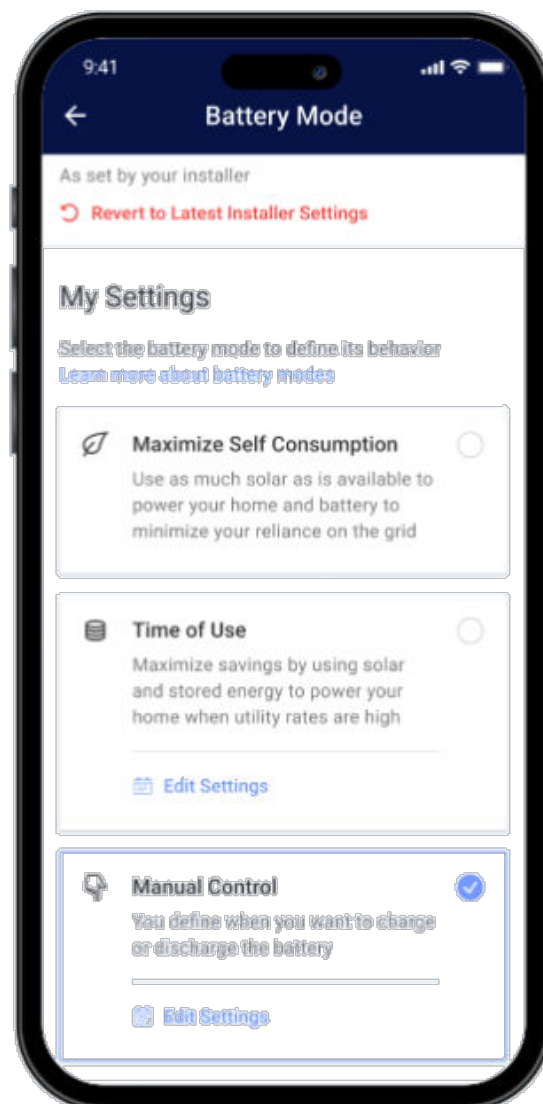
Backup Only

This mode maintains the battery in a charged state for use during grid outages, ensuring maximum backup availability when needed.



Manual Control

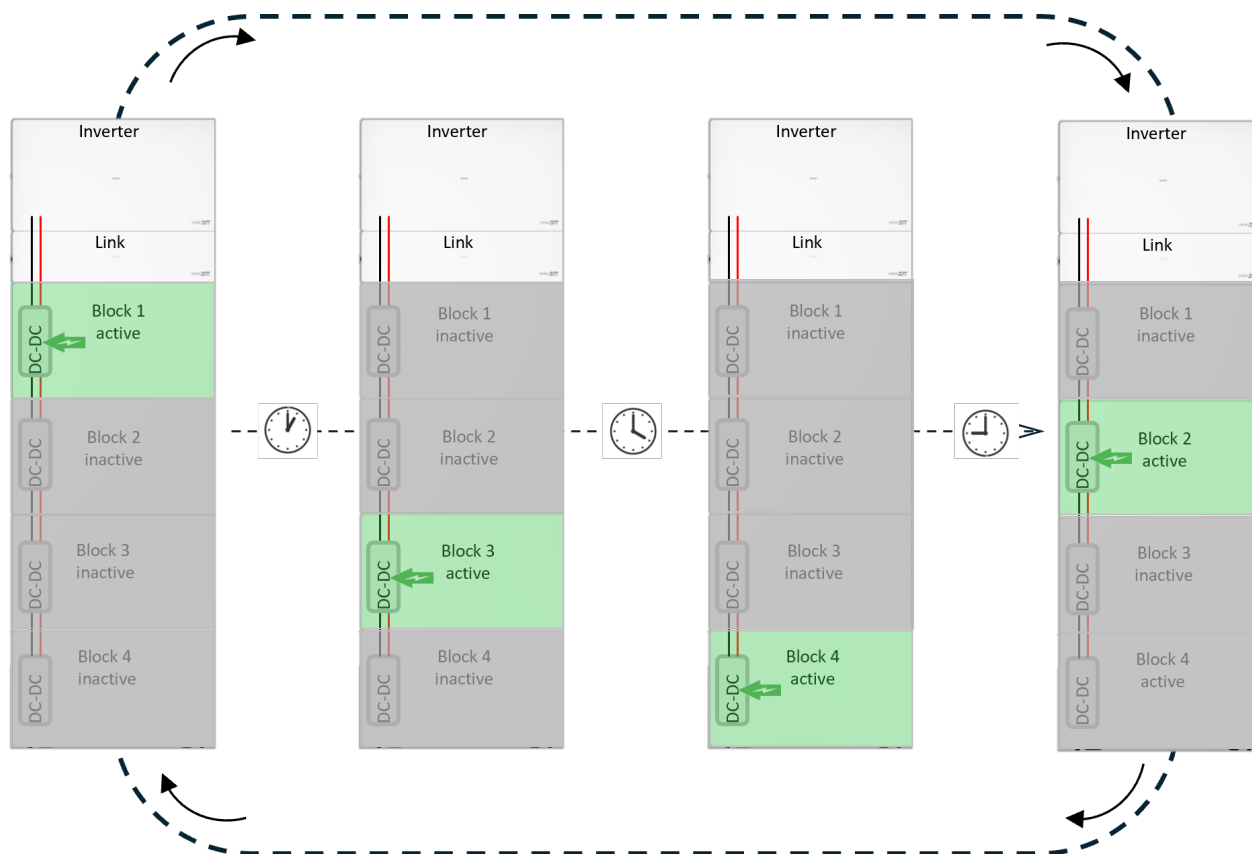
This mode manually defines charging and discharging times, providing full control over battery operation to match specific energy strategies.



Additional features

Battery optimizer

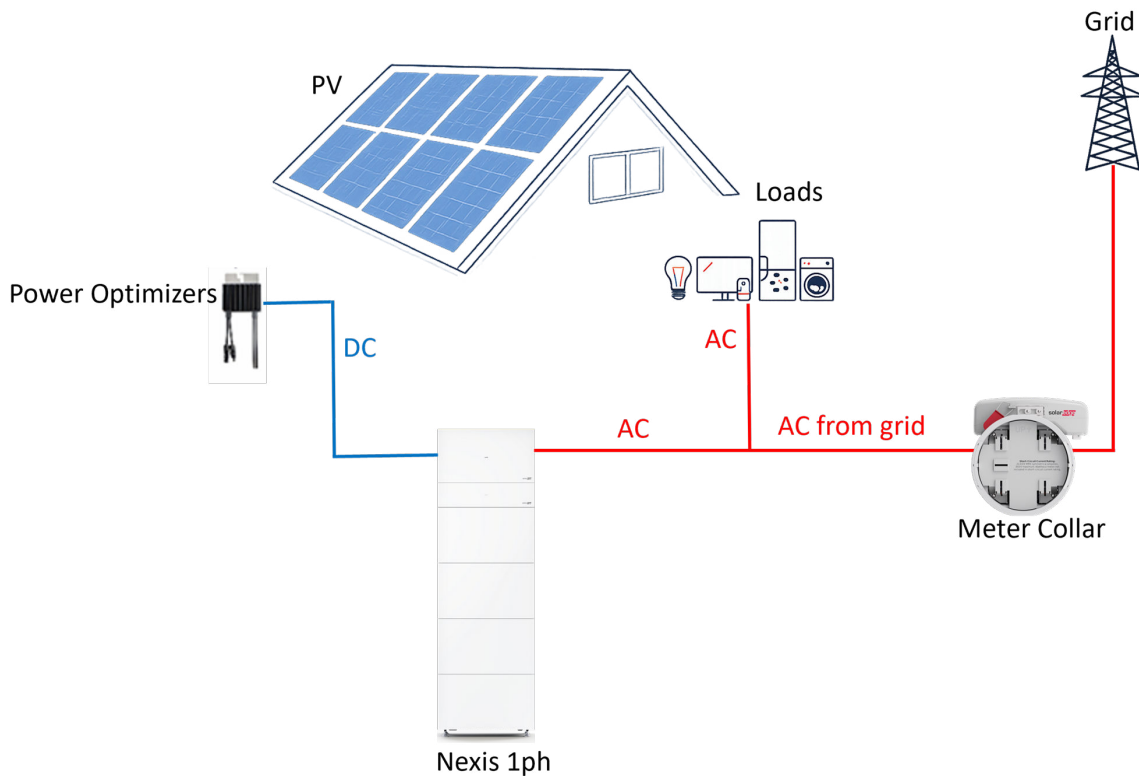
- Each SolarEdge Nexis Battery Block includes a DC-DC power module, allowing it to work independently
- At low power, the SolarEdge Nexis Battery charges or discharges through a single Battery Block to reduce conversion overhead and improve efficiency. The system rotates the active block over time to balance the blocks and support long-term battery health.
- The feature is enabled by default and operates automatically based on system conditions, with no manual setup required



Backup

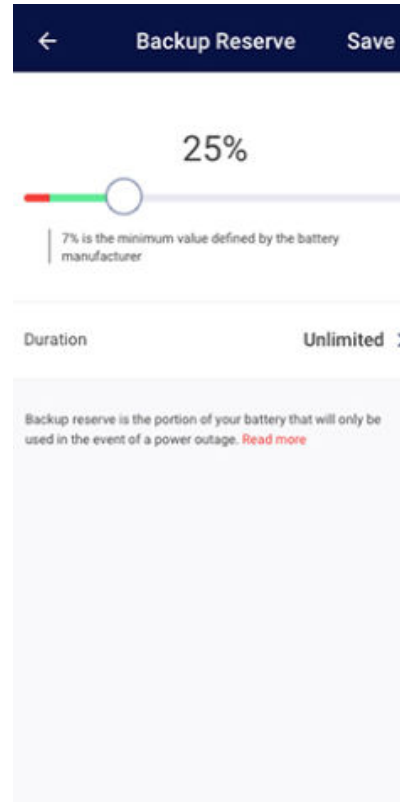
Full home backup

- The SolarEdge Nexis Solution supports a full home backup configuration, enabling users to back up their entire home
- The feature is configured during commissioning, requiring the installation of the SolarEdge Nexis IslandDER



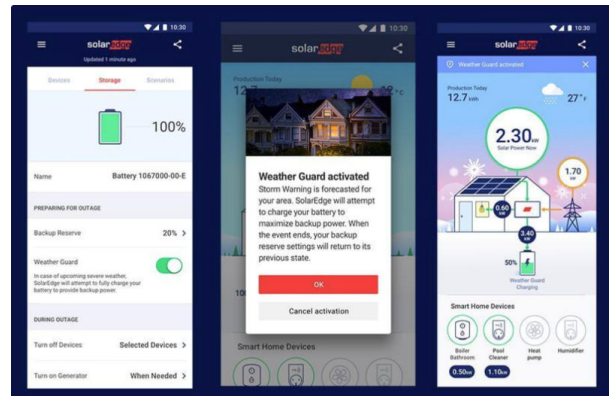
Backup Reserve

- Reserve a portion of the battery exclusively for backup use to ensure energy availability during outages
- This feature can be configured in the SolarEdge Go app, the mySolarEdge app, or on the Monitoring platform under **Backup Reserve** settings.



Weather Guard

- Weather Guard is designed exclusively for SolarEdge system owners with full home backup
- When enabled, it detects severe weather and is designed to automatically charge the battery to full capacity before the grid goes down, extending backup power duration
- This feature can be configured in the mySolarEdge app



SolarEdge Nexus installation

Required tools

Standard tools can be used during the installation of the SolarEdge Nexus Inverter PV system. The following tools are recommended for installation:



Drill



Pencil



Wire cutter



Wire Stripper



RJ45
crimping tool



Level



Adjustable Torque
Torx Screwdriver
set



Mounting screws

Have the following tools available:

- 1/2 in. wrench

- Long shank Torx T15 screwhead
- Flat screwdriver set with adjustable torque

PV-only

Power Optimizer important safety instructions

Save these instructions

The following warnings, cautions, and notes apply when installing power optimizers.



WARNING

- The metallic enclosure of the power optimizer must be grounded in accordance with the product's listing and local and national codes
- L'enceinte métallique de l'optimiseur de puissance doit être mise à la terre en accord avec les réglementations locales et nationales
- When modifying an existing installation, turn OFF the inverter's P/1/0 switch, the DC Safety Unit, and the AC circuit breaker on the main AC distribution panel
- Avant de faire ces étapes, éteignez l'onduleur monophasé en mettant sur OFF l'interrupteur P/1/0 situé au bas de l'onduleur



CAUTION

- Power optimizers are IP68/NEMA6P rated. Choose a mounting location where optimizers are not submerged in water
- Les optimiseurs de puissances sont compatibles à la norme IP68/NEMA6P. Choisissez le lieu de montage tel que l'optimiseur ne puisse pas être submergé par l'eau
- This unit must be operated according to the operating specifications provided with the unit
- Cette unité doit être opérée suivant les instructions trouvées dans le manuel fourni avec le produit
- Cutting the power optimizer input or output cable connector is prohibited and voids the warranty
- Sectionner les câbles d'entrées ou de sortie de l'optimiseur est interdit et annule sa garantie
- All PV modules must be connected to a power optimizer
- Tous les modules doivent être connectés à un optimiseur de puissance
- If you intend to mount the optimizers directly to the module or module frame, first consult the module manufacturer for guidance regarding the mounting location and

the impact, if any, on module warranty. Drilling holes in the module frame should be done according to the module manufacturer's instructions.

- Pour installation à même le module ou la monture du module, consultez d'abord le fabricant du module sur la position et son impact sur la garantie du module. Le perçage de trous dans le cadre du module devra se faire suivant les instructions du fabricant.



CAUTION

Installing a SolarEdge system without ensuring compatibility of the module connectors with the optimizer connectors may be unsafe and could cause functionality problems, such as ground faults, resulting in inverter shutdown. To ensure the power optimizers connectors are mechanically compatible with the PV module connectors they connect to, do the following:

- Use connectors from the same manufacturer and of the same type on both the power optimizers and the PV modules
- The module connector manufacturer should explicitly verify compatibility with the SolarEdge optimizer connector
- A third-party test report by one of the listed external labs (TUV, VDE, Bureau Veritas UL, CSA, InterTek) should be obtained, verifying the compatibility of the connectors. Verify that the connectors are compatible in the following ways:
 - The module connector manufacturer should explicitly verify compatibility with the SolarEdge optimizer connector
 - A third-party test report by one of the listed external labs (TUV, VDE, Bureau Veritas UL, CSA, InterTek) should be obtained, verifying the compatibility of the connectors. For more information, refer to the SolarEdge Power Optimizer Input Connector Compatibility Technical Note the SolarEdge Power Optimizer input connector compatibility - Technical note.[pdf](#).
- Utiliser des connecteurs identiques du même fabricant et du même type aussi bien pour les optimiseurs de puissance que pour les modules
- Vérifiez que les connecteurs sont compatibles de la manière suivante:
 - Le fabricant du connecteur doit explicitement vérifier la compatibilité avec le connecteur SolarEdge
 - Un rapport de test de tierce partie doit être effectué par l'un des laboratoires externes indiqués ci-dessous: (TUV, VDE, Bureau Veritas UL, CSA, Intertek), qui vérifiera la compatibilité des connecteurs. Pour plus d'informations, consultez <https://knowledge-center.solaredge.com/sites/kc/files/optimizer-input-connector-compatibility.pdf>.



IMPORTANT

Modules with SolarEdge Power Optimizers are safe. They carry a low safety voltage before the inverter is turned ON. If the power optimizers are not connected to the

inverter or the inverter is turned OFF, each power optimizer outputs a safe voltage of 1 V.

SolarEdge Power Optimizer installation

For the minimum and maximum number of power optimizers in a PV string, referred to as the PV string length, refer to [Power Optimizer Datasheets](#).

Refer to [SolarEdge Designer](#) for PV string length verification.

The total cable length of home run cables from the first and the last power optimizer to the inverter may not exceed 1000 ft (300 m). Use extension cables between the following units:

- Power optimizer and a PV module
- Two power optimizers
- Power optimizer and an inverter



IMPORTANT

In new installations, do not mix S-series and P-series power optimizers in the same string.



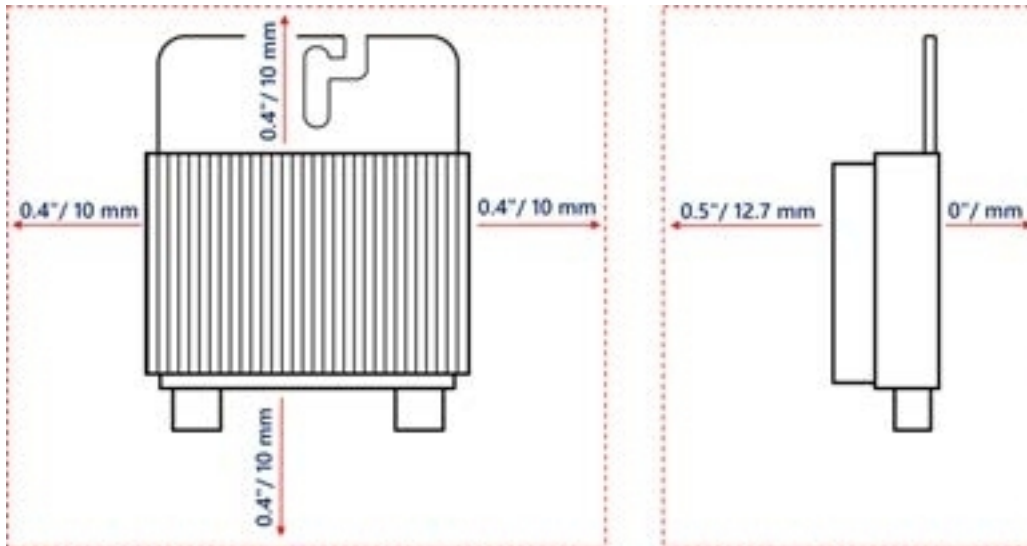
NOTE

When adding a new power optimizer, use SolarEdge Designer to verify that the PV module specifications, such as power, I_{sc} , and V_{oc} at the minimum ambient temperature, are compatible with the replacement power optimizer. For more details, refer to the [Power Optimizer Datasheet](#).

Install power optimizers

- The power optimizer may be placed in any orientation
- Position the power optimizer close enough to its panel so that its cables can be connected
- Ensure power optimizers have the required output and input conductor length
- Completely shaded panels may cause their power optimizers to shut down temporarily. This does not affect the performance of the other power optimizers in the PV string if the minimum number of unshaded power optimizers connected in a PV string of panels is met. If, under typical conditions, fewer than the minimum number of power optimizers are connected to unshaded panels, add more power optimizers to the PV string.

To allow for heat dissipation, maintain the following clearance:



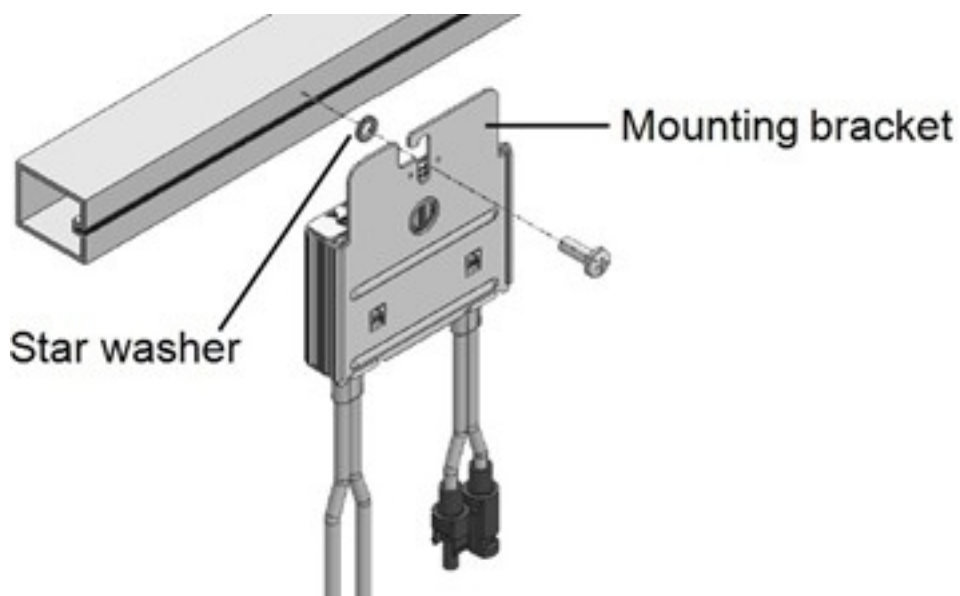
- Equipment grounding tightening torques: 4-6 AWG: 45 lb-in., 8 AWG:
 - 40 lb-in., 10-14 AWG
 - AWG: 35 lb-in.

When installing PV panels in a confined space, such as Building-Integrated Photovoltaic (BIPV) Panels, ventilation measures may be required to ensure that power optimizers do not exceed the maximum temperatures stated in their specifications.

Mount the Power Optimizers

Mount Power Optimizers on a grounded metal rail

1. Insert the supplied 5/16" stainless steel grounding star washer between the railing and the flat side of the mounting bracket.



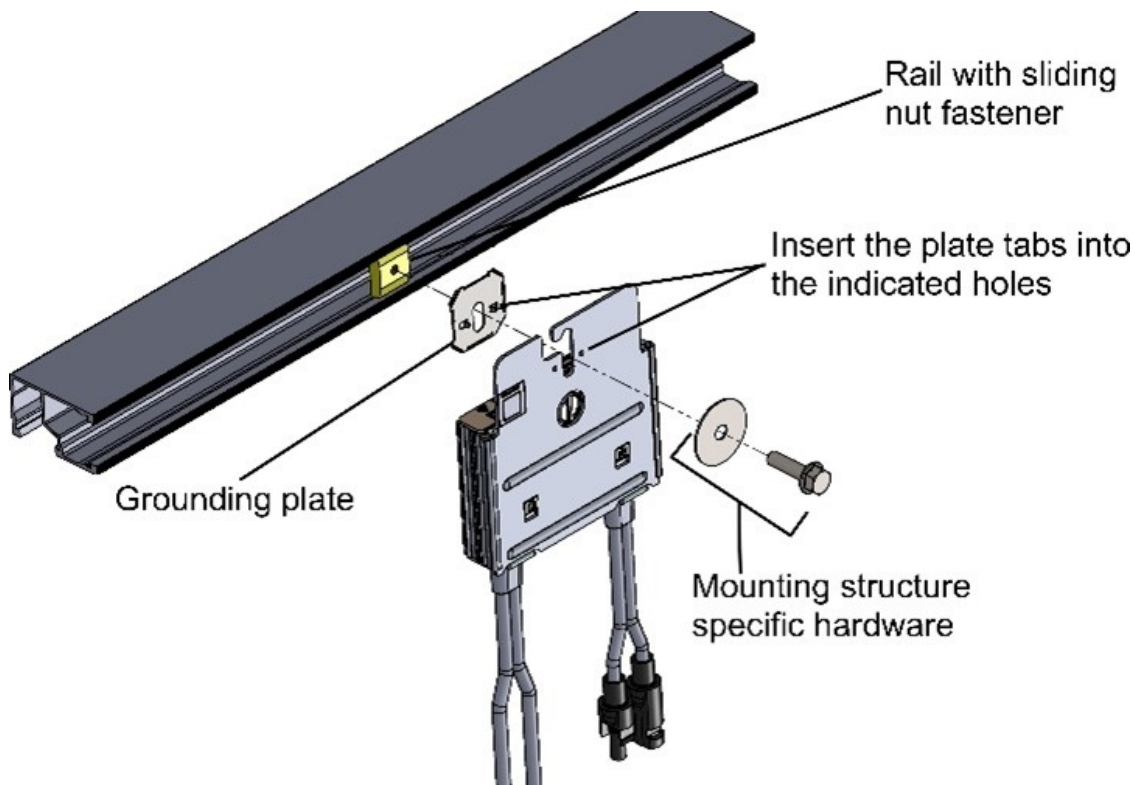
2. Tighten the bolt to a torque of 7 ft·lbf (9.5 N·m).

**NOTE**

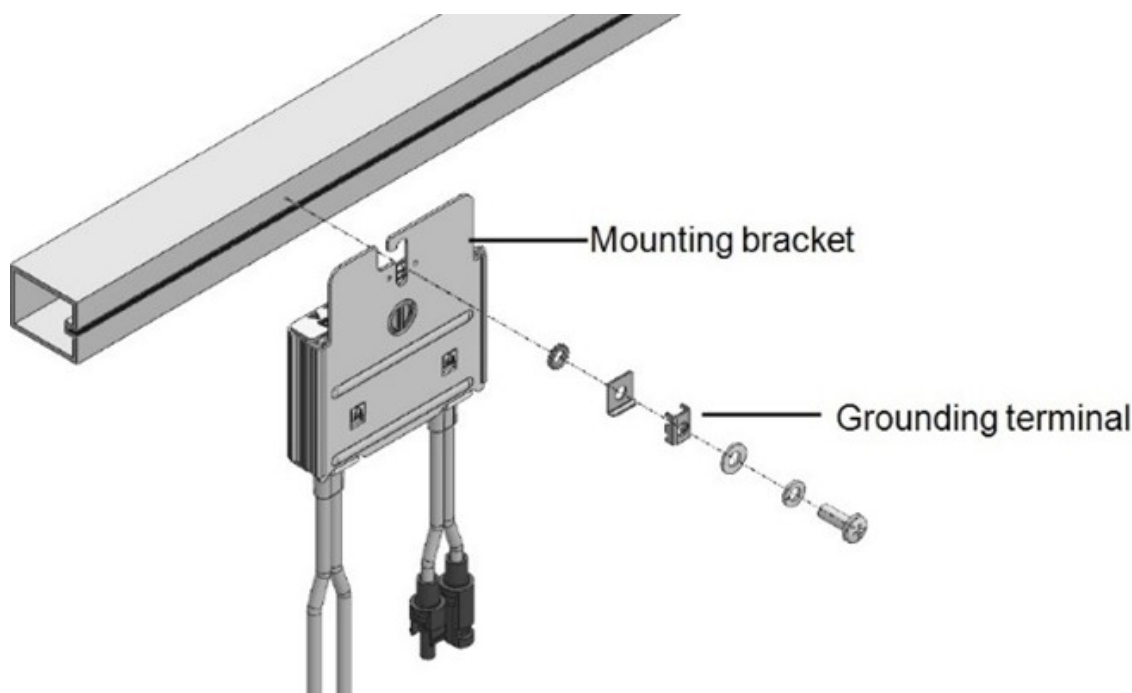
Ensure the grounding washer breaks through the anodized coating of the railing to ensure good conductivity.

Mount Power Optimizers on rails with sliding nut fasteners

If the star washer cannot be used, install a SolarEdge grounding plate, which is sold separately, between the railing and the flat side of the mounting bracket. Use specific mounting hardware as required. Apply a torque of 7 ft·lbf (9.5 N·m).

**Mount Power Optimizers on ungrounded structures**

If the structure is ungrounded, for example, a wooden structure, and neither the star washer nor the grounding plate is suitable, install a SolarEdge grounding lug (sold separately) and connect a grounding conductor according to the supplied instructions. The grounding terminal accepts wire sizes of 6-14 AWG and must be sized for equipment grounding as per NEC 250.122 requirements. Tighten the screw connecting the power optimizer to the frame and the grounding terminal. Apply a torque of 7 ft·lbf (9.5 N·m).



Extension cables

Use an extension cable between a Power Optimizer and a PV module

For P-series power optimizers with the 4-type suffix in their part number (Pxxx-4xxxxxx):

A total round-trip cable length between the Power Optimizer (+) and (-) input terminals of up to 52 ft (16 m) can be installed per power optimizer, 26 ft (8 m) for DC+, and 26 ft (8 m) for DC-.

For S-series Residential Power Optimizers (including part numbers starting with U), and P-series residential power optimizers with the 5-type suffix in their part number (Pxxx-5xxxxxx):

A total round-trip cable length between the power optimizer (+) and (-) input terminals of up to 6 ft (1.8 m) can be installed per power optimizer, 3 ft (0.9 m) for DC+, and 3 ft (0.9 m) for DC-.

Use extension cables between two Power Optimizers or between a Power Optimizer and the inverter

Extension cables may be installed between two Power Optimizers in the following cases:

- From a Power Optimizer in one row to another Power Optimizer in the next row
- Around obstacles or pathways within the same row
- From the end of the PV string to the inverter
- For connecting homerun DC cables from power optimizers to the inverter, use cables with the following cross-sections:
 - For DC terminal blocks inside the inverter (if applicable): 12-6 AWG / 4-16 mm²

Complete the power optimizer installation

1. Verify that each power optimizer is securely attached to the panel support structure.
2. Record the serial number and location of each power optimizer.

Connect a PV panel to a power optimizer



NOTE

Improper wiring may cause electrical faults in a PV system. To avoid electrical faults, verify proper locking of connectors and avoid cable tension and friction. Proper planning, materials, and installation reduces the risk of electric arcing, short-circuits, and ground faults in the PV system.

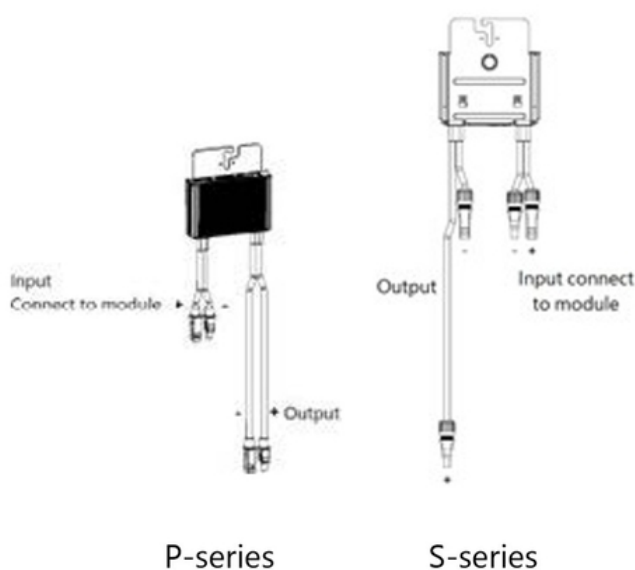


NOTE

Images are for illustration purposes only. Refer to the label on the product to identify the plus (+) and minus (-) input and output connectors.

For each Power Optimizer:

1. Connect the plus (+) output connector of the panel to the plus (+) input connector of the Power Optimizer.
2. Connect the minus (-) output connector of the panel to the minus (-) input connector of the Power Optimizer.



Connect Power Optimizers in strings



NOTE

The number of Power Optimizers per string does not have to be the same. The minimum and maximum string lengths are specified in the [Power Optimizer Datasheet](#). Refer to [Designer](#) for string length verification.

1. Connect the minus (-) output connector of the string's first Power Optimizer to the plus (+) output connector of the string's second Power Optimizer. When connecting S-Series Power Optimizers, connect the short minus (-) output connector of one power optimizer to the long plus (+) output connector of the next power optimizer.
2. To minimize electromagnetic interference (EMI), minimize the distance between the positive and negative DC cables.



NOTE

For detailed instructions, refer to the [SolarEdge EMI Performance Application Note](#).

3. Connect the remaining Power Optimizers in the string in the same manner.

Verify the correct Power Optimizer connection

When a PV panel is connected to a Power Optimizer, the Power Optimizer's safe output voltage is 1 V (± 0.1 V). The total PV string voltage should equal 1V multiplied by the number of Power Optimizers connected in series in the PV string. For example, if ten Power Optimizers are connected in a PV string, then the output voltage should be 10 V.

Ensure the PV panels are exposed to sunlight during this process. The Power Optimizer only turns ON if the PV panel generates power of at least 2 W.

In SolarEdge systems, due to the introduction of Power Optimizers between the PV panels and the inverter, the short circuit current I_{sc} and the open circuit voltage V_{oc} have different meanings from those in traditional systems.



NOTE

For more information about the SolarEdge system's PV string Voltage and current, refer to the V_{oc} and I_{sc} in the [SolarEdge Systems Technical Note](#).

To verify the correct Power Optimizer connection:

Measure the voltage of each PV string individually before connecting it to other PV strings or to the inverter. Verify correct polarity by measuring the PV string voltage with a voltmeter that has at least 0.1 V accuracy.

**NOTE**

As the inverter is not yet operating, you may measure the PV string voltage and verify the correct polarity on the DC wires inside the Inverter.

For troubleshooting Power Optimizer operations, refer to [Troubleshooting](#).

**NOTE**

The correct Power Optimizer connection can also be verified in the [Designer](#) application.

SolarEdge Nexis Inverter installation

Inverter models and specifications

For information on the inverter's model and specifications, refer to the [SolarEdge Nexis Inverter Datasheet](#).

- **Storage & transportation temperature range:** -40°F to +158°F / -40°C to +70°C
- **Operating temperature range:** -40°F to +140°F / -40°C to +60°C
- **Rating:** IP65 / NEMA 4x
- **Maximum altitude:** 9842 ft / 3000 m
- **Max Derating Output Power (60°C):** 6.5kW

Transport and storage

Transport the inverter in its original package, face up, and avoid any unnecessary shocks.

If the original package is no longer available, use a similar box that can withstand the weight of the inverter, has a handle system, and can be fully closed.

**CAUTION**

Avoid tilting or laying the inverter flat during transport to prevent internal damage.

**NOTE**

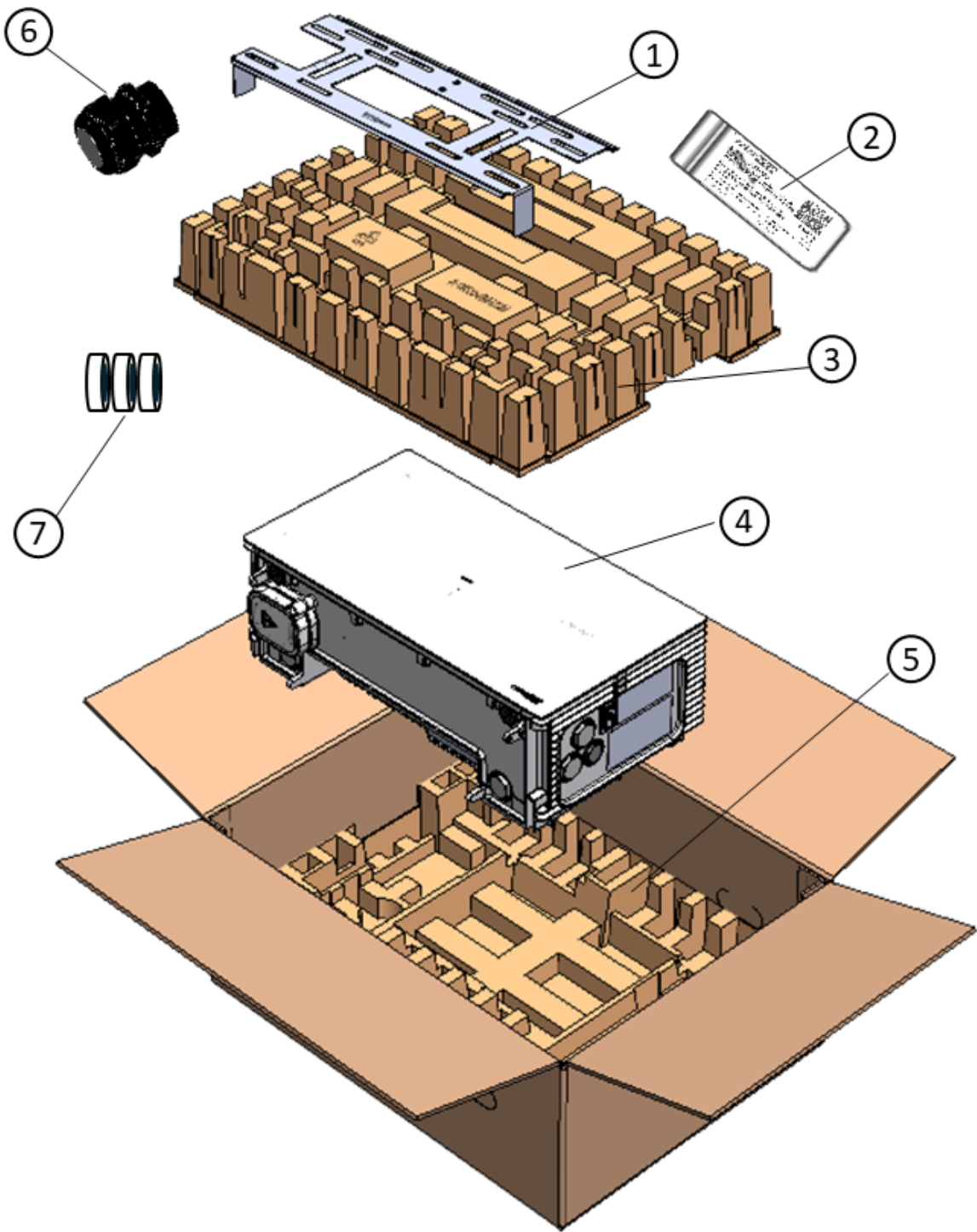
Store the inverter in a dry place where [ambient temperatures are -40°C to +70°C \(-40°F to +158°F\)](#) for safe long-term storage.

**NOTE**

The inverter weighs 70 lbs. Always use proper lifting techniques and appropriate equipment to prevent injury or damage.

Before installation

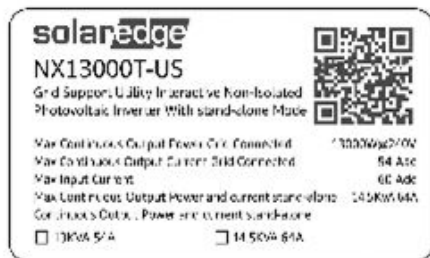
Inverter package contents



Item Number	Description
1	Wall bracket
2	PCS and Power Class Labels
3	Package pulp
4	SolarEdge Nexis Inverter
5	Package pulp
6	Wiring gland
7	Beads

Power Class Labels

Each inverter ships with combined labels that include model-specific data. This supports the single-SKU strategy by allowing installers to apply the correct rating label during commissioning. Refer to the [SolarEdge Nexis Inverter Datasheet](#) for further information on power models.



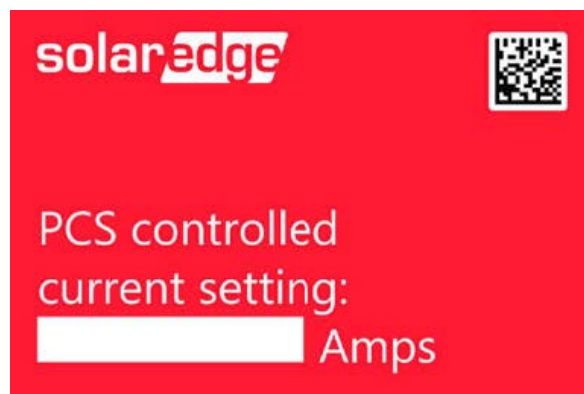
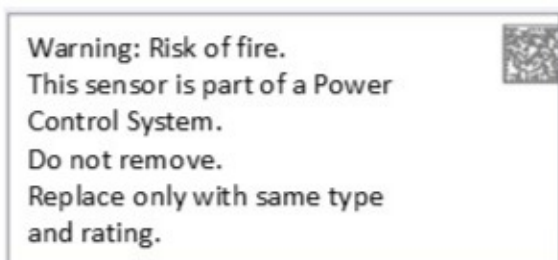
PCS Labels



NOTE

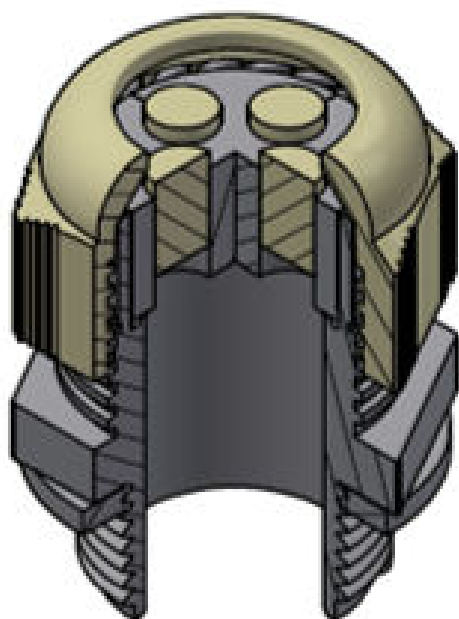
The PCS Labels are required only for PCS Installation. For more details, refer to [PCS installation instructions](#).

The following images display a PCS label for the current transformer (CT) cable and a PCS label for the main panel.



Wiring Gland

The Wiring Gland is a sealing gland that provides a sealed pass-through for Ethernet and, if used, additional communication wires (Cat 5e or higher). It is designed exclusively for the inverter's 1 in. conduit entries and uses a rubber waterproof fitting and internal washer to protect against dust and moisture, and ensure secure, safe cable routing.

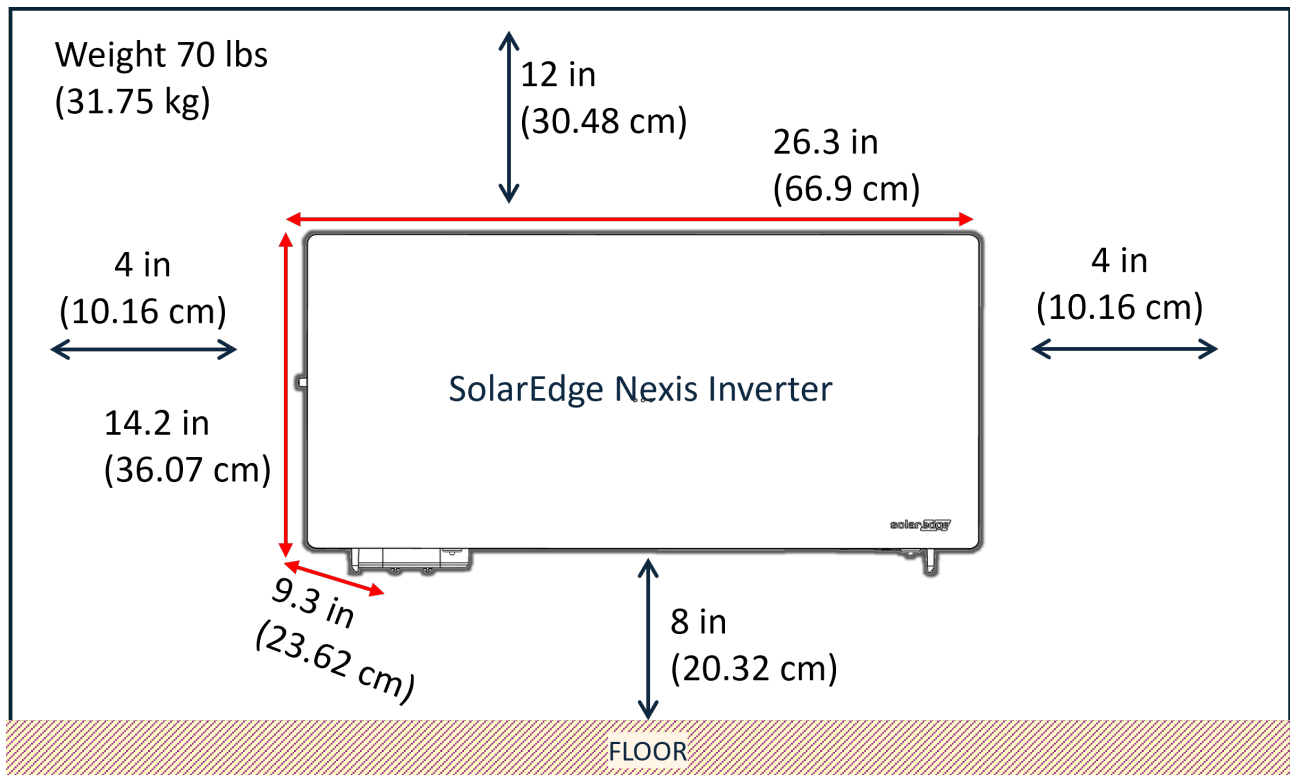


The SolarEdge Nexis Inverter's physical specifications and site requirements



NOTE

The SolarEdge Nexis Inverter can be installed indoors or outdoors. If the inverter is installed outdoors, it is recommended to install it under a fixed shelter or permanent overhead cover.



Select a residual current device



IMPORTANT

All SolarEdge Inverters include a certified internal residual current device (RCD) that protects against electrocution and fire hazards in the event of a malfunction in the PV array, cables, or inverter. Certification requires two RCD trip thresholds. The default threshold for electrocution protection is 30 mA. For slowly rising residual current, the default threshold is 300 mA.

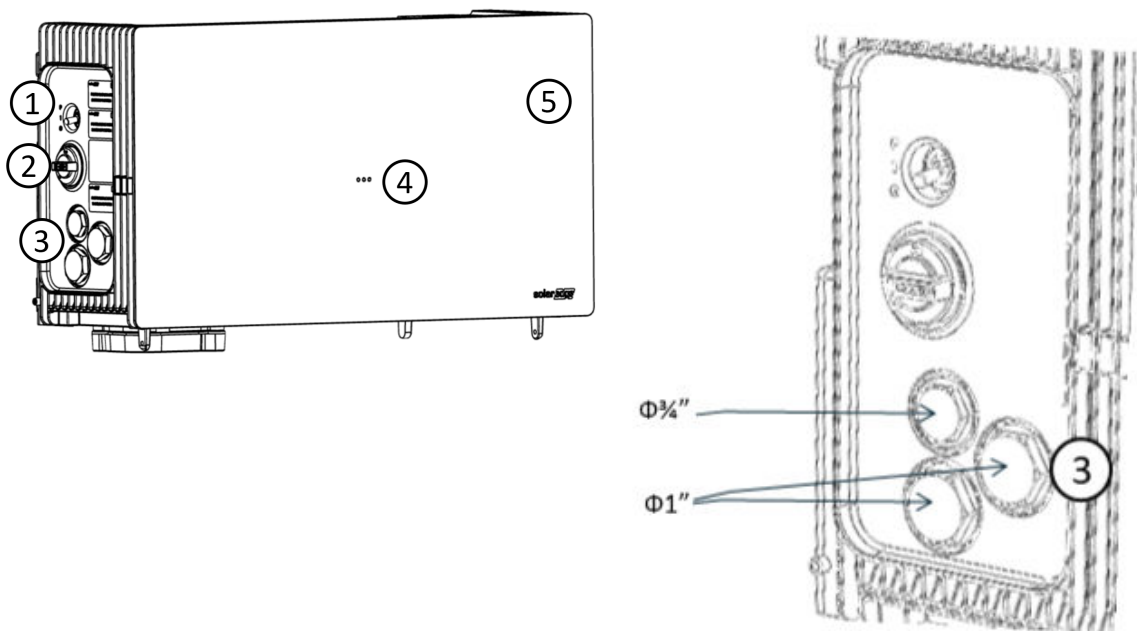
If local regulations require an external RCD, verify the required RCD type under the applicable electrical code and install it in accordance with local standards and directives. SolarEdge recommends a Type A RCD rated at 100 mA or 300 mA, unless local codes require a lower rating. Where required, a Type B RCD may also be used.

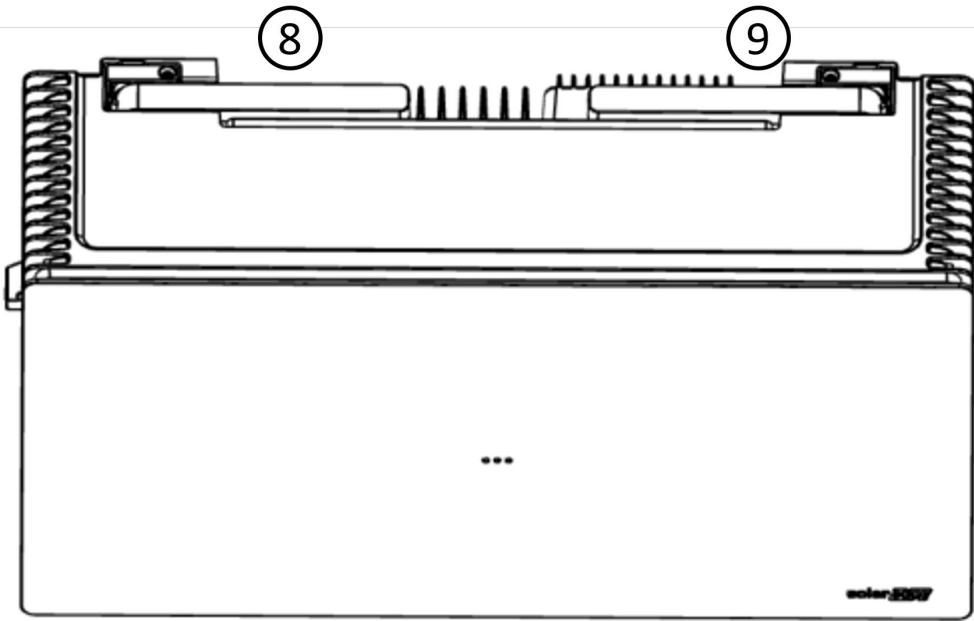
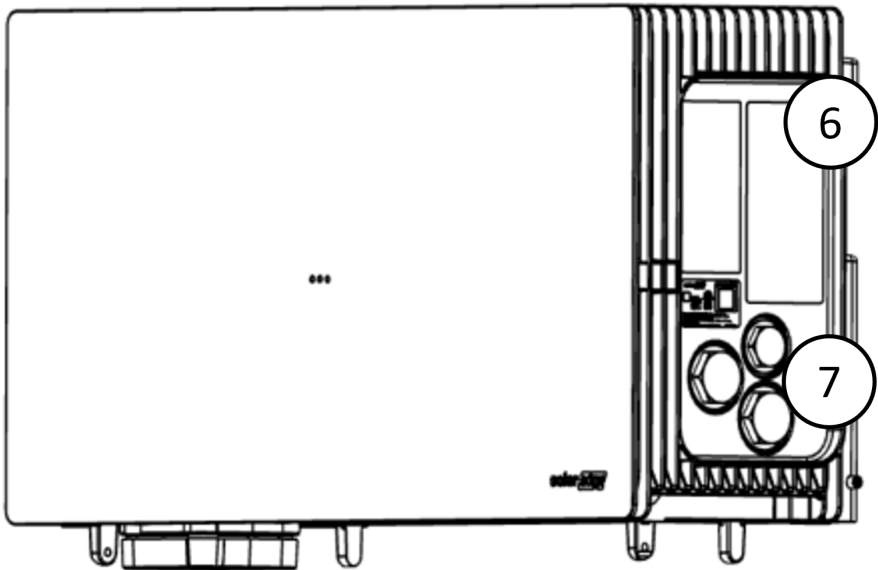
If the local electrical code requires an RCD with a lower leakage setting, the discharge current may cause nuisance tripping of the external RCD. To reduce nuisance tripping, follow these steps:

1. Select an RCD that operates correctly in the installation. For example, a 30 mA RCD may trip at leakage currents as low as 15 mA (IEC 61008). Higher-quality RCDs typically trip closer to their rated value.
2. Set the inverter's internal RCD trip threshold lower than the external RCD trip threshold. The internal RCD trips when the residual current exceeds the permitted limit. Because the inverter's internal RCD resets automatically when the residual current returns to a low level, it reduces the need to manually reset the external RCD.

For detailed information, refer to the [RCD Selection for SolarEdge Inverters Application Note](#).

SolarEdge Nexis Inverter external overview

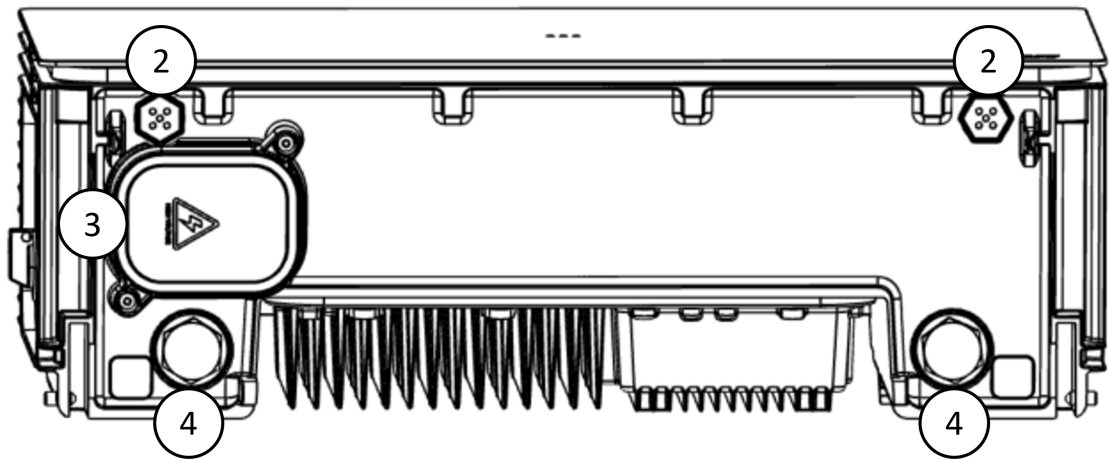
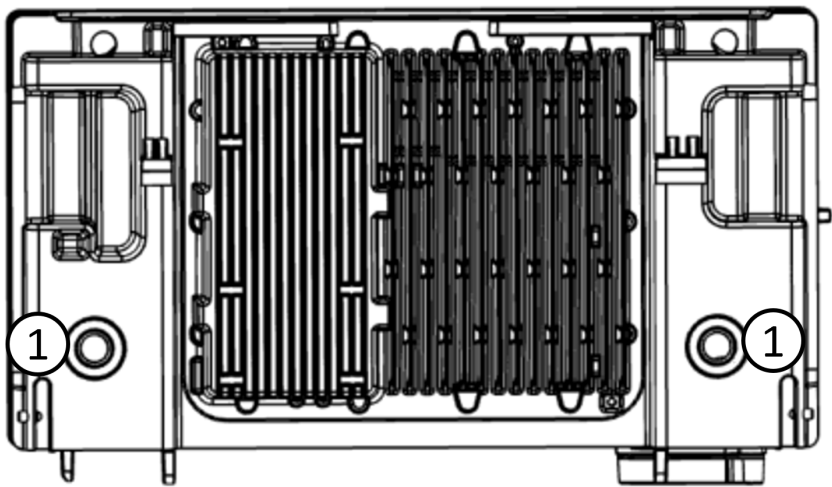




Component Number	Component Name
1	P/1/0 Switch
2	DC Disconnect Switch
3	1 in. and ¾ in. conduit entries
4	LED display
5	Decorative cover

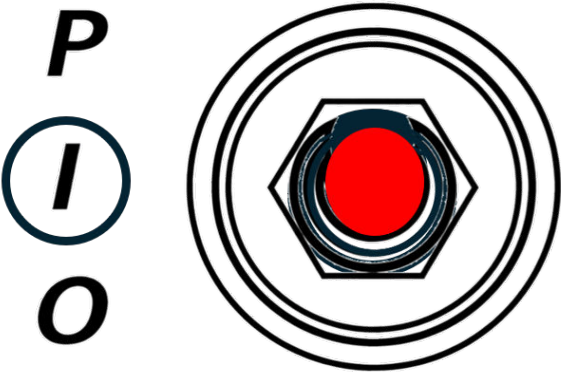
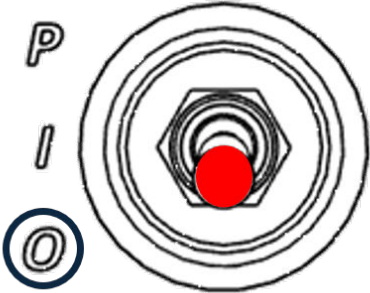
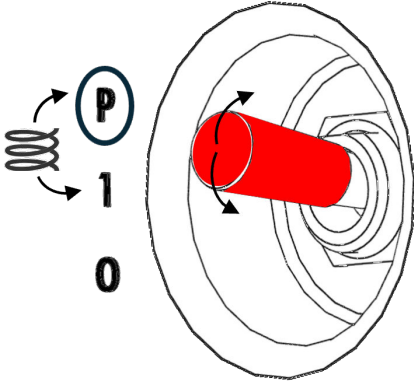
Component Number	Component Name
6	Place Power Class Labels here
7	1 in. and ¾ in. conduit entries
8	Wi-Fi antenna
9	LTE antenna

The back and bottom of the inverter

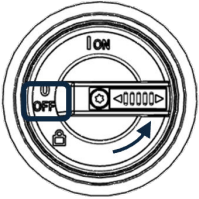
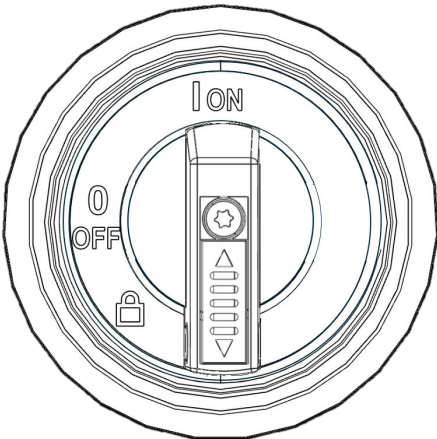


Component Number	Component Name
1	Prefabricated conduit entry
2	Water drain
3	Quick connector
4	Prefabricated conduit entry

P/1/0 Switch

Position	Function/result
	1: Activates the inverter to start power production.
	0: Disables power production and reduces DC voltage to a safe level.
	P (momentary press): A spring-loaded position that is used to activate the inverter's Wi-Fi access point and enables commissioning via the SolarEdge Go app.

DC Disconnect Switch

Position	Function/result
	Open/OFF • Manually isolates the inverter from the PV modules and the battery by disconnecting the DC input power • A safe method to shut down DC power during installation, maintenance, or emergencies  NOTE To comply with NEC 2017, Section 404.8(A), ensure the DC Disconnect Switch is no higher than 6 ft 7 in. from the floor.
	ON • Closes the DC circuit when switched ON • Connects the DC source (battery and/or PV, depending on the system) to the inverter's internal DC bus • Allows DC power to flow, enabling the inverter to power up and operate

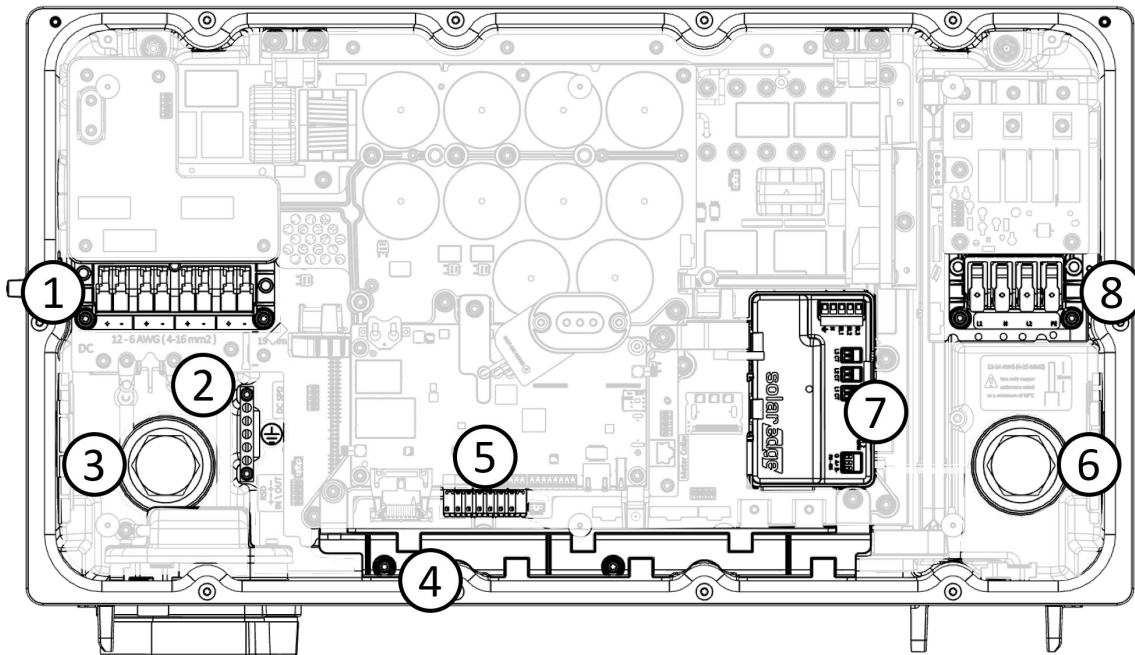
Inverter LEDs

Three LEDs provide system information, such as errors or performance indications. This is done based on their color and state. The LED states are defined as follows:

LED State	Description
	Inverter is OFF
	S_OK  NOTE S_OK means the inverter is online and successfully sending data to the SolarEdge Monitoring platform.
	AC Production
	Inverter OFF, no production
	No safe DC
	Inverter configuration or reboot
 ↓  ↓ 	FW Upgrade
	Error

For more information, refer to [Inverter status and system performance indications](#).

SolarEdge Nexus Inverter internal overview



Number and Name of the Component	Component Description
1. DC Terminal Blocks	The inverter's DC Terminal Blocks use unified lever terminals for both PV and battery connections. The terminal blocks are positioned high to provide working space and to maintain the required conductor bending radius.
2. Grounding Bar	The inverter's Grounding Bar bonds all grounding conductors to the inverter's enclosure, eliminating the need for grounding bushings.
3. Left rear-entry	This is a prefabricated rear-entry for rear conduit routing, for a cleaner installation.
4. Wiring Tunnel	A Wiring Tunnel that allows DC or AC Conductors to cross from left to right or right to left.
5. Communication board Connector	The Communication Board Connector consolidates the inverter's hardware interfaces and is used to connect a standalone battery's communication wires.
6. Right rear-entry	A prefabricated rear-entry for rear conduit routing, for a cleaner installation.
7. Modbus RGM Meter	SolarEdge's RGM Meter serves both as a production and an export/import meter. The system's configuration automatically determines the meter's function: Production for Full Home Backup and production/export-import for PV/storage. Non-

Number and Name of the Component	Component Description
	Backup installations require a current transformer connection. For more details on the meter, refer to this Installation Guide .
8. AC Terminal blocks	The inverter's AC Terminal Blocks are lever terminals for grid connection. The terminal blocks are placed high to provide working space and a banding radius for conductors.

Important safety instructions

Inverter installation important safety instructions / Consignes de sécurité pour l'installation de l'onduleur

Save these instructions/Conservez ces instructions



WARNING



To reduce the risk of injury, read all the instructions in this document.

Pour réduire le risque de blessure, lisez toutes les instructions de ce document.



WARNING

Before opening the inverter cover:

1. Turn off the inverter's P/1/0 Switch located on the side of the inverter.
2. Turn off the DC Safety Switch.
3. Turn off the inverter AC circuit breaker on the main service panel.
4. Wait five minutes for the capacitors to discharge.

Avant d'ouvrir le couvercle de l'onduleur:

1. Eteignez l'onduleur à l'aide du commutateur P/1/0 sur OFF=0.
2. Eteignez le sectionneur DC (si applicable).
3. Eteignez le disjoncteur AC de l'onduleur dans le tableau général.
4. Attendez 5 minutes pour la décharge des capacités.

**WARNING**

- Ensure that the circuit breaker rating matches the maximum power rating of the inverter.
- Connect the grounding wire to the PE terminal block or the grounding bar in compliance with electrical standards and local regulations.
- Read the information on the label attached to the inverter before inserting the AC wires.
- Assurez-vous que le calibre du disjoncteur correspond à la puissance maximale nominale de l'onduleur.
- Raccordez le conducteur de mise à la terre au bornier PE ou à la barre de mise à la terre, conformément aux normes électriques et aux règlements locaux.
- Lisez les informations sur l'étiquette fixée à l'onduleur avant d'insérer les conducteurs AC.

**WARNING**

The inverter cover is heavy. Use caution when removing the screws and lowering the cover to prevent injury or equipment damage.

Le couvercle de l'onduleur est lourd. Soyez prudent lorsque vous retirez les vis et abaissez le couvercle afin d'éviter toute blessure ou tout dommage matériel.

**WARNING**

Before operating the inverter, ensure the inverter is grounded properly. This product must be connected to a grounded, metal, permanent wiring system, or an equipment-grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the product.

Avant d'utiliser l'onduleur monophasé, assurez-vous que l'onduleur est correctement mis à la terre. Ce produit doit être raccordé à un système de câblage fixe, métallique, l'équipement-le conducteur de mise à la terre doit être exécuté avec les conducteurs de circuit et raccordé à l'équipement borne de mise à la terre ou de plomb sur le produit.

**WARNING**

Opening the inverter and repairing or testing under power must be performed only by qualified service personnel familiar with this inverter.

L'unité ne doit être ouverte que par un technicien qualifié dans le cadre de l'installation et de la maintenance.

**WARNING**

The DC Disconnect Switch disconnects both the positive and negative conductors.

Le coupeur CC ouvre les conducteurs positifs et négatifs.

**WARNING**

For safe servicing, lock the DC Disconnect Switch and the AC Input Panel in the OFF position before performing any work on the inverter. Only qualified personnel may perform servicing.

Pour toute opération de maintenance, consignez le sectionneur CC et le panneau d'entrée CA en position ARRÊT (ouvert, hors tension) avant de travailler sur l'onduleur. L'entretien doit être effectué uniquement par du personnel qualifié. Le coupeur CC ouvre les conducteurs positifs et négatifs.

**WARNING**

The inverter input and output circuits are isolated from the enclosure. This system does not include an isolation transformer and should be installed with an ungrounded PV array following the requirements of NEC Articles 690.35 and 690.43 National Electric Code, ANSI/NFPA 70, 2011 (and Canadian Electrical Code, Part I, for installations in Canada). Equipment grounding is the responsibility of the installer and must be performed following all applicable Local and National Codes.

Les circuits d'entrée et de sortie de l'onduleur sont isolés de l'enveloppe. Ce système n'inclut pas d'isolation galvanique (transformateur) et devra être installé sans mise à la terre du champ PV et en accord avec les articles 690.35 et 690.43 du National Electric Code (NEC), ANSI/NFPA 70, 2011 (et du Code Electrique Canadien, Partie 1, pour les installations faites au Canada).

La mise à la terre des équipements est la responsabilité de l'installateur et doit être faite en accord avec les toutes les règles locales et nationales applicables.

**WARNING**

These servicing instructions are for use by qualified personnel only. To reduce the risk of electric shock, do not perform any servicing other than that specified in the operating instructions unless you are qualified to do so.

Ces instructions de maintenance sont destinées uniquement au personnel qualifié. Pour réduire le risque de choc électrique, n'effectuez aucune opération de maintenance autre que celles spécifiées dans le mode d'emploi, sauf si vous êtes qualifié pour le faire.

**WARNING**

The inverter must be connected to a dedicated AC branch circuit with a maximum Overcurrent Protection Device (OCPD), as displayed in the table below:

Les onduleurs doivent être connectés à un branchement AC dédié avec un disjoncteur comme décrit ci-dessous:

Model	Max Current {Aac}
NX3800T-US	20
NX5000T-US NX5700T-US	30
NX6000T-US NX7600T-US	40
NX9600T-US	50
NX10000T-US NX11500T-US	60
NX13000T-US	70

**WARNING**

- This inverter/PCE is not approved to CSA C22.3 No. 9
- Consult the local wires owner or utility to determine all applicable utility interconnection requirements before installation

**NOTE**

The inverter is NEMA type 4X rated. Unused conduit entries should be sealed with appropriate seals.

L'onduleur est homologué NEMA type 4X. Les entrées de conduit inutilisées doivent être obturées à l'aide de bouchons d'étanchéité appropriés.

**NOTE**

This inverter is provided with an IMI (Isolation Monitor Interrupter) for ground fault protection.

Cet onduleur est équipé d'un IMI (Isolation Monitor Interrupter) assurant la protection contre les défauts à la terre.

PCS important safety instructions / Consignes de sécurité importantes relatives au PCS

Save these instructions/Conservez ces instructions



WARNING

Configuration of the power control settings system or changes to settings shall be made by qualified personnel only. To become PCS certified, see [PCS Certification Overview - NA Technical](#).

Configuration du système de réglages de contrôle de la puissance ou toute modification de ces réglages doit être effectuée uniquement par du personnel qualifié. Pour obtenir la certification PCS, consultez la section. [PCS Certification Overview - NA Technical](#).



WARNING

- Incorrect configuration or setting of the power control settings may result in unsafe conditions.
- La configuration du système sur le contrôle des puissances ou les modifications des réglages ne doivent être effectuées que par du personnel qualifié. Une configuration ou un réglage incorrect des paramètres de contrôle de puissance peut entraîner des conditions dangereuses.
- The controlled current settings shall not exceed the busbar rating or conductor ampacity of any PCS-controlled busbar or conductor.
- Les réglages du courant ne doivent pas dépasser l'intensité nominale du jeu de barres ou l'ampacité du conducteur de tout jeu de barres ou conducteur contrôlé par le PCS.
- PCS settings limit the maximum operating current in controlled busbars or conductors and may be lower than the sum of the currents from the connected controlled power sources. Use the PCS-controlled current settings to calculate design currents in the applicable sections of NEC Articles 690 and 705.
- Les courants de fonctionnement maximaux dans les barres ou les conducteurs contrôlés sont limités par les réglages du système de contrôle de la puissance (PCS) et peuvent être inférieurs à la somme des courants des sources de puissance contrôlées connectées. Les réglages des courants contrôlés par le PCS peuvent être utilisés pour le calcul des courants de conception utilisés dans les sections pertinentes des articles 690 et 705 du NEC.

Automatic updates and preparing for commissioning

The SolarEdge Nexis Inverter supports automatic firmware updates when AC power is available, and monitoring communication is enabled.

To shorten commissioning time in the SolarEdge Go app:

1. Wire the AC, and ensure that AC power is supplied to the inverter.
2. Complete communication wiring - Ethernet or cellular, if applicable.
3. If Wi-Fi is required, use SolarEdge Go to connect the inverter to the home's Wi-Fi network.

Once AC power and communication are established, the inverter automatically completes updates in the background, reducing overall commissioning time.

Unpack and mount the inverter

1. Open the inverter package face up.
2. Remove the bracket from the package and align it to the wall, using the SolarEdge logo and the up arrows to ensure the correct orientation.



NOTE

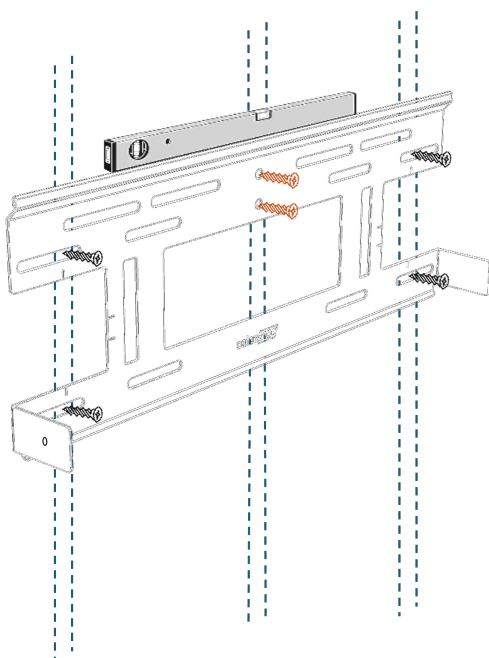
For inverter dimensions and clearances, refer to the [Inverter's physical specifications and site requirements](#).

3. Level the bracket.

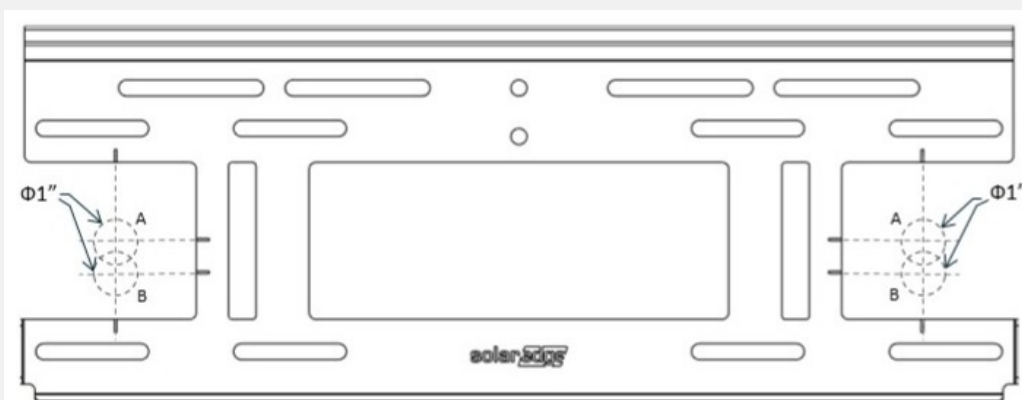
4. Mount the bracket to a single stud using the central mounting holes, or across two studs using the side mounting holes, as displayed in the following images.

**NOTE**

Secure the inverter bracket to the wall using four screws—two at the top and two at the bottom.

**NOTE**

To use the inverter's rear entries, use the bracket markings to identify the correct drilling hole locations, as displayed in the following image. For PV-only or standalone battery installations, use the Line B bracket markings.



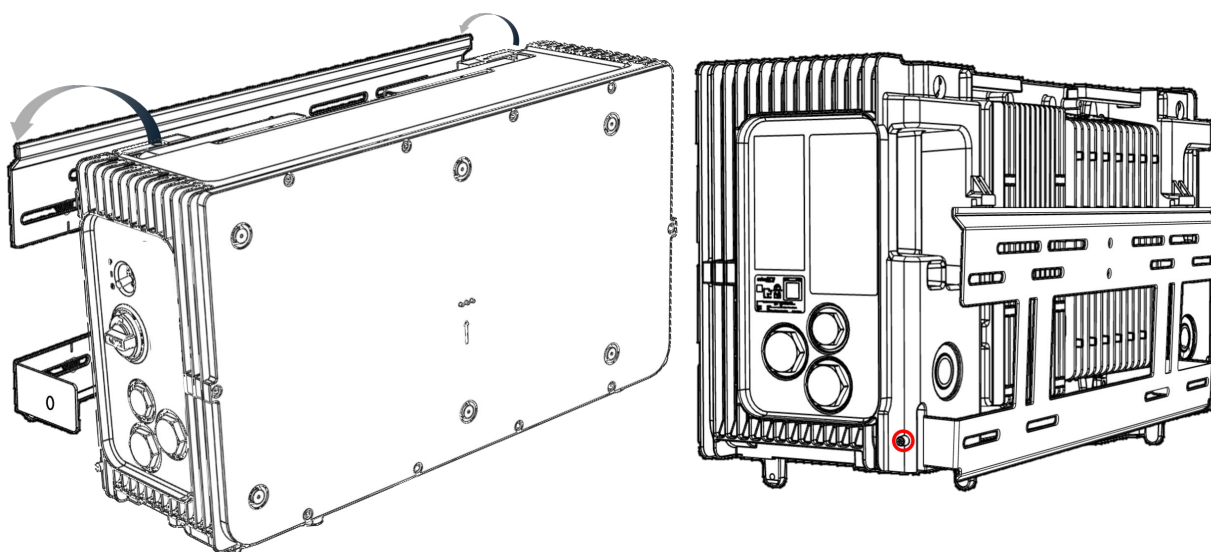
5. Place the wiring gland and the beads in a safe location.
6. Remove the protective upper pulp from the package.

7. Place the decorative cover in a safe location.
8. Carefully lift the inverter out of the package using the built-in carrying handles.

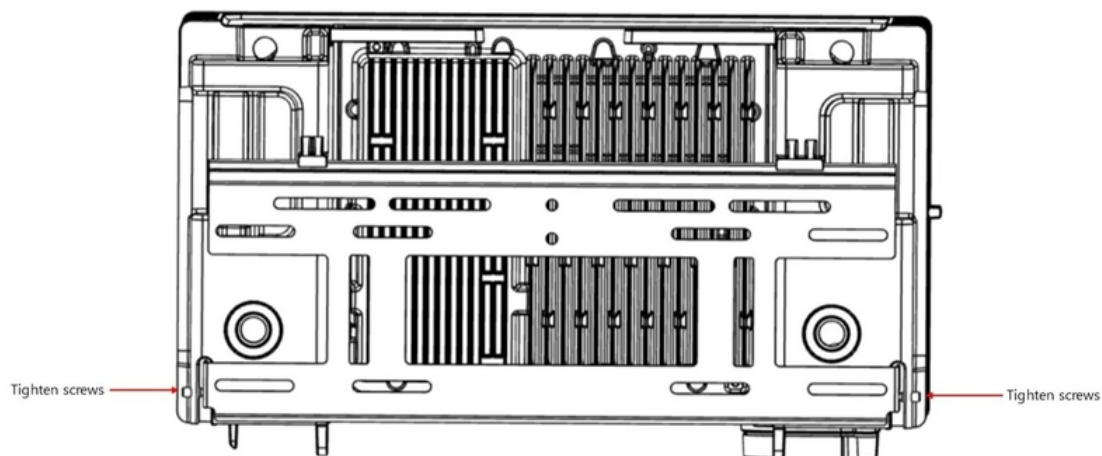
**WARNING**

Do not use the antennas or switches to lift the inverter.

9. Lift the inverter onto the bracket by the side or the bottom.
10. Hang the inverter by placing the mounting hooks onto the top of the bracket, and confirm that the U-shaped indentations are seated in the designated inserts, as displayed in the following images.



11. With a T25 Torx screwdriver, tighten the two built-in screws through the screw holes to a torque of 17-7 in-lb (2.00 N·m), ensuring they are fully seated against the U-shaped indentations, as displayed in the following image.



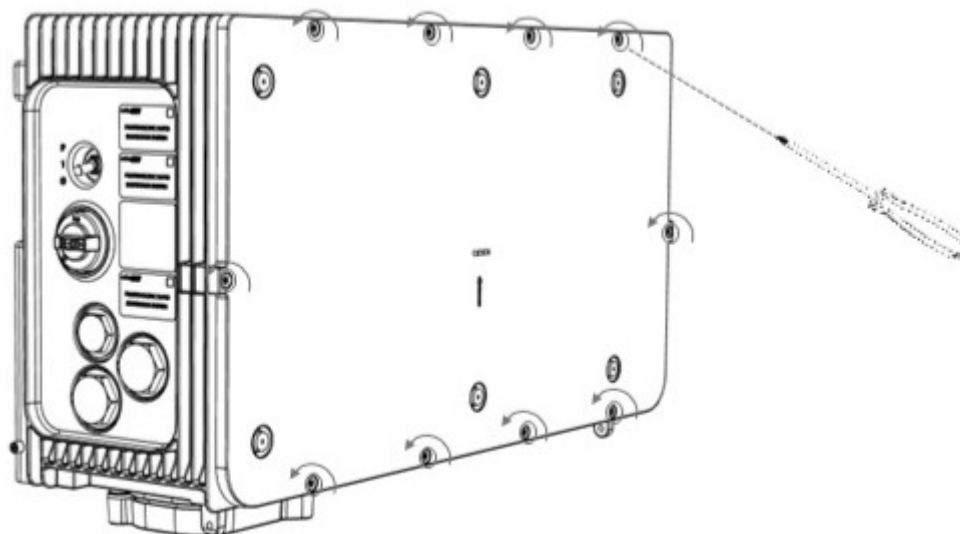
Open the inverter



NOTE

Ensure the P/I/O Switch and the DC Disconnect Switch at the side of the inverter, and the AC are turned **OFF**. Wait five minutes to ensure a safe voltage.

1. Loosen the screws on the metallic cover.

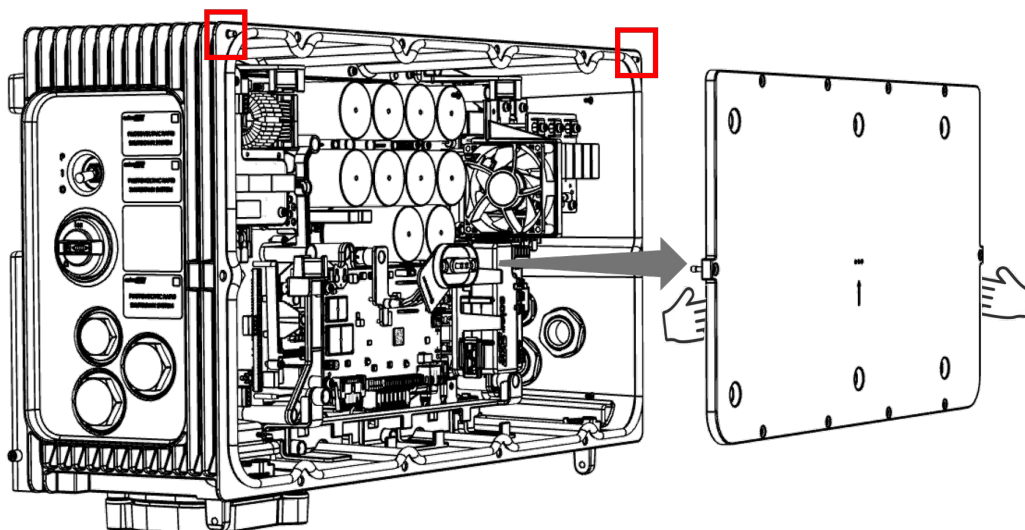


2. Carefully remove the metallic cover from the inverter and place it somewhere safe, as displayed in the following image.



NOTE

The inverter's cover has a self-holding mechanism, as displayed in the following image.



Wire the inverter

- Route all wires through the inverter's side, bottom, or rear conduit entries. If needed, route wires through the internal wire tunnel
- The bottom and rear conduit entries are prefabricated; no locknut tightening is required after inserting the conduit
- Rear conduit entry caps can only be removed from outside the inverter
- Leave extra wire length for routing flexibility and future modifications
- Use a CAT 5e cable or higher when extending or routing communication, CT, and RSD wiring through conduits
- Use wiring methods in accordance with the National Electrical Code (NEC), ANSI/NFPA 70
- To maintain the system's Type 4X environmental rating, any field-installed conduit hub must be UL 514B listed and explicitly rated for Type 4X applications



CAUTION

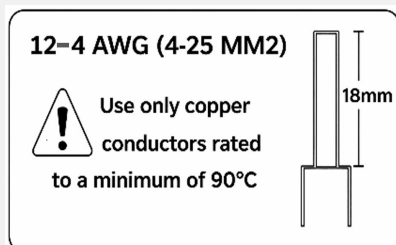
Ensure the DC Disconnect Switch remains accessible when using the left-side conduit entries.

AC wiring

- **Wire gauge:** 12-4 AWG (4-25 mm²).
- **Exposure length:** ¾ in.

**NOTE**

You can use the AC wiring label inside the inverter as a reference for the exposed AC conductor wire length that is required.

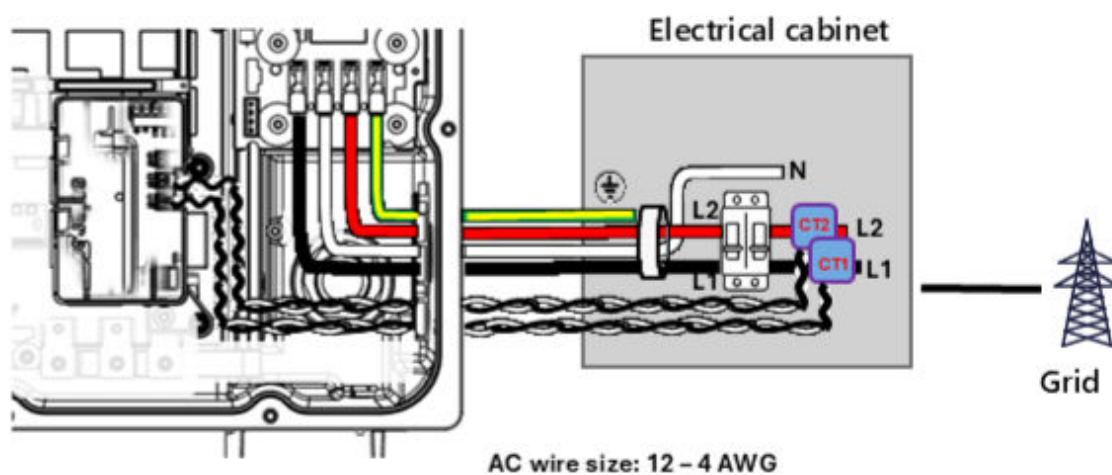


1. Insert the AC and grounding wires through one of the conduit entries.
2. Run the AC Wires (L1/L2/N) through one of the beads provided.

**WARNING**

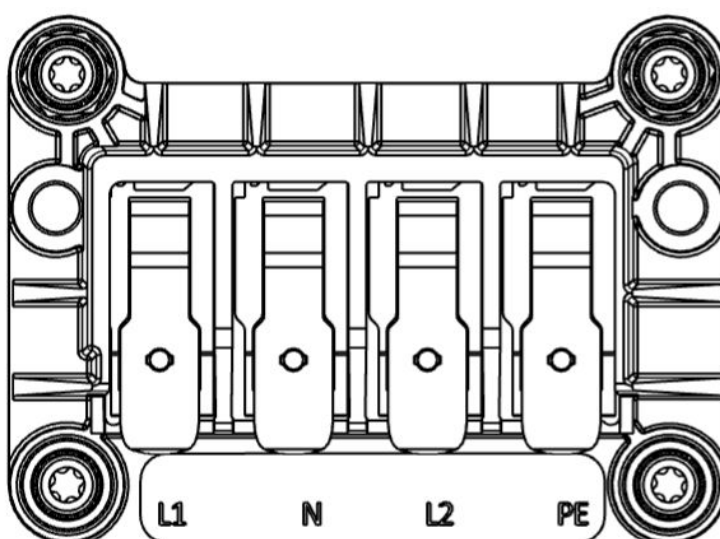
Do not run AC and DC wires through the same bead.

3. Connect the AC and grounding wires to the AC terminal blocks.



NOTE

- The AC terminal block has a dedicated grounding terminal. If AC wires enter the inverter from the left side, the left grounding bar may be used for the AC ground.
- The AC L1 and L2 terminal blocks are not located next to each other



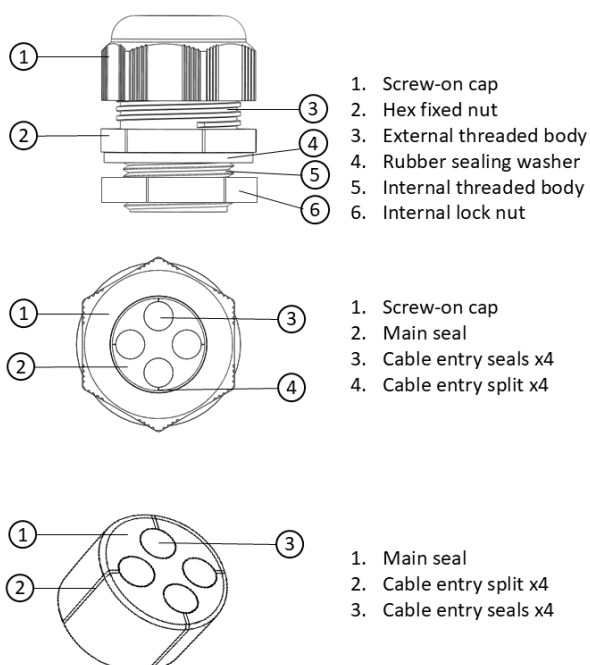
Install the wiring gland



NOTE

- The provided wiring gland fits only 1 in. conduit entries
- Use a CAT 5e cable or higher for the wiring gland to ensure a proper fit and seal
- The wiring gland is compatible with an 8 AWG PV/THHN and selected 6 AWG cables up to Ø8 mm outer diameter

The following image displays the components of the wiring gland:



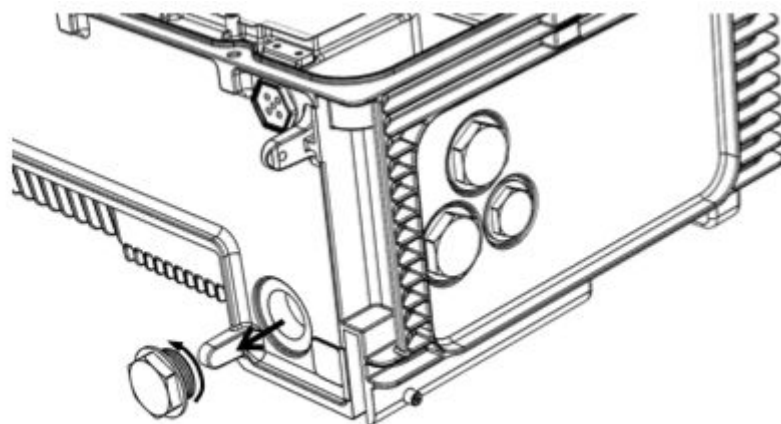
To install the wiring gland:



NOTE

The following images illustrate the prefabricated threaded bottom conduit entry, but they apply to any 1 in. conduit entry.

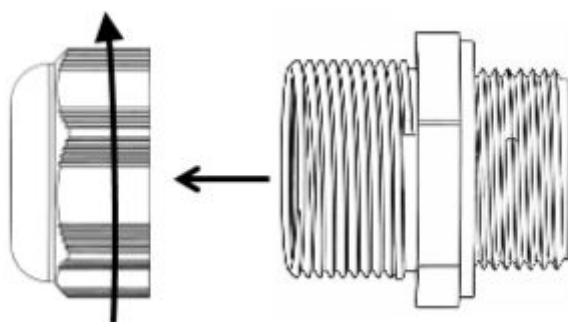
1. Remove the selected 1 in. conduit entry cap.



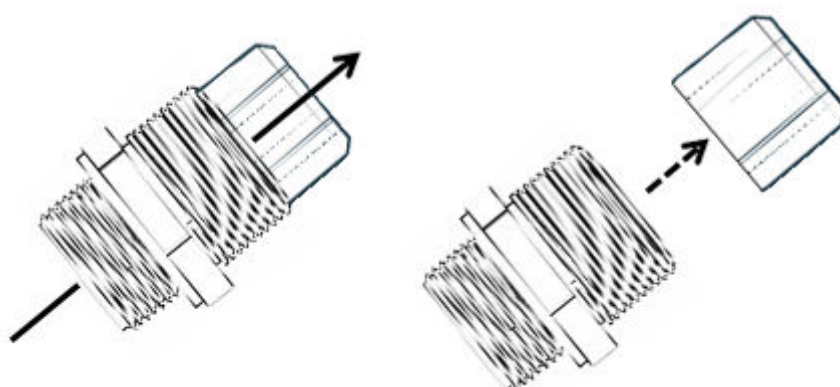
2. Unscrew and remove the screw-on cap.

**NOTE**

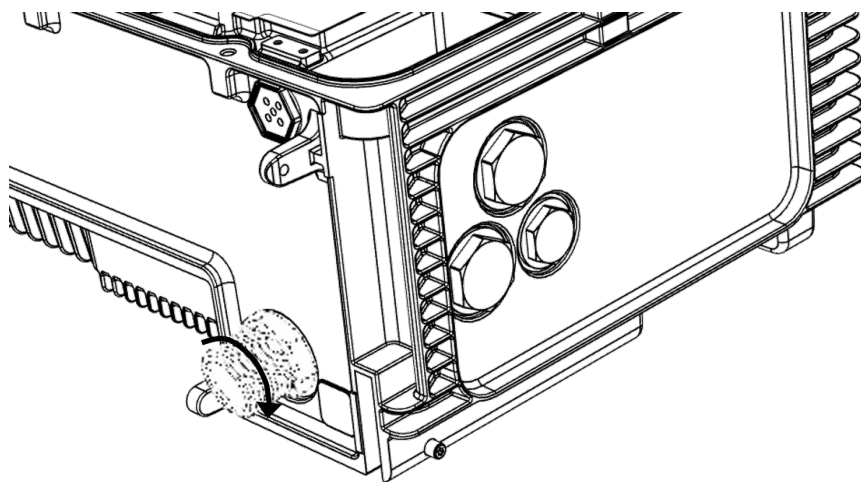
Do not remove the seal from the gland body yet.



3. Press out the main seal with the four individual cable entry seals.

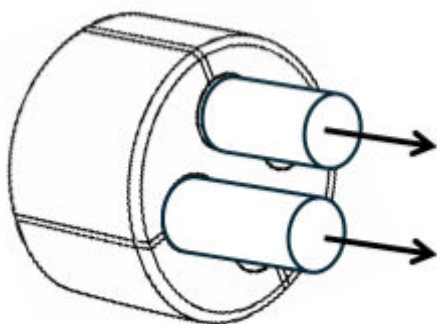


4. Thread the internal gland body, with the rubber sealing washer, into the inverter's cable entry point.

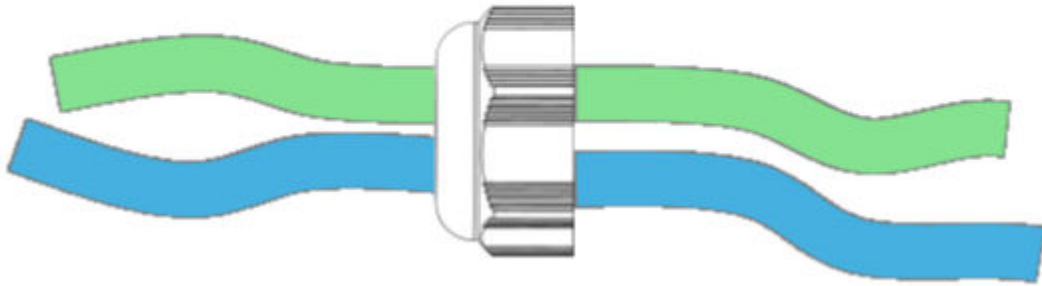
**NOTE**

For non-prefabricated conduit entries, lock the internal nut from inside the inverter.

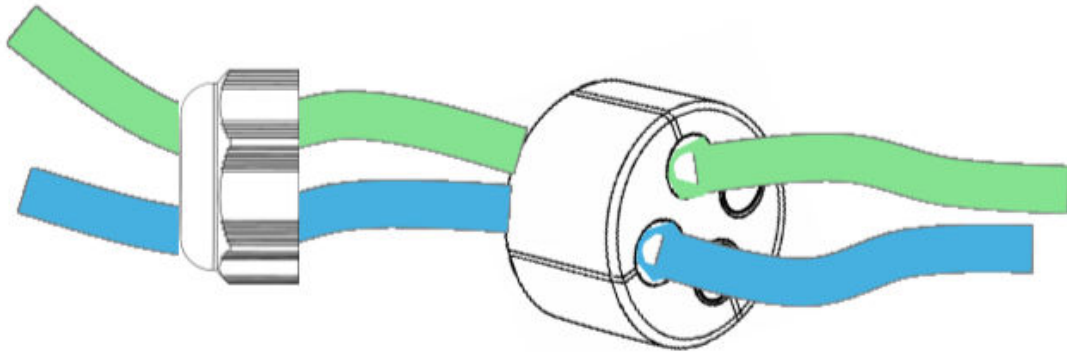
5. For each communication signal, for example, RS-485 and CAN bus, remove one individual cable seal from the main seal.



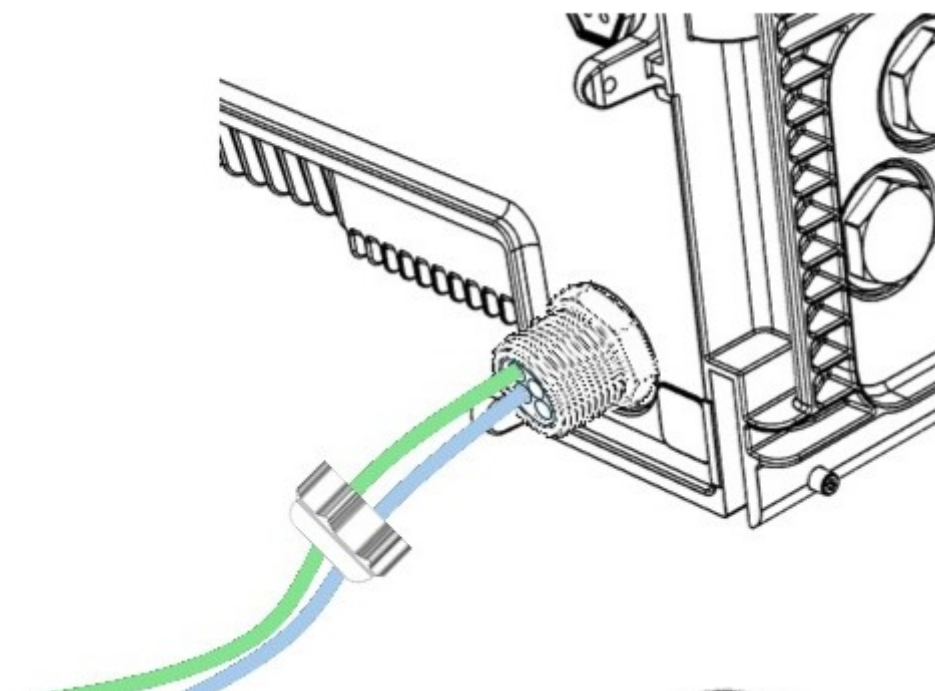
6. Feed the communication cables through the gland cap.



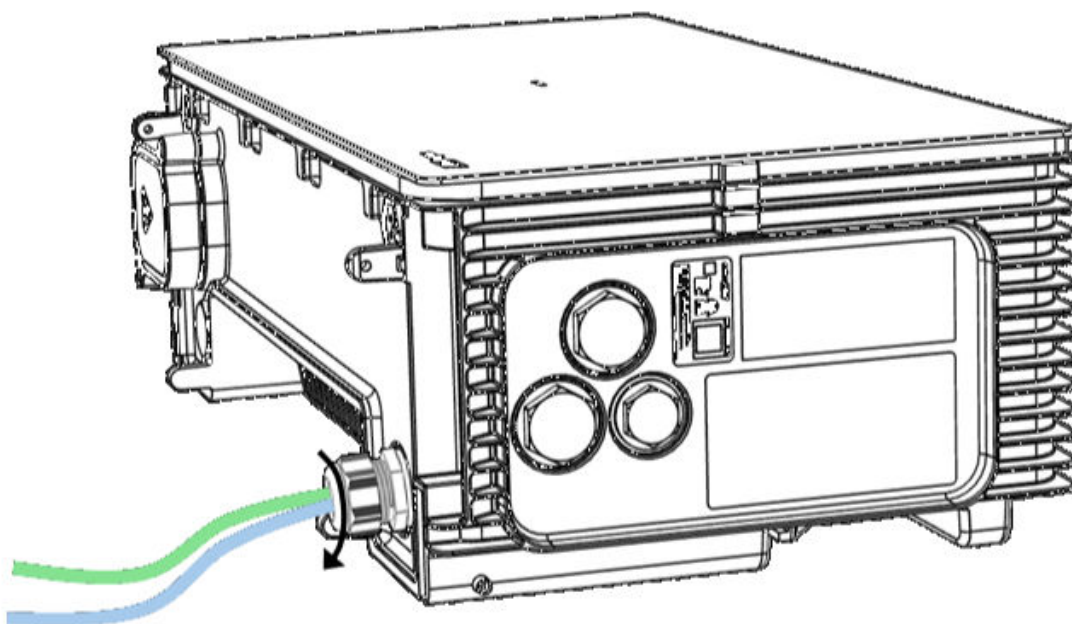
7. At the split in the main seal, open the seal for each required cable and insert the cables into the slots.



8. Insert the main seal, with the cables installed, into the gland body.



9. Tighten the gland cap onto the gland body at the inverter's cable entry point.



Communication wiring - Wi-Fi, LTE, and Ethernet

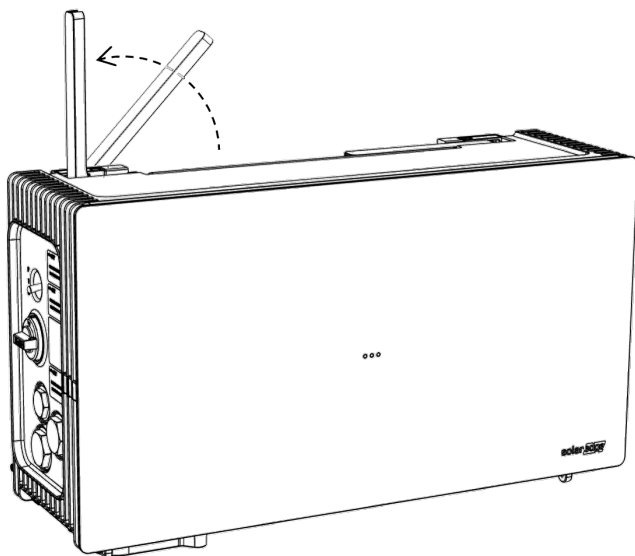


NOTE

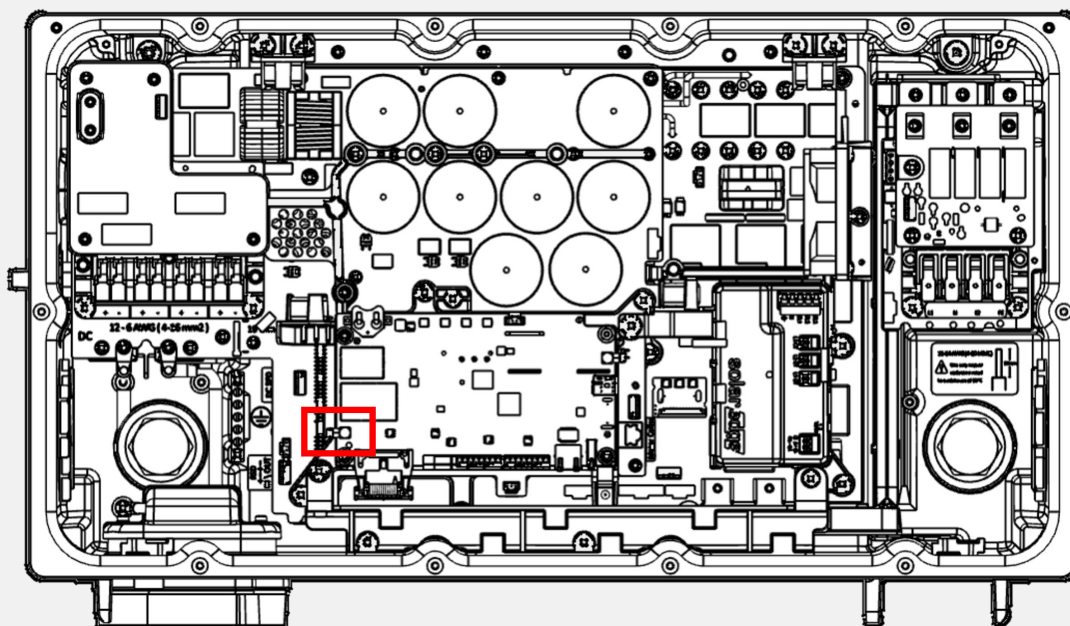
The monitoring communication type is configured during commissioning in SolarEdge Go.

To Install Wi-Fi:

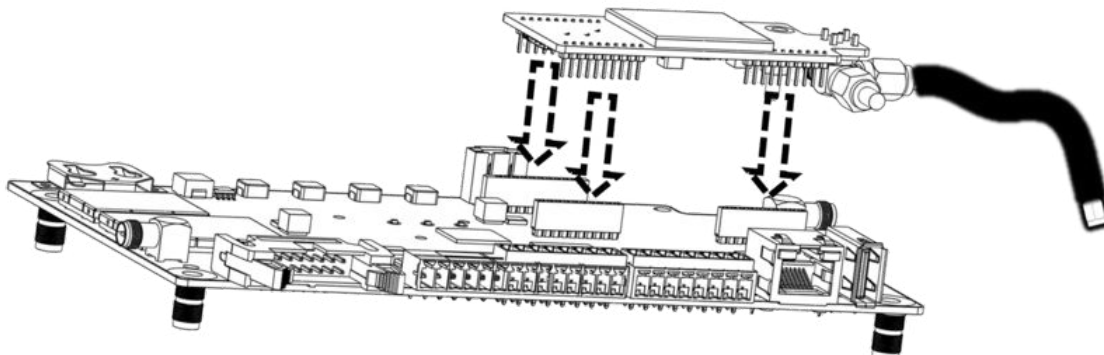
Raise the Wi-Fi Antenna.

**NOTE**

In locations with poor Wi-Fi reception, contact SolarEdge Support to purchase an external extended Wi-Fi antenna, SE-ANT-ZB-WIFI-03, to improve signal strength. When installing the external antenna, do not use the built-in Wi-Fi antenna. Disconnect it from the communication board and connect the extended Wi-Fi antenna through a wiring gland.

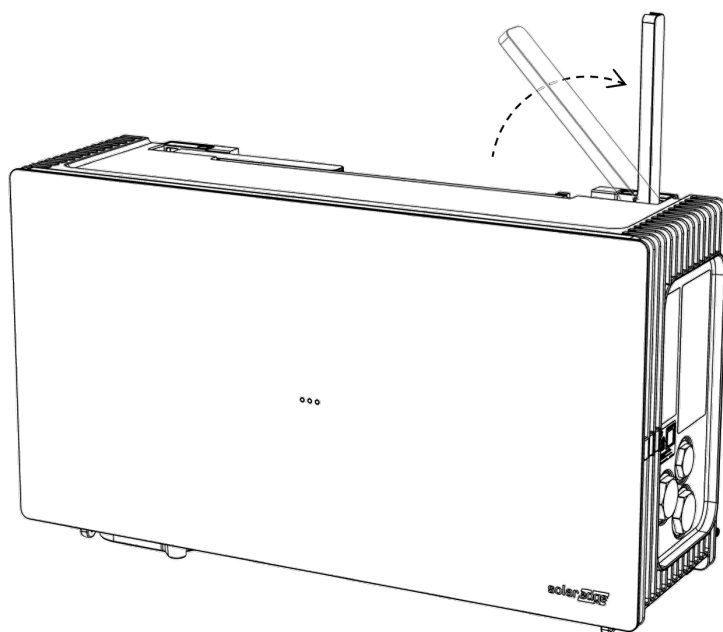
**To install LTE:**

1. Plug the LTE antenna into the LTE module.
2. Connect the LTE module to the inverter communication board, as displayed in the following image.

**NOTE**

In locations with poor cellular reception, contact SolarEdge Support to purchase an external extended LTE antenna, FLD-SE-ANT-LTE-LNG, to improve signal strength. When installing the external antenna, do not use the built-in LTE antenna. Connect the extended LTE antenna through a wiring gland to the LTE module.

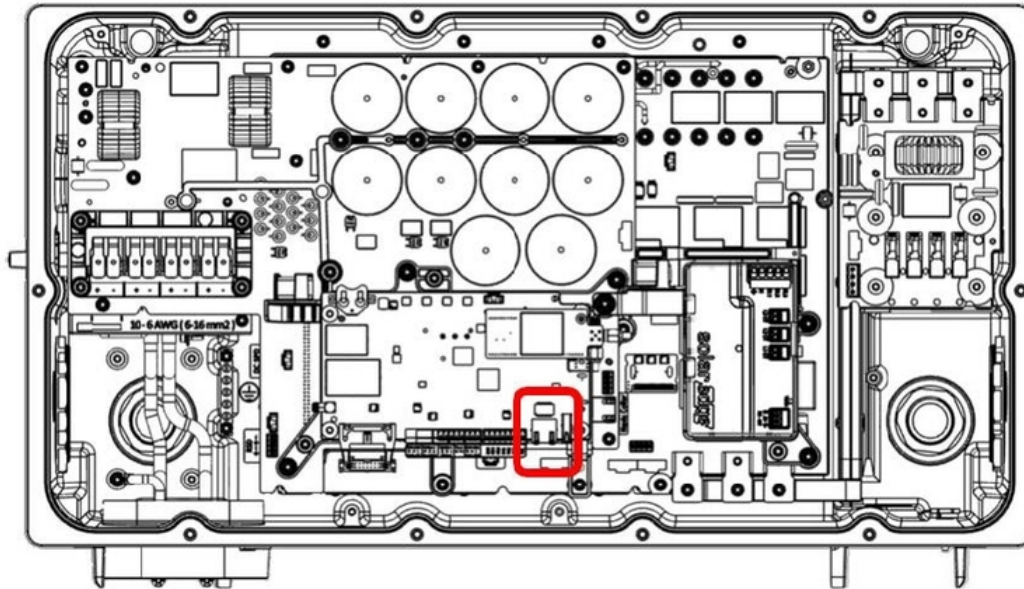
3. Raise the LTE antenna.

**To install Ethernet:**

1. Run the Ethernet cable through the wiring gland or one of the inverter's conduit entries.
2. Plug the cable into the Ethernet port on the communication board, as displayed in the following image.

**NOTE**

This connector is different from the SolarEdge Nexus IslandDER dedicated RJ45 connector.

**NOTE**

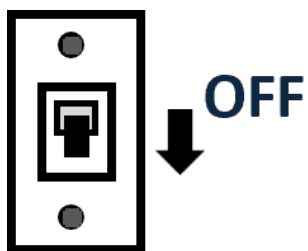
- The maximum supported length for the Ethernet cable is 328 ft
- If the Ethernet cable is crimped, test it with an RJ45 tester

Install SolarEdge Slim Current Transformers

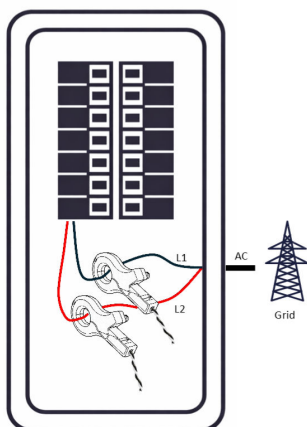
**NOTE**

- Installation of a SolarEdge Current Transformer (CT) is required to measure the site's export and import for non-backup installations
- SolarEdge Slim CTs are not supplied with the meter and must be purchased separately
- Rogowski coils are not suitable for use with the meter

1. Ensure the AC power is turned off before clamping the CTs to the export/import wires, as displayed in the following image.



2. Install the CTs with the arrows pointing to the grid for consumption or export measurement.

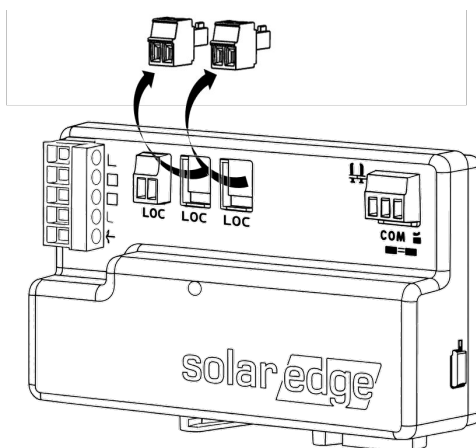
**NOTE**

SolarEdge CT wires are equipped with red and black clips to indicate L1 and L2.

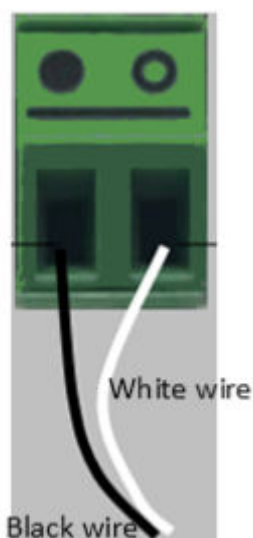
3. A nylon cable tie may be secured around the CT to prevent accidental opening.



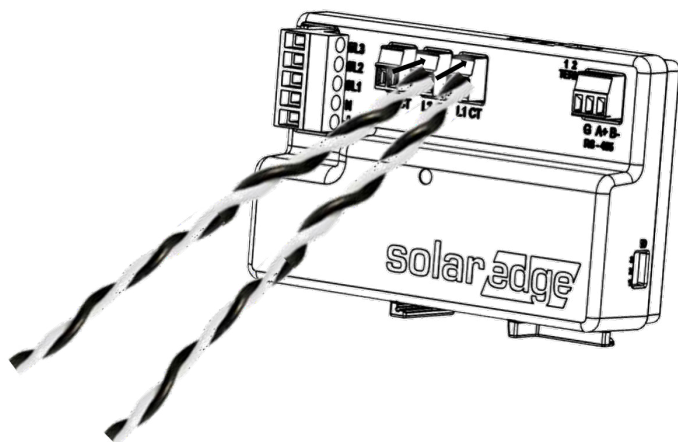
4. Disconnect the CT connectors from the corresponding marked terminals on the inverter's meter.



5. Connect the black CT wire to the connector's left terminal and the white CT wire to the connector's right terminal, ensuring both wires are fully inserted and secured.



6. Reconnect the CT connectors to the meter.



**NOTE**

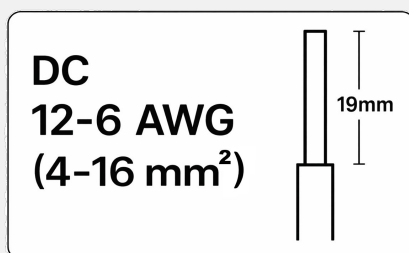
- For PCS Installation instructions, refer to [PCS installation instructions](#)
- In SolarEdge Go, for commissioning export and import measurements, select **Production > Export/Import meter**
- SolarEdge Slim CTs can be extended to a maximum of 150 ft in length

PV wiring

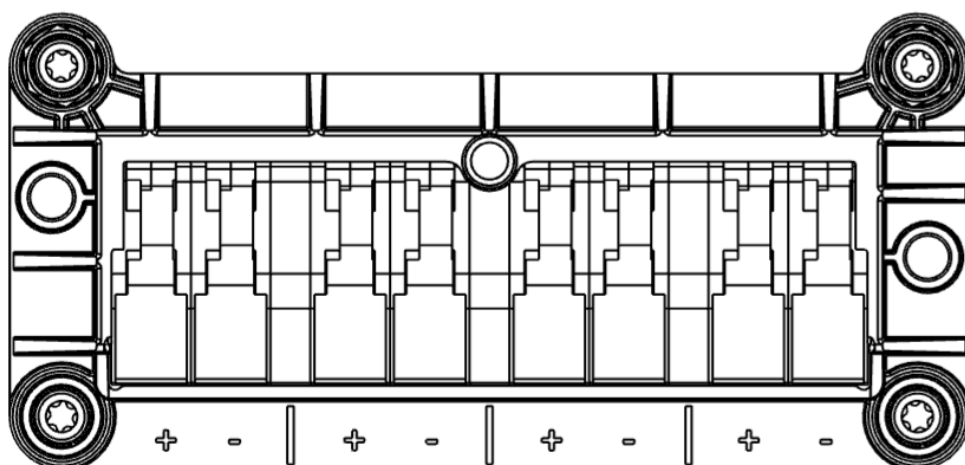
- **Wire gauge:** 12-6 AWG (4-16 mm²)
- **Exposure length:** ¾ in.

**NOTE**

You can use the DC wiring label inside the inverter as a reference for the length of exposed DC conductor wire.

**NOTE**

The DC lever terminals are arranged in pairs for the DC+ and DC- poles.

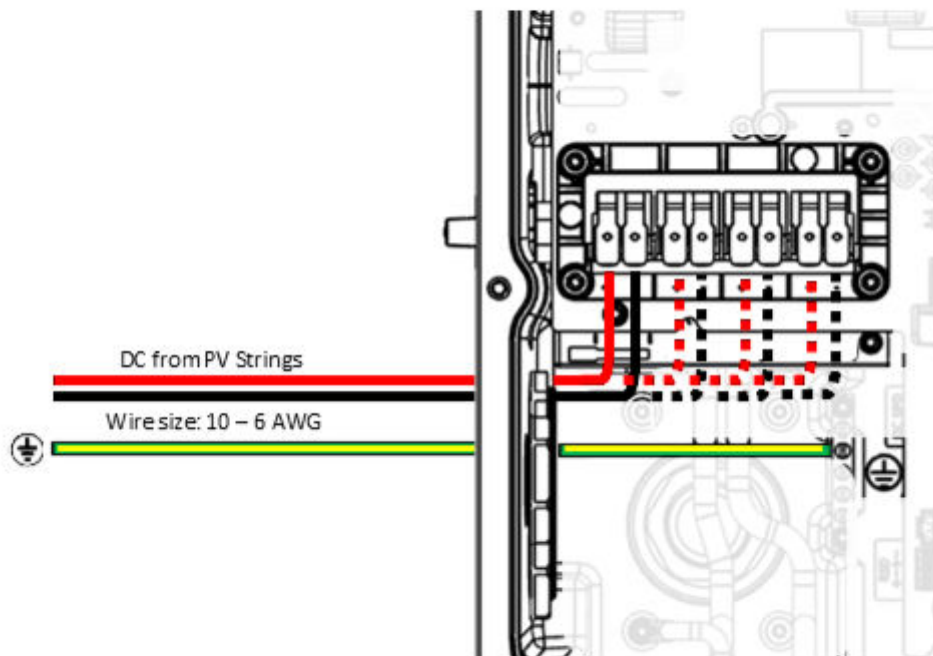


1. Insert the PV and grounding wires through one of the conduit entries.
2. Run the PV Wires through one or both of the provided beads.

**WARNING**

- Do not run AC and DC wires through the same bead
- Do not run +/- pairs in different beads

3. Connect the PV wires to the DC terminal blocks.

**NOTE**

All four DC terminals can be used to connect the PV strings in any order.

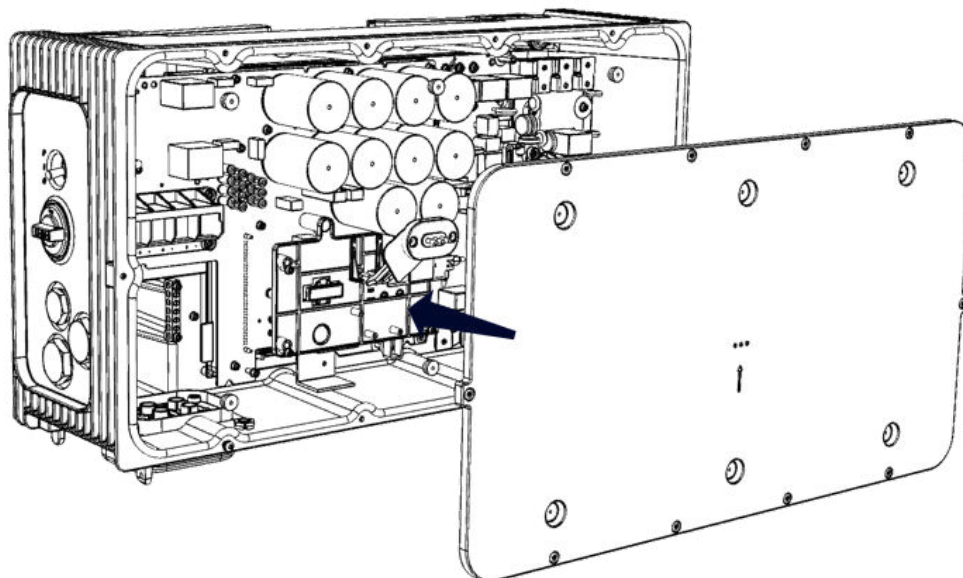
**WARNING**

Ensure each + and - connection belongs to the same PV string.

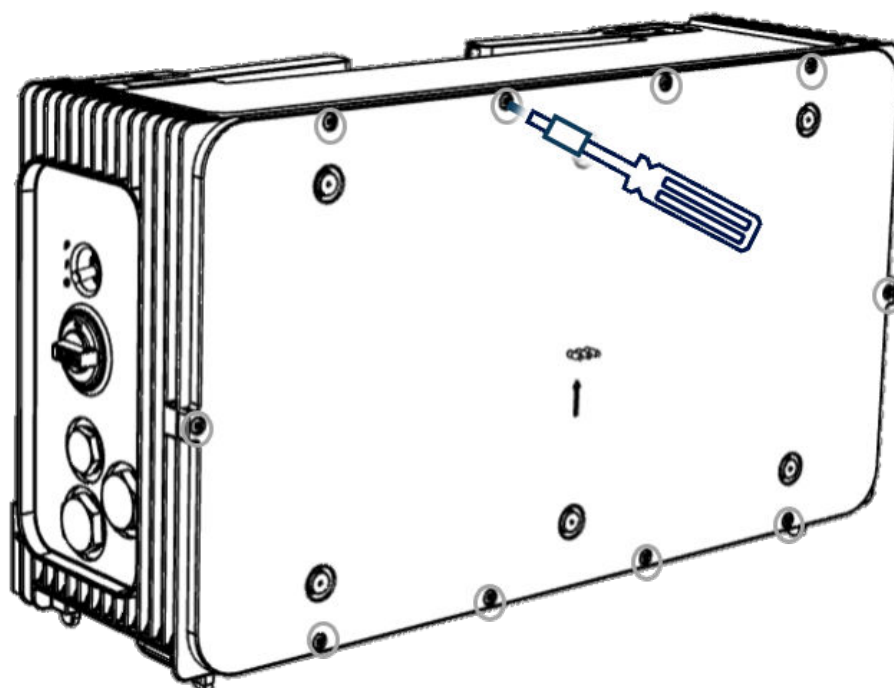
4. Connect the grounding wire to the grounding bar and tighten the flat screws to 3 ft·lb (4 N·m).

After wiring the inverter

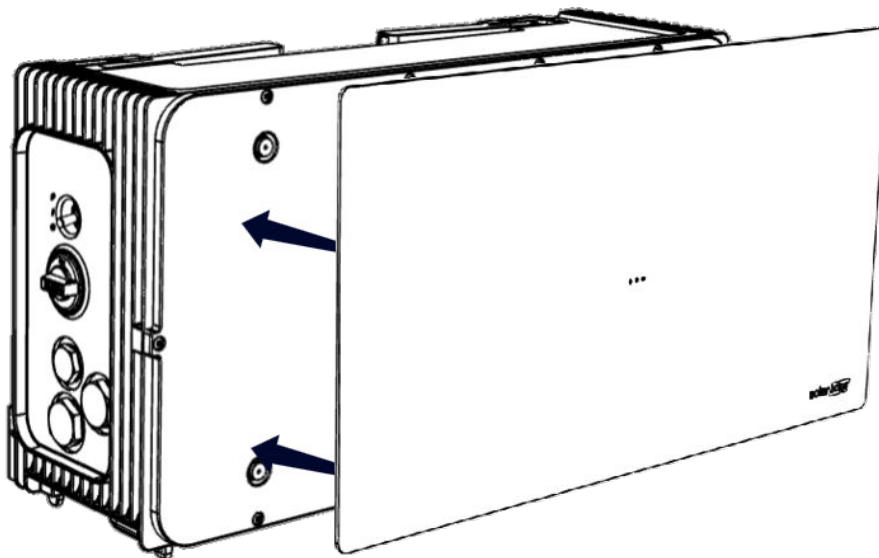
1. Reattach the metal cover to the front of the inverter.



2. Tighten the screws to a torque of 34.5 in·lb.



3. Attach the inverter's decorative cover to the metal cover.

**NOTE**

Magnets that are pre-fixed to the inverter's metal cover secure the decorative cover in place.

4. Turn ON the DC Disconnect Switch and the P/I/O Switch.
5. Turn ON the AC power.

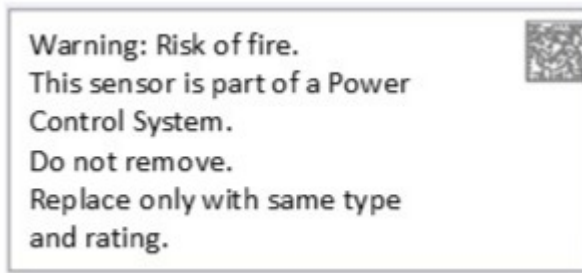
PCS (BCM) installation

Before activating BCM, you must comply with the following requirements:

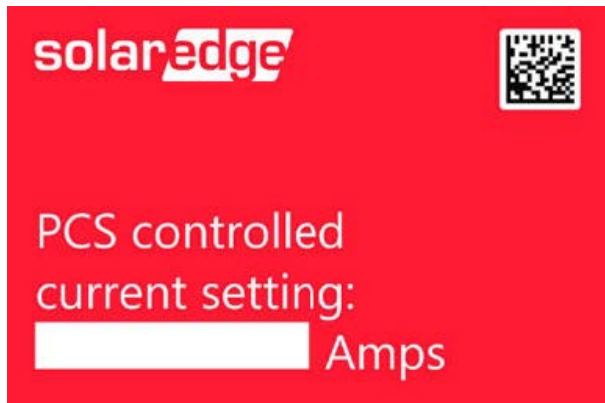
**NOTE**

- Only qualified personnel are permitted to set or change the BCM settings
- The maximum PCS operating current settings cannot exceed the busbar rating or conductor ampacity of any PCS-controlled busbar or conductor

1. Follow the inverter installation instructions to install the **SolarEdge Slim Current Transformer** PN: CT-SECT-SPL-225A-T-20.
2. Wrap the PCS label around the current transformer (CT) cable.



3. Place the PCS label on the main panel and write the missing data on the label.



For more details refer to [SolarEdge PCS Technology](#).

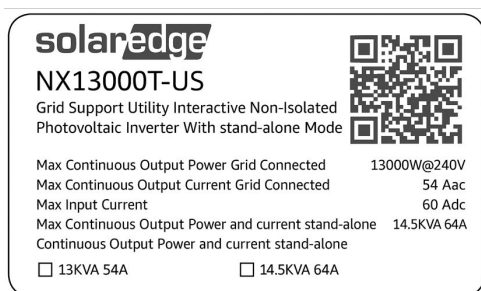
Commission the system



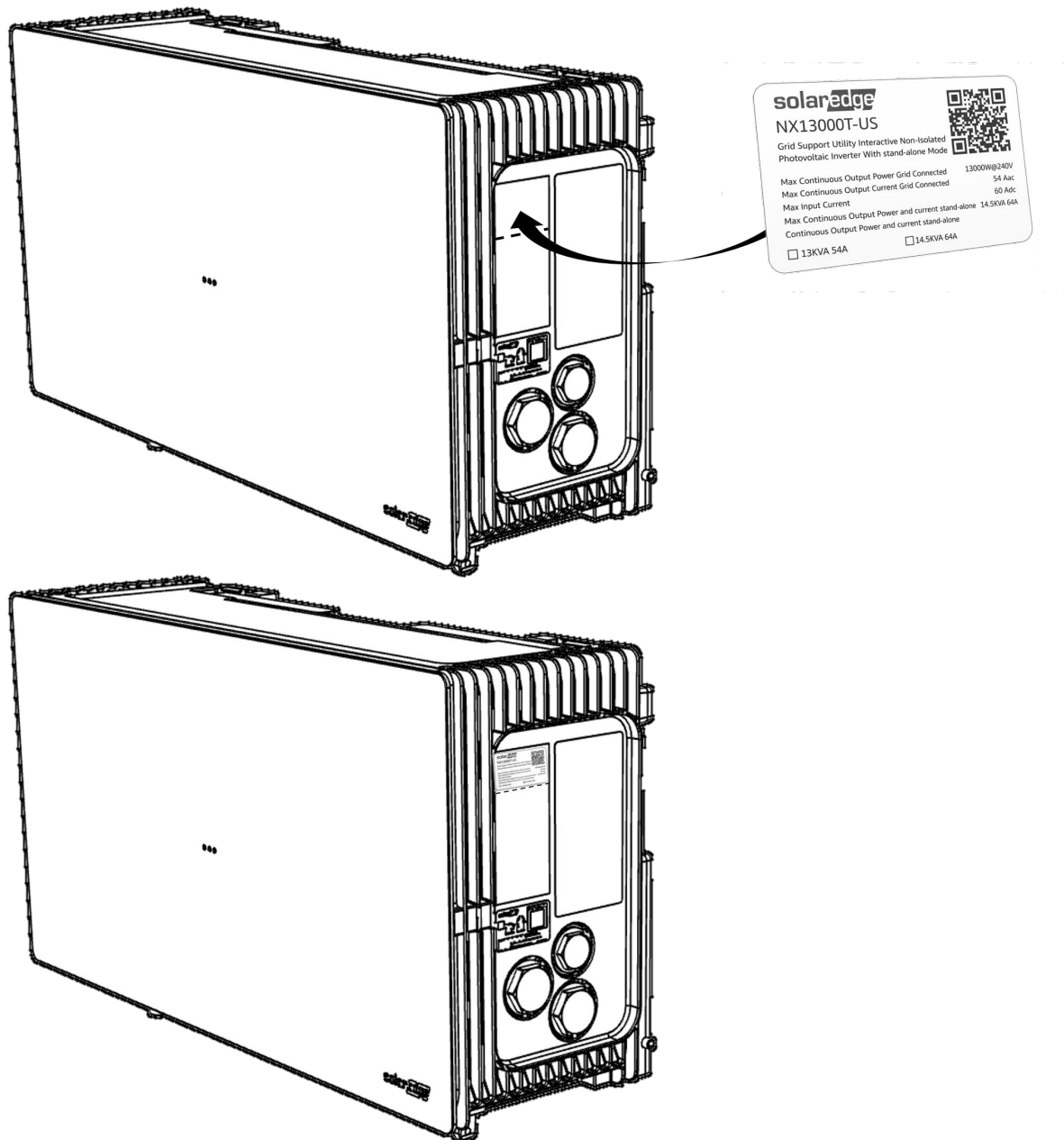
NOTE

- The firmware identifies the inverter power model during commissioning
- Record the number of optimizers to reduce pairing time

1. Select the correct power class label from the single SKU label envelope; an example is displayed in the following image.



2. Place the SKU label over the existing power model label on the right-hand side of the inverter. Align the top and sides of the new label using the original label's separation line as a reference.



3. Open **SolarEdge Go** and follow the on-screen instructions.

For information on activating, commissioning, and configuring your inverter, refer to the [SolarEdge Go Mobile Application Guide](#).

Current transformer test

- The CT Connectivity Test confirms that the CTs are installed on the correct AC line and oriented in the proper direction
- To test CT connectivity, open SolarEdge Go and follow the steps for the CT Connectivity Test

**NOTE**

If there are no measurements, check for active loads on the premises.

Current transformer reverse polarity

If the CT is installed in the wrong direction, installers can select **Reverse CT Polarity** in SolarEdge Go to correct the polarity without remounting the CT.

Storage installation

The SolarEdge Nexis Storage Solution is a fully integrated system that combines the SolarEdge Nexis Inverter and SolarEdge Nexis Battery into a single configuration. This modular, scalable, DC-coupled solution integrates with the SolarEdge ONE Smart Energy Management Platform to provide flexible, optimized energy storage performance.

Battery Installation

Important battery handling and safety instructions

Save these instructions

Battery installation warnings



WARNING

- Install the battery in accordance with applicable national and local codes and standards, and only in locations that comply with local building codes
- Battery installation must be performed by qualified electricians trained to work on low-voltage systems
- The battery module is heavy. Follow local regulations and safe practices for material handling and lifting
- Do not install the battery in habitable spaces, including sleeping rooms
- Ensure the mounting surface can support the combined weight of the battery module and the mounting bracket
- Do not install the battery if it has been dropped, crushed, or shows signs of physical damage
- For residential installations, install fire detection and protection equipment in accordance with local building and fire codes
- Do not install the battery near heating equipment, ignition sources, or open flames
- Do not install the battery near gas meters, valves, regulators, gas lines, or gas appliances. Follow local codes. A minimum clearance of 3 ft is recommended. A failing battery may ignite flammable gases, resulting in property damage, serious injury, or death.
- Do not install the battery near water sources, including downspouts, sprinklers, or faucets
- When installing the battery in a garage or near vehicles, locate it outside the vehicle path. If possible, mount it on a side wall and/or above bumper height.
- Before wiring, verify the battery is switched OFF, and that the DC safety switch on all inverters in the PV system is OFF
- Install the battery and associated components in accordance with NFPA/CSA C22.1, Article 480 or Article 706
- There is a risk of electrocution near hazardous voltage battery terminals

**NOTE**

To comply with 2024 IFC requirements, battery installations are limited to the following locations:

- Detached garages and accessory structures
- Attached garages separate from the dwelling unit
- Outdoors or on exterior walls
- Enclosed utility closets and basements

**NOTE**

- The SolarEdge Nexis Battery can be installed in direct sunlight, but installation in a shaded area is recommended
- The SolarEdge Nexis Battery is flood-resistant up to 1 ft. in flood-prone areas. Install the battery at a higher elevation using the wall-mount bracket, which is sold separately.

Battery operation warnings



WARNING

- The battery contains rechargeable lithium-ion cells. A damaged, defective, or improperly used battery may cause fire, serious injury, and/or property damage.
- Lithium-ion batteries and products containing lithium-ion may expose you to chemicals, including antimony trioxide, lithium nickel cobalt oxide, and nickel
- If electrolyte leaks from the battery, avoid contact and follow the instructions in the [SolarEdge Nexis Battery Emergency Response Guide](#)
- Use the battery only as specified in this document
- Do not use the battery if it is defective, appears cracked, broken, or otherwise damaged, or fails to operate. The battery and its components are not user serviceable
- Do not open, disassemble, repair, tamper with, or modify the battery. Battery cells are not replaceable
- Do not operate the battery at ambient temperatures above 55°C or below - 20°C
- Do not expose the battery or its components to an open flame
- If the battery catches fire, or if fire occurs near the battery, call the fire department immediately and follow the instructions in the [SolarEdge Nexis Battery Emergency Response Guide](#)
- The battery is prone to re-ignite after extinguishment. Use caution and follow the emergency response instructions.
- Operating the battery in temperatures outside the specified range may damage the battery
- Do not clean the battery with solvents, or expose the battery to flammable or corrosive chemicals or vapors.
- Use only the fluids, parts, and accessories specified in this guide. Do not use non-genuine SolarEdge parts or accessories or parts or accessories not purchased from SolarEdge or a SolarEdge-certified third party.
- After installation, do not store the battery for more than one month, and do not discontinue the power feed to the battery for more than one month.
- Do not paint any part of the battery, including internal or external components, for example, the outer shell or casing
- Handle a non-functioning battery with caution. The state of charge and venting risk may be unknown. Contact [SolarEdge](#) for assistance.
- Do not remove or transport a damaged or non-functioning battery. Contact SolarEdge or your SolarEdge-certified installer for support.

- Do not dispose of this product with household waste. Follow local regulations for proper disposal.

SolarEdge Nexis Battery System specifications

The SolarEdge Nexis battery system comprises Battery Blocks and a Battery Link, providing a stackable architecture that supports a wide range of energy capacities and power outputs. Refer to the SolarEdge [Nexis Battery System Datasheet](#) for battery specifications.

Specifications

Configuration	Nominal Energy (kWh)	Usable Energy (kWh)	Max Power (kW)	Max Current (A)	Load Start Capability (LRA)
1 Block	4.9	4.65	3.5	9.7	62
2 Blocks	9.8	9.3	7	19.4	124
3 Blocks	14.7	13.95	10.5	29.2	185
4 Blocks	19.6	18.6	13	35	185

- **Battery type:** LiFePO₄
- **Round-trip efficiency:** Up to 92% (DC-coupled)
- **Voltage range:** 370–480 Vdc
- **Communication:** Wireless or Wired CAN
- **Inverter compatibility:** Up to four Battery Blocks per stack

Transport and storage

The SolarEdge Nexis battery system is engineered for durability and safe handling during transport and storage. Refer to the [SolarEdge Transportation and Storage Guidelines](#) for further information.

Storage conditions

Temperature range (up to 12 months): +32°F to +95°F / 0°C to +35°C

Maximum altitude: 9842 ft / 3000 m

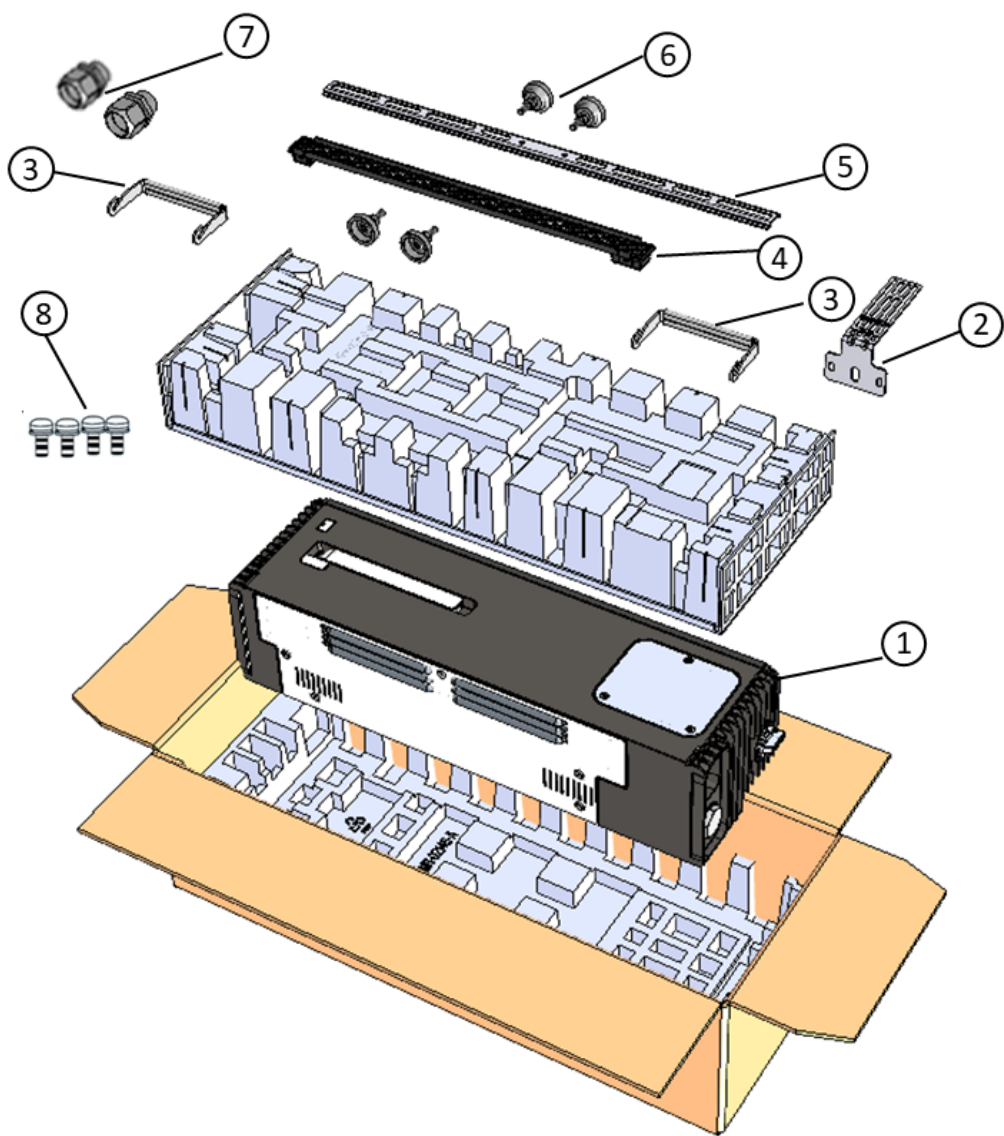
Ambient operating temperature: -4°F to +131°F / -20°C to +55°C with a maximum of 113°F / 45°C when installed in direct sunlight

The following table displays the UL9540A report made by Intertek (Report Reference No 105986109CRT-XXX)

Issued July 1st 2025	Issued July 31st 2025
105986109CRT -001 105986109CRT -003	105986109CRT -002 105986109CRT -004

Before installation

Battery Link package contents



Item Number	Item Name
1	Battery Link
2	Wall Bracket
3	Two Battery Block handles
4	Filter to attach to the bottom block of the battery stack
5	Wall Bracket Extension to install between two battery studs
6	Four Battery Block feet for floor-standing configurations
7	Two Wiring Glands
8	Four screws for attaching the Wall Bracket Extension to the wall, to the wall bracket, and to attach the wall bracket to the Battery Block.

Battery system physical specifications and site requirements



NOTE

SolarEdge Nexus Batteries can be installed indoors or outdoors. If the batteries are installed outdoors, it is recommended to install them under a fixed shelter or permanent overhead cover.

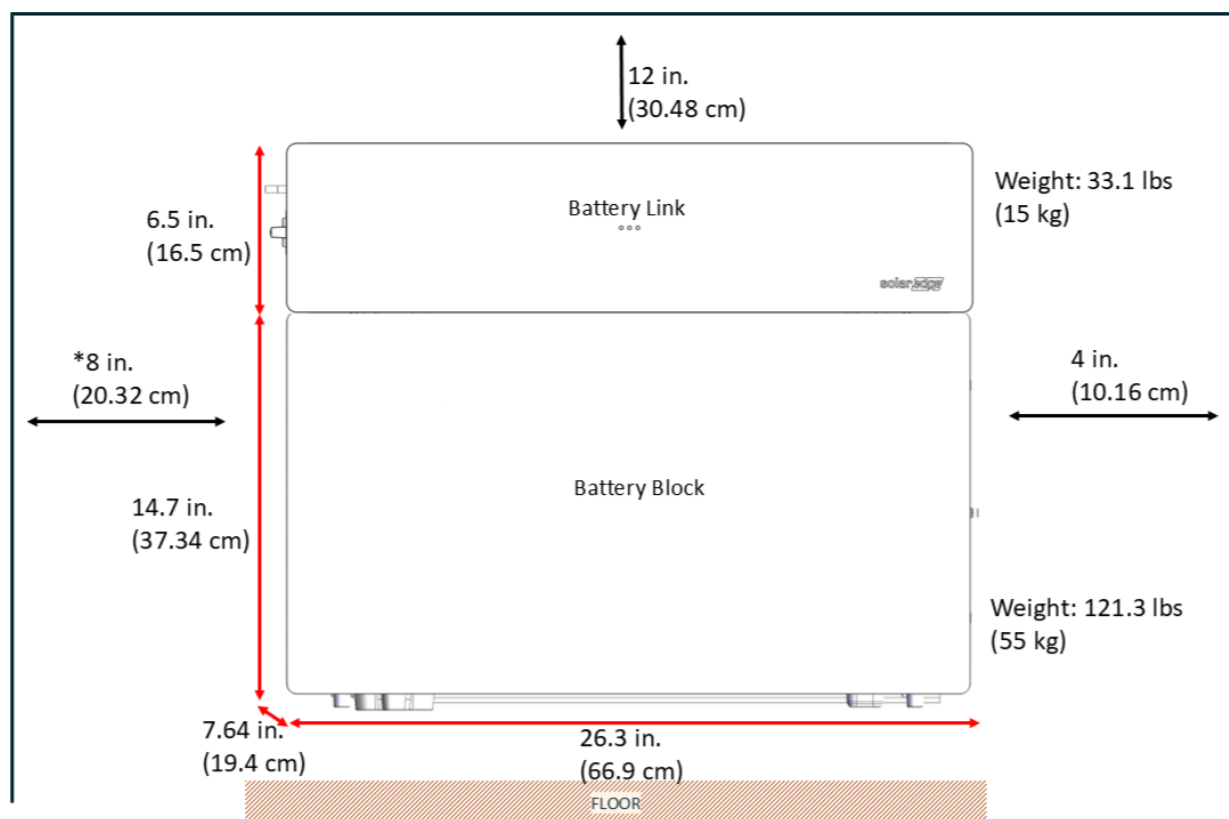
Indoor

Room size $\geq$
63 ft² per
Battery Stack



Outdoor





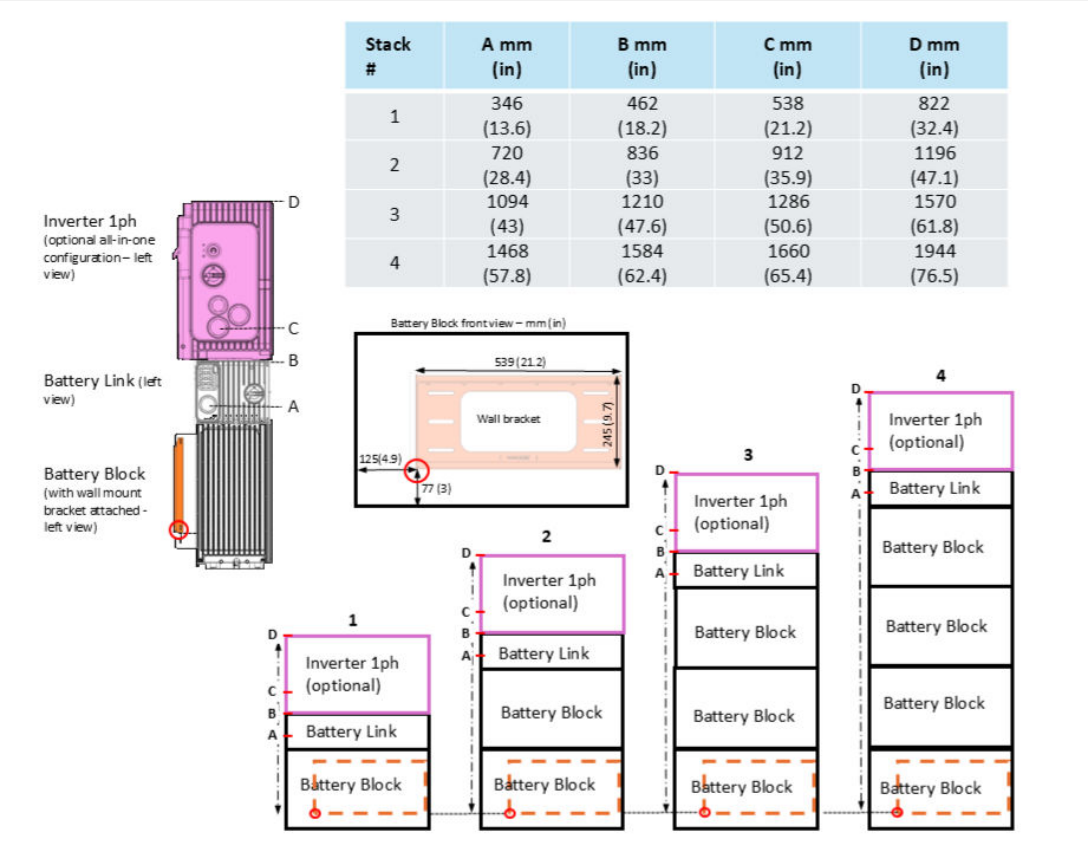
NOTE

- * A minimum of 4 in. is allowed between the side of the battery and the wall, but 8 in. is recommended for servicing the Battery Blocks
- The battery's minimum rear clearance is 0.5 in., and the maximum rear clearance is 4 in.



NOTE

Optional: The Wall Mount Bracket is connected to the bottom Battery Block and is designed to carry the weight of the entire stack. Consider the dimensions in the table below for accurate planning.

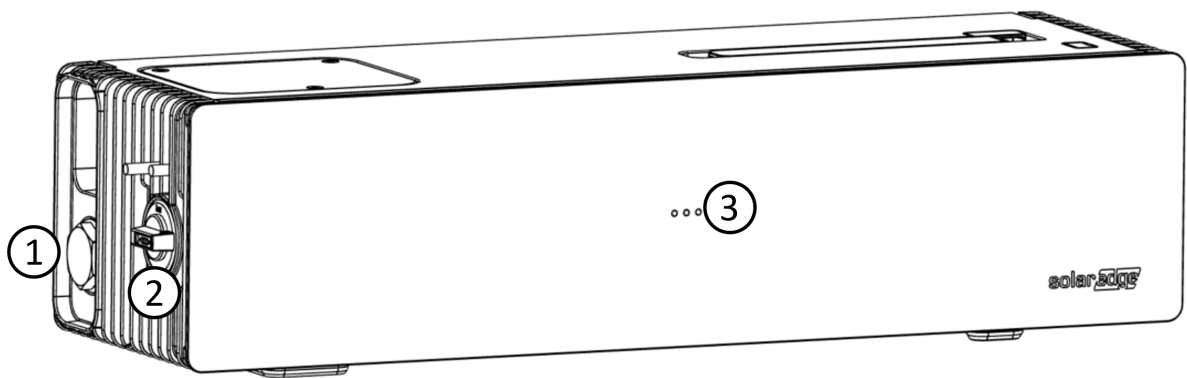


SolarEdge Nexis battery system

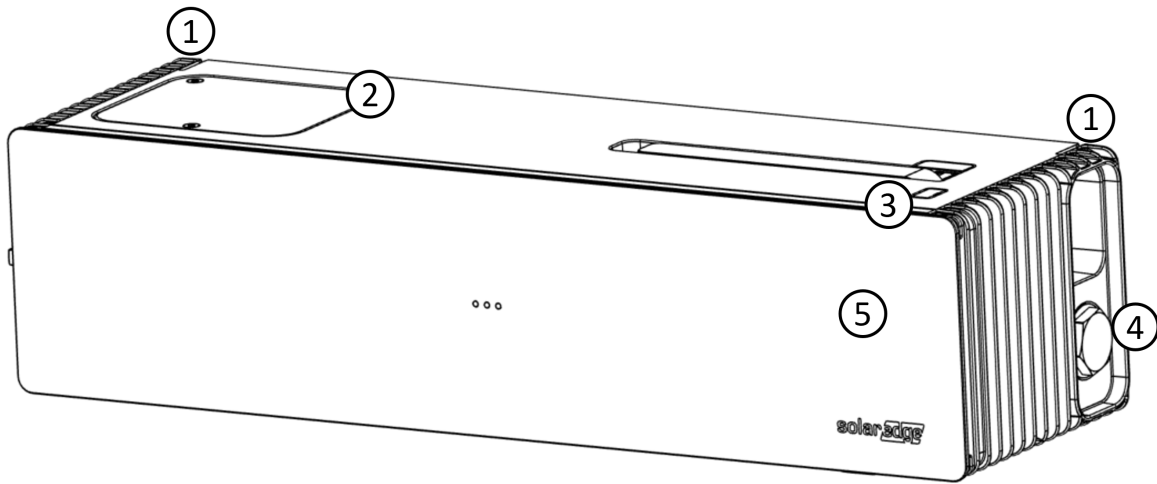
Battery LED behavior

LED State	Description
Installation and Commissioning	
	Battery stack OFF
	SW upgrade
	Battery stack identification process
Operation	
	There is communication between the battery stack and the Inverter
	The battery stack is on standby (not charging or discharging)
	The battery stack is on standby (not charging or discharging), and there is a fault in one or more Battery Blocks
	The battery stack is operational (charging or discharging)
	The battery stack is operational (charging or discharging), and there is a fault in one or more Battery Blocks
	The battery stack has a fault (not charging or discharging)

Battery Link

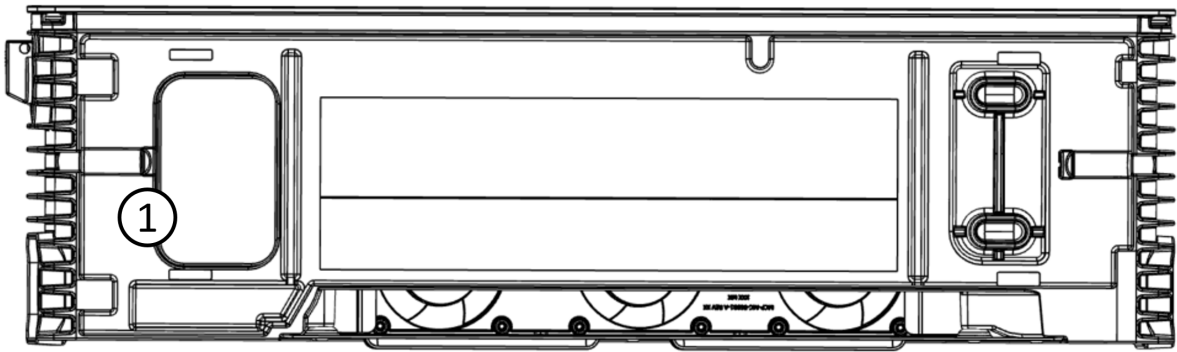


Component Number	Component Name
1	Prefabricated 1 in. conduit entry
2	DC Disconnect Switch
3	LEDs



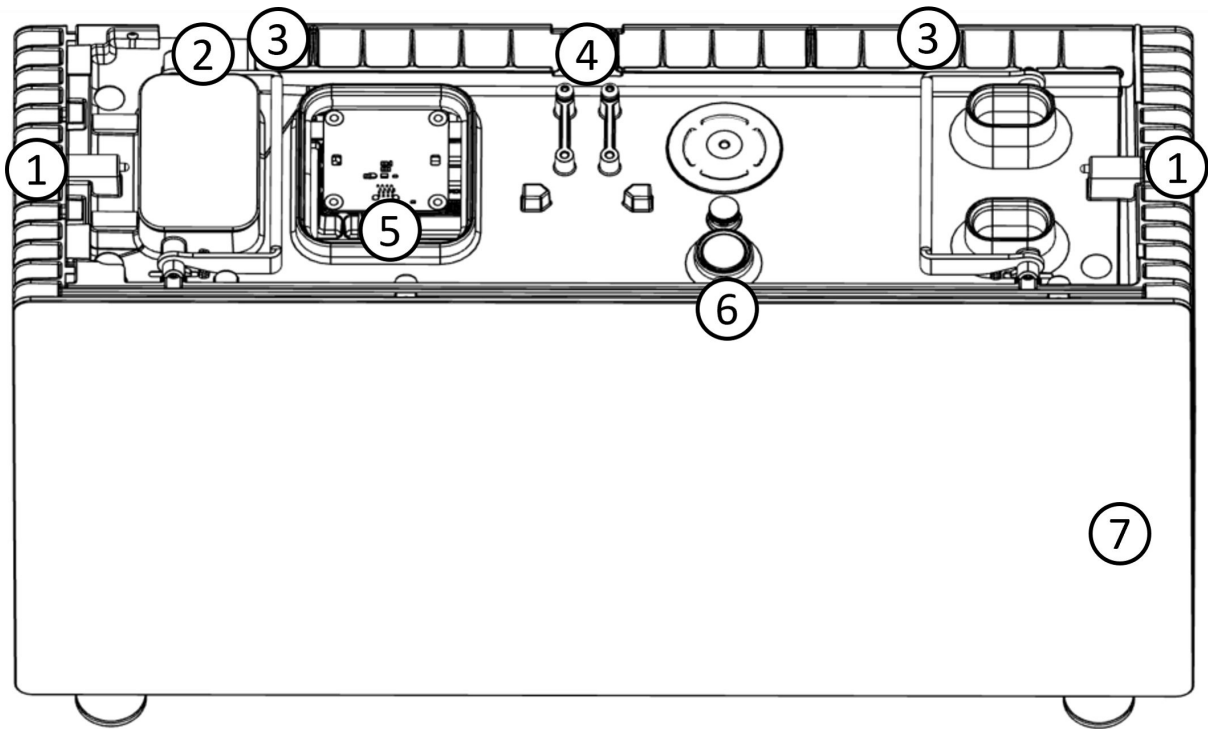
Component Number	Component Name
1	Alignment for the inverter wall bracket for the all-in-one configuration
2	Quick connector for the SolarEdge Nexis Inverter
3	Simple-Click™ cover
4	Prefabricated 1 in. conduit entry
5	Decorative cover

The bottom of the Battery Link



Component Number	Component Number
1	Quick Connector for the Battery Block

Battery Block

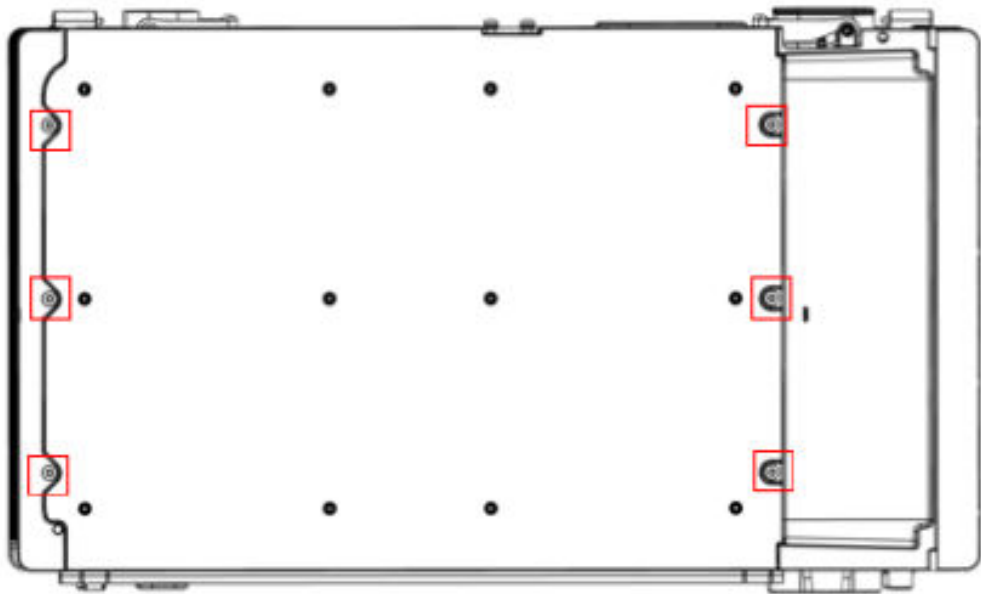


Component Number	Component Name
1	SolarEdge Simple-Click™
2	Quick Connector
3	Attach the handle here

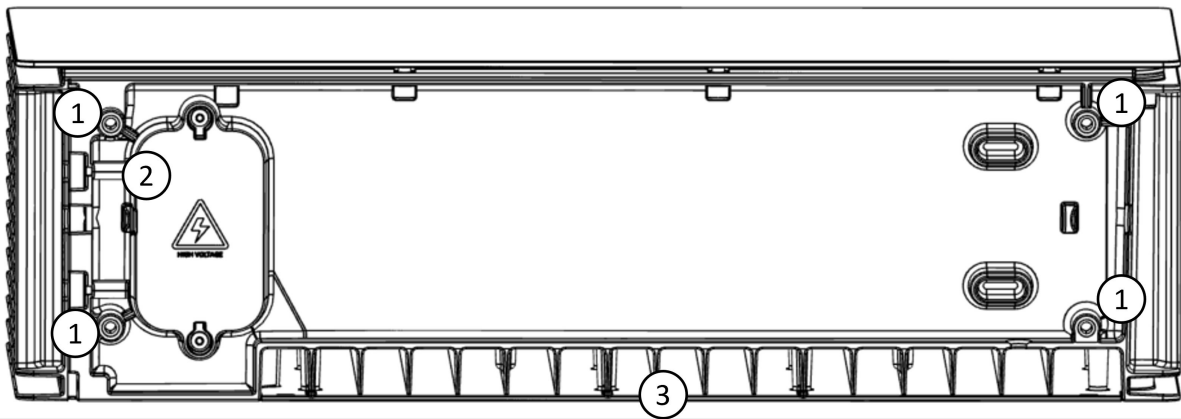
Component Number	Component Name
4	Wall Bracket attachment
5	Battery Block Status LED
6	Level
7	Decorative Cover

The back of the Battery Block

Screw holes for mounting the bracket to the back of the Battery Block.



The bottom of the Battery Block



Component Number	Component Name
1	Attach Battery Block feet
2	Quick Connector
3	Attach the filter here

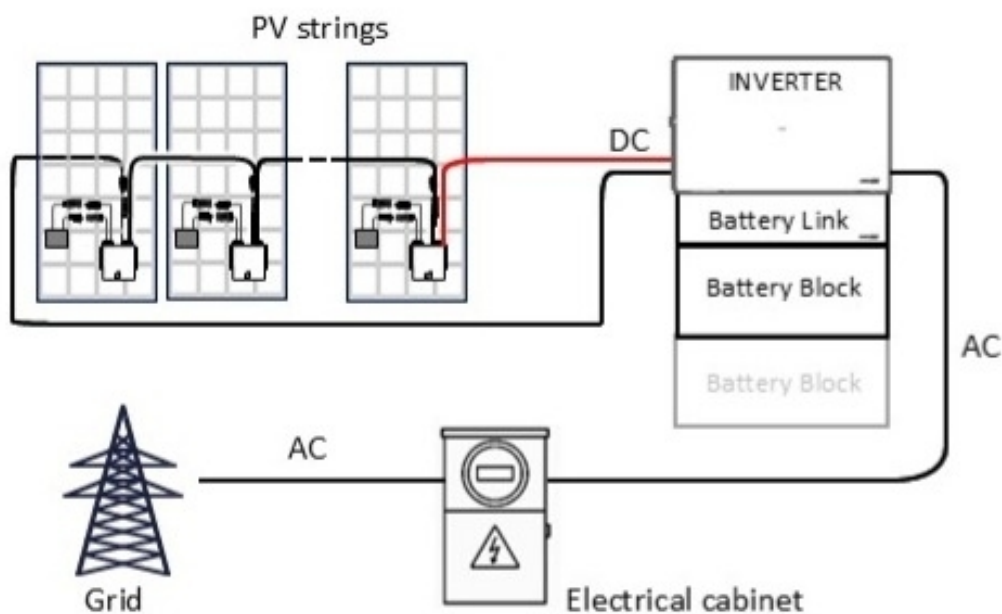
Install the battery

The following explains how to:

- [Install an all-in-one battery installation](#)
- [Install a stand-alone battery installation](#)

All-in-one installation

SolarEdge Nexus Battery System's all-in-one configuration requires no inverter-battery wiring, as displayed in the following image.



Battery stack assembly

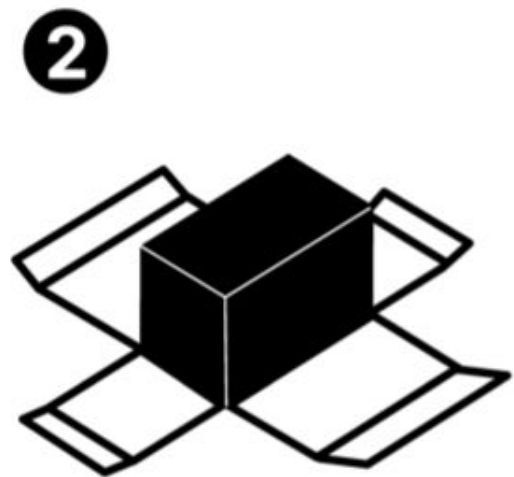
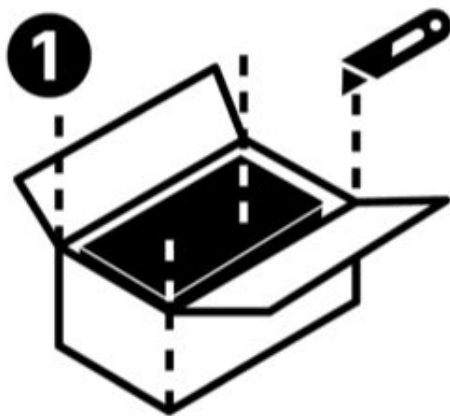
Install the first Battery Block

1. Before you unpack the Battery Block, open the Battery Block's package window and verify that the green LED is blinking.

**WARNING**

Do not install the Battery Block if the green LED is not blinking. Use a different Battery Block and contact SolarEdge Support.

2. Cut the Battery Block packaging open along the seams, then unfold it completely to create a flat work surface, as displayed in the following image.

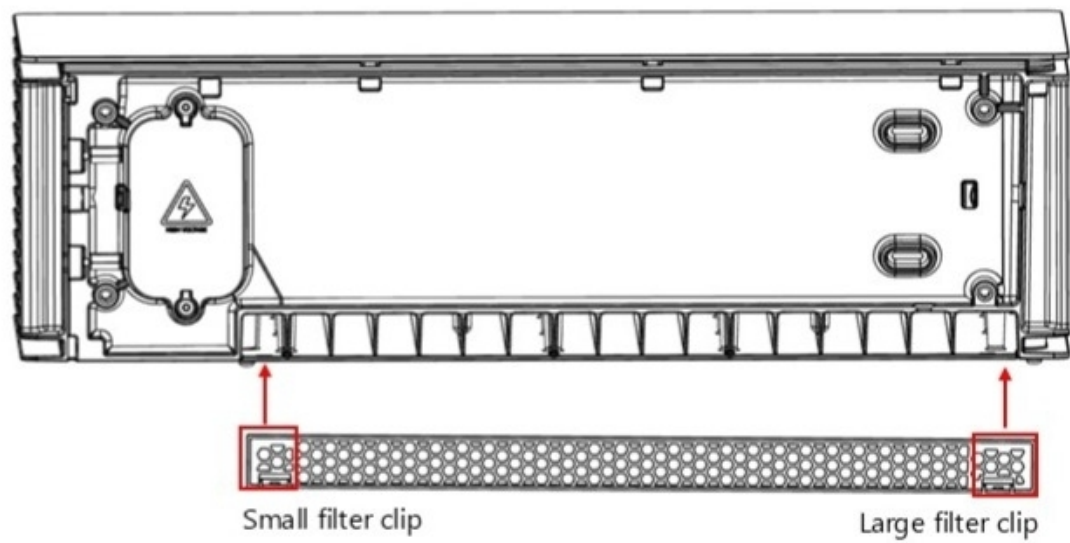
**WARNING**

Do not remove the bottom quick-connector cap on the first Battery Block.

3. Open the Battery Link package face up and remove the protective pulp.
4. Remove the filter from the Battery Link package and attach it to the Battery Block, as displayed in the following image.

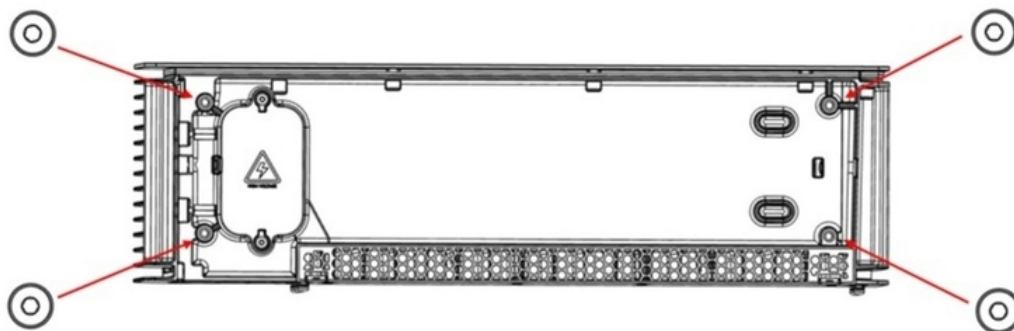
**NOTE**

The filter is only attached to the bottom Battery Block in the stack.



Install the first floor-standing Battery Block

1. Screw the feet into the bottom Battery Block, as displayed in the following image.

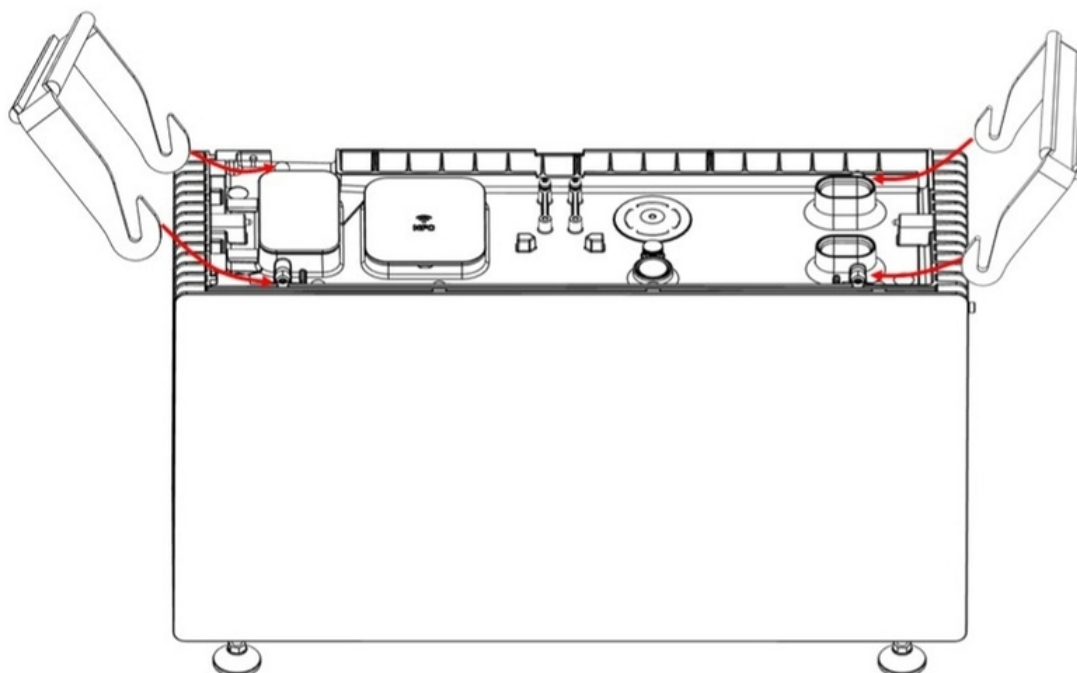


2. Attach the handles to the top of the Battery Block, as displayed in the following image.



NOTE

It is recommended to leave the handles resting on the top Battery Block, below the link, for future service.



3. Lift the Battery Block onto its feet and place it next to the wall.



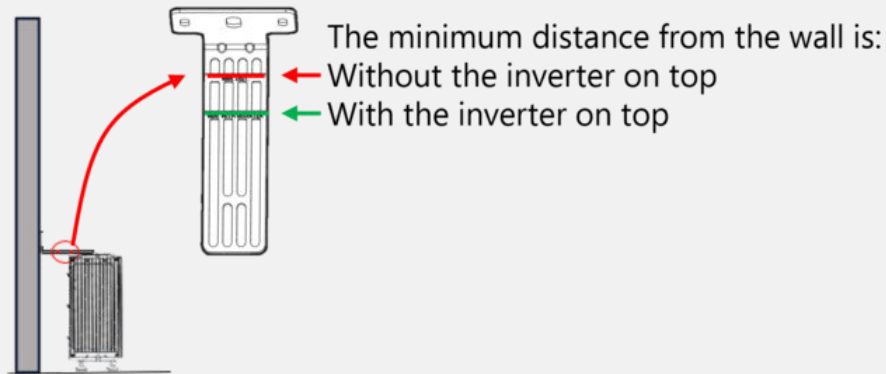
WARNING

The Battery Block must be lifted by two people.

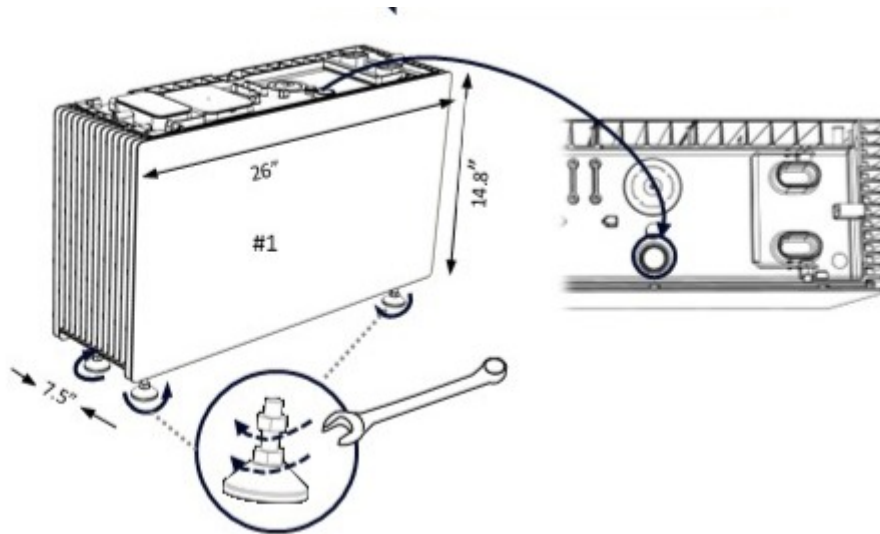
4. Use the wall bracket to position the Battery Block correctly.

**NOTE**

The following image displays the wall bracket's minimum distance from the wall with or without the SolarEdge Nexis Inverter.



5. Adjust the feet to level the Battery Block using the integrated level, as displayed in the following image.
6. Lock the feet by tightening the locknuts, as displayed in the following image.



Install the first wall-mounted Battery Block



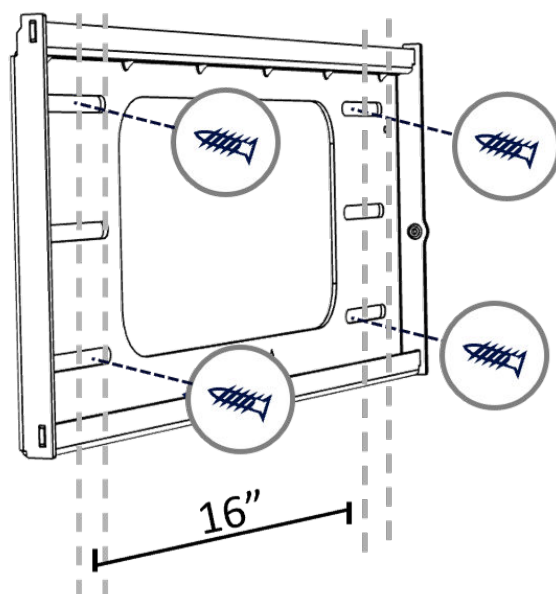
NOTE

Each Nexis battery package includes adjustable feet for floor-standing installations. To wall-mount the battery, a wall-mounting bracket kit, which must be purchased separately, is required PN: **IAC-NX-BLCKWMB-01**.

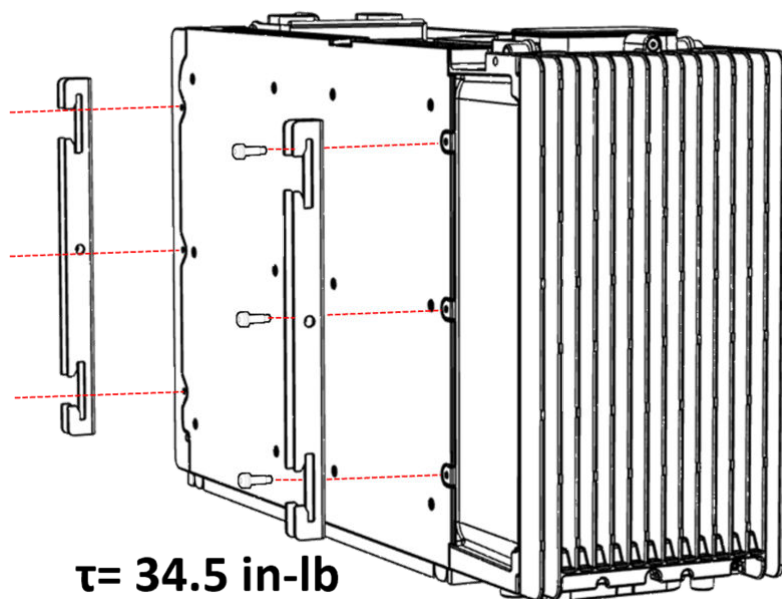
- **The wall-mounting bracket kit includes:**

- One wall bracket
- Two Battery Block mounting hooks
- Six hook screws
- One securing screw

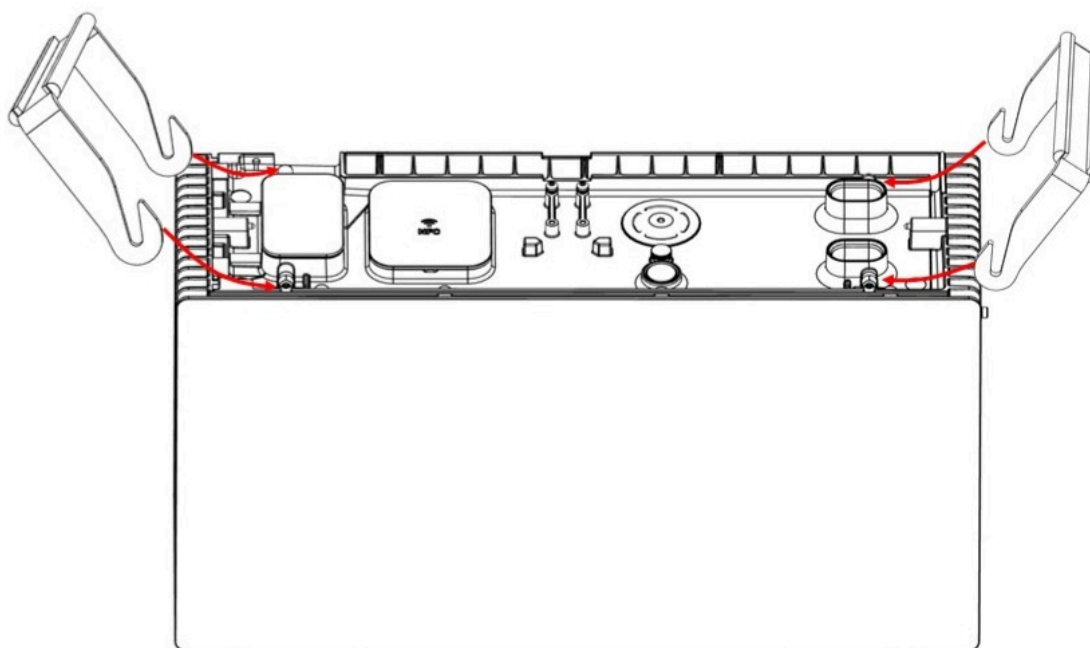
1. Remove the wall bracket from its package.
2. Level it and align it to the wall.
3. Mount the wall bracket securely to the wall, using mounting screws, as displayed in the following image.



4. Screw the hooks to secure the Battery Block to the wall, tightening them to a torque of 34.5 in-lb, as displayed in the following image.



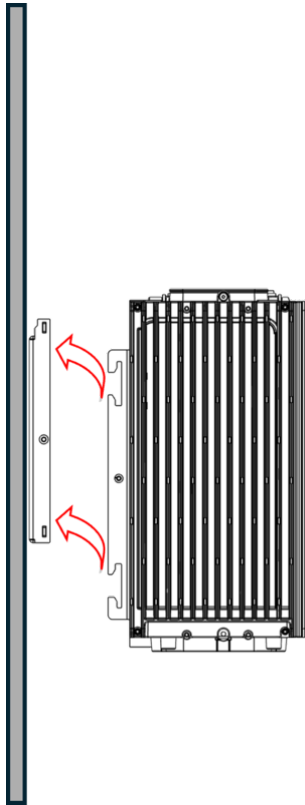
5. Attach the handles from the Battery Link package, as displayed in the following image.



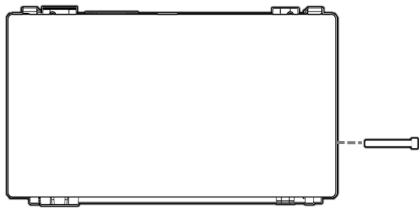
6. Lift the Battery Block and hang it on the wall bracket, as displayed in the following image.

**NOTE**

The Battery Block must be lifted by two people.



7. Secure the Battery Block to the bracket using the supplied securing screw, and tighten it to a torque of 8.9 in-lb, as displayed in the following image.



Stack the battery



IMPORTANT

If the green LED is not blinking, do not install the Battery Block. Use a different one and contact SolarEdge Support.

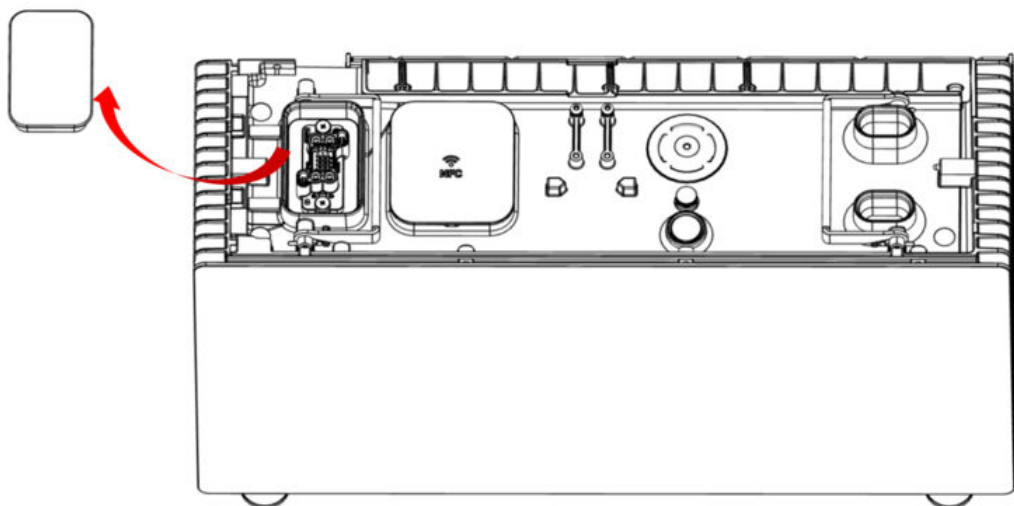
To assemble each Battery Block:

1. Remove the top quick connector cap from the top Battery Block on the mounted stack.

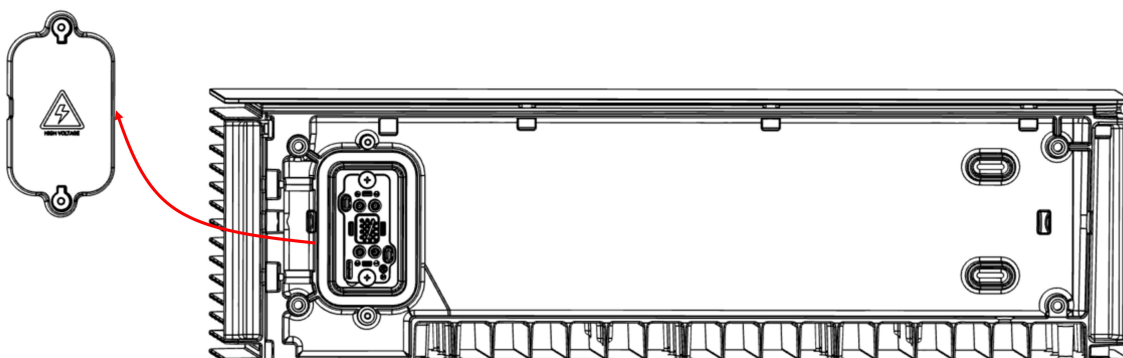


WARNING

If the wall bracket is installed at this stage, do not remove the top quick connector cap until mounting is complete.



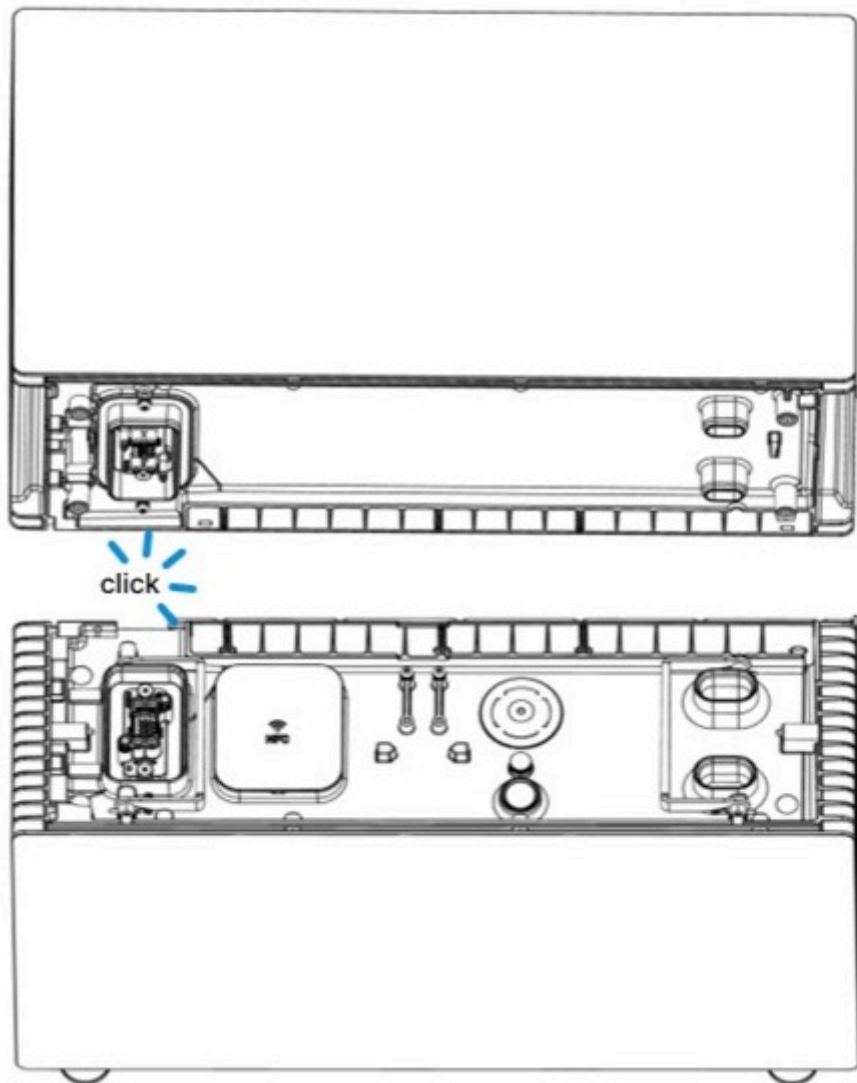
2. Unpack the next battery block.
3. Remove the Battery Block's bottom quick connector cap.



**NOTE**

The Battery Block's bottom quick connector cap is secured with screws. The top cap can be removed by hand.

4. Use the handles to lift the Battery Block and place it next to the stack.
5. With SolarEdge's Simple-Click™ architecture, click the top Battery Block onto the one below.

**NOTE**

To disconnect the Battery Blocks, use a screwdriver with a long shank Torx T15 screwhead to release the screws on both sides of the Battery Block.

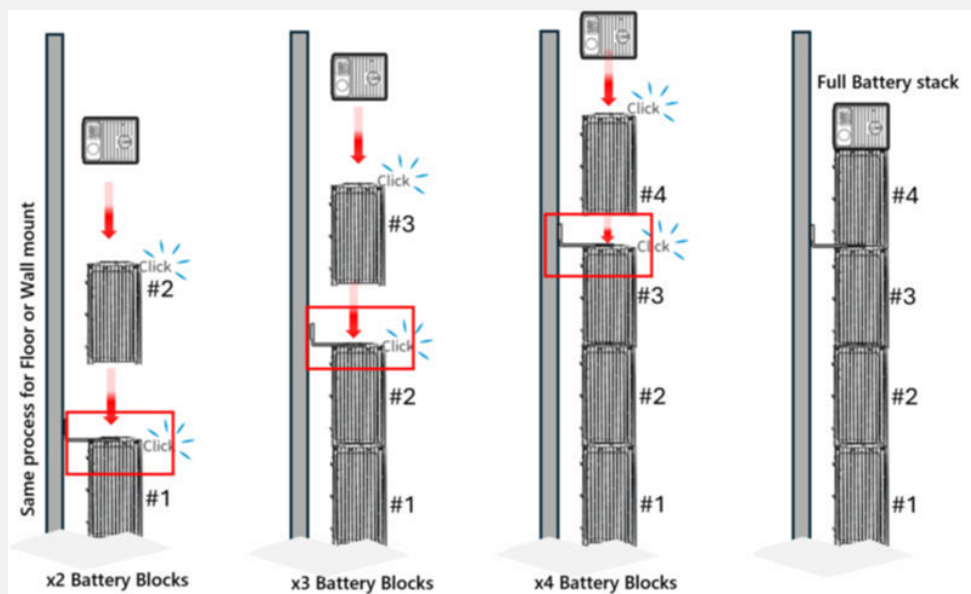
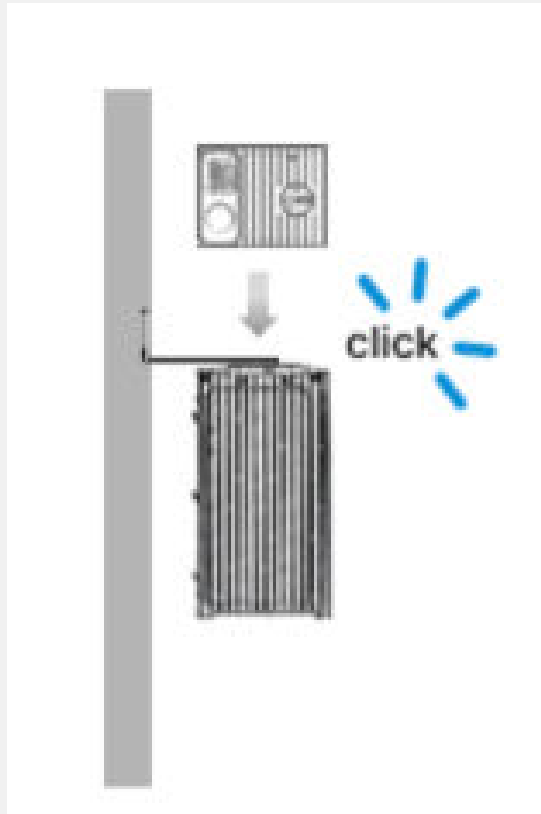
Before reconnecting the Battery Blocks to the Battery Link, ensure the screws are fully tightened.

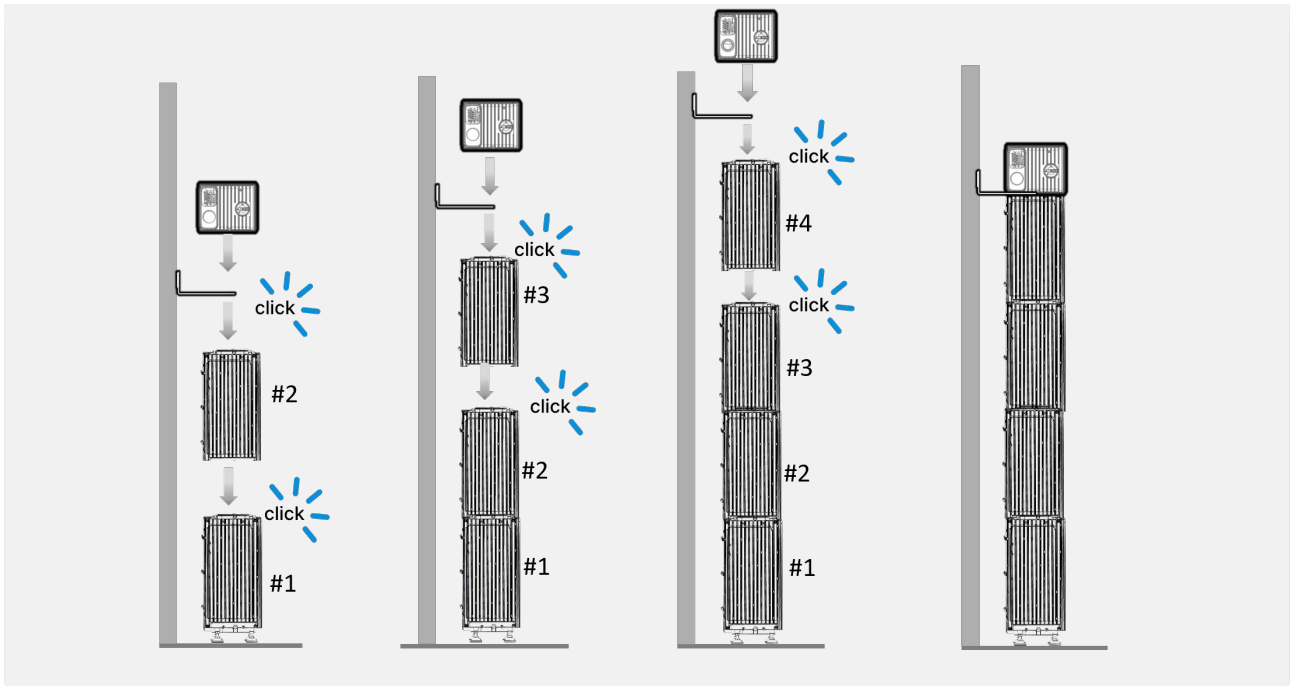
Attach the wall bracket and click the final Battery Block into place:



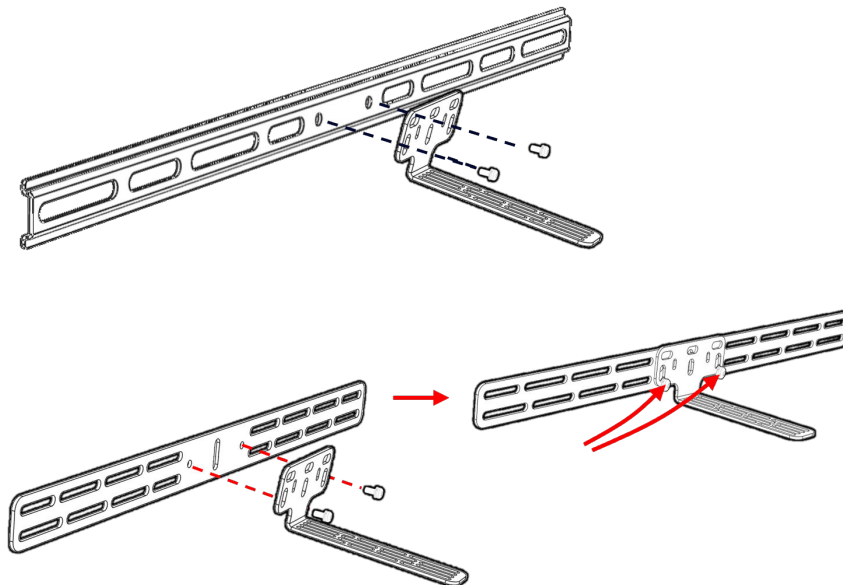
NOTE

The wall bracket can be mounted between the top Battery Block and the Battery Link, or between the top two Battery Blocks, as displayed in the following images.





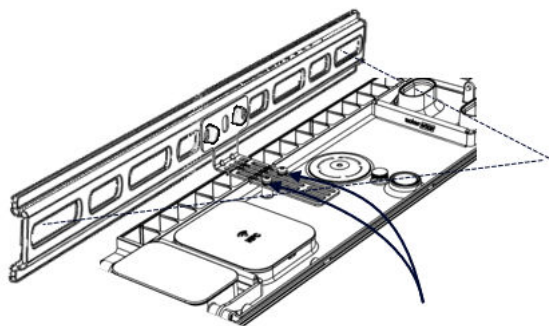
1. If necessary, attach the wall bracket to a wall bracket extension for a two-stud fixation, as displayed in the following image, and tighten the screws to a torque of 34.5 in-lb.



2. Attach the wall bracket or the wall bracket extension to the wall.
3. Attach the wall bracket to the Battery Block, and tighten it with the dedicated screws, as displayed in the following image.

**NOTE**

Only two screws are required to attach the wall bracket to the Battery Block.



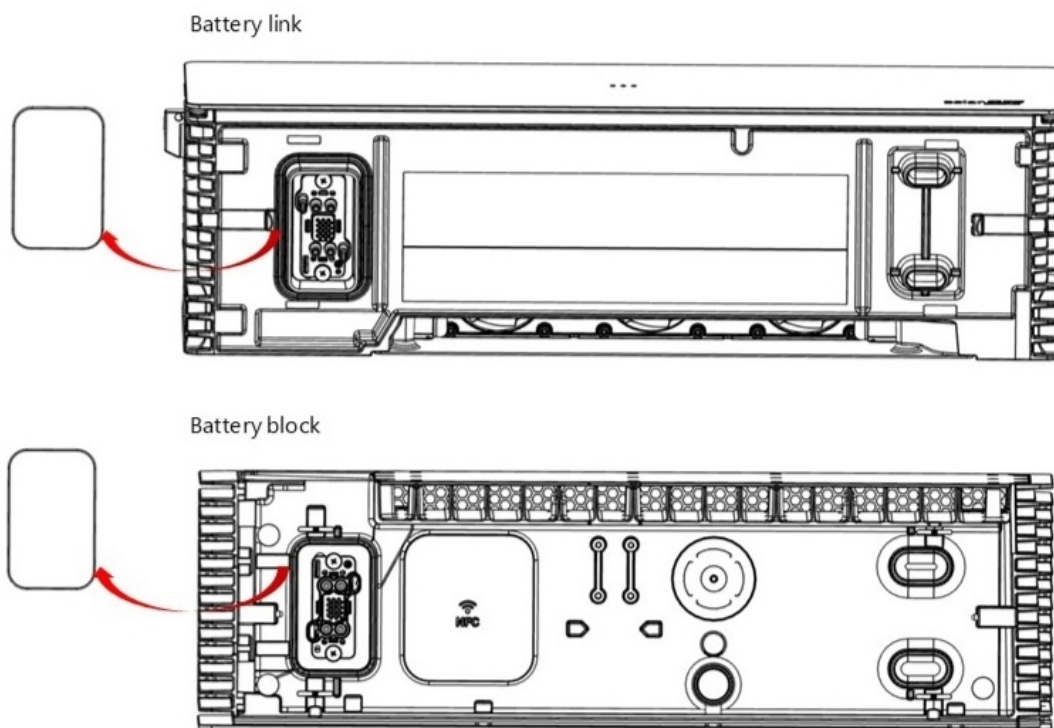
To connect the Battery Link:

1. Place the items from the Battery Link package and the Battery Link's decorative cover in a safe place.
2. Remove the bottom quick connector cap from the Battery Link and the top quick connector cap from the Battery Block, as displayed in the following image.

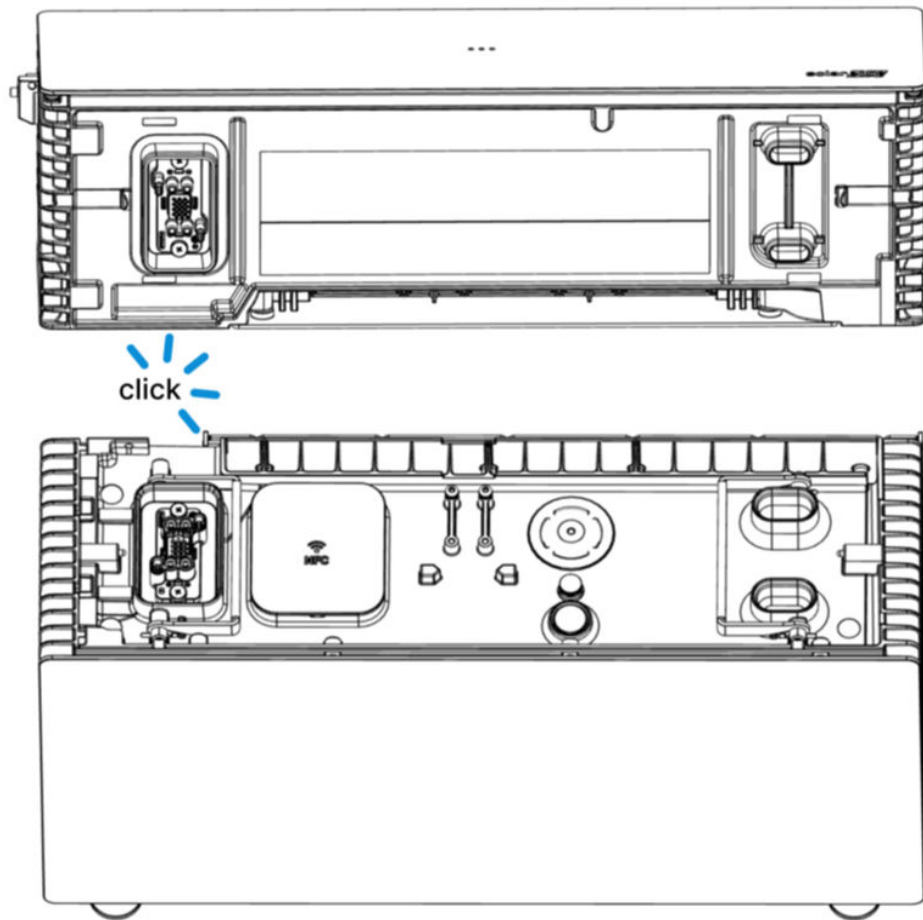


NOTE

If the wall bracket is installed at this stage, do not remove the top quick connector cap until mounting is complete.



3. With SolarEdge's Simple-Click™ architecture, click the Battery Link into place on the Battery Block.

**NOTE**

- To disconnect the Battery Link from the Battery Block, use a long-shank Torx T15 screwdriver to release the simple-click screws on both sides of the Battery Block
- Before reconnecting the Battery Link to the Battery Blocks, ensure the screws are fully tightened

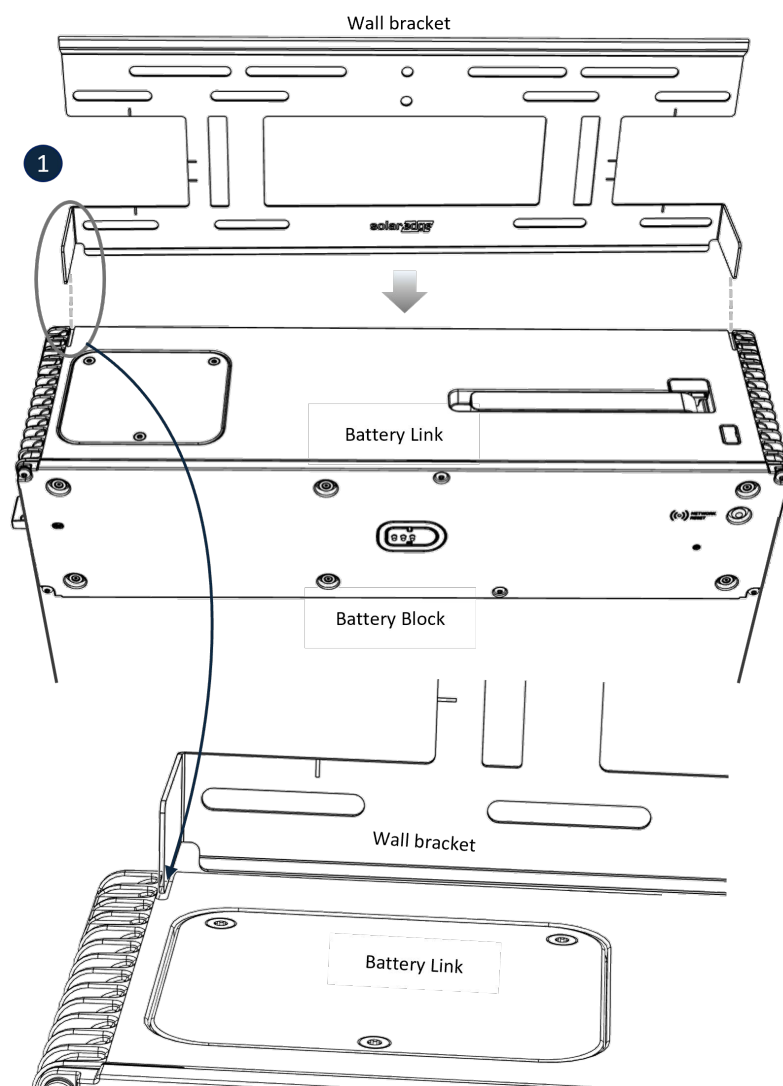
SolarEdge Nexus Inverter and Battery Link integration

Mount and attach the SolarEdge Nexus Inverter to the SolarEdge Nexus Battery Link

**WARNING**

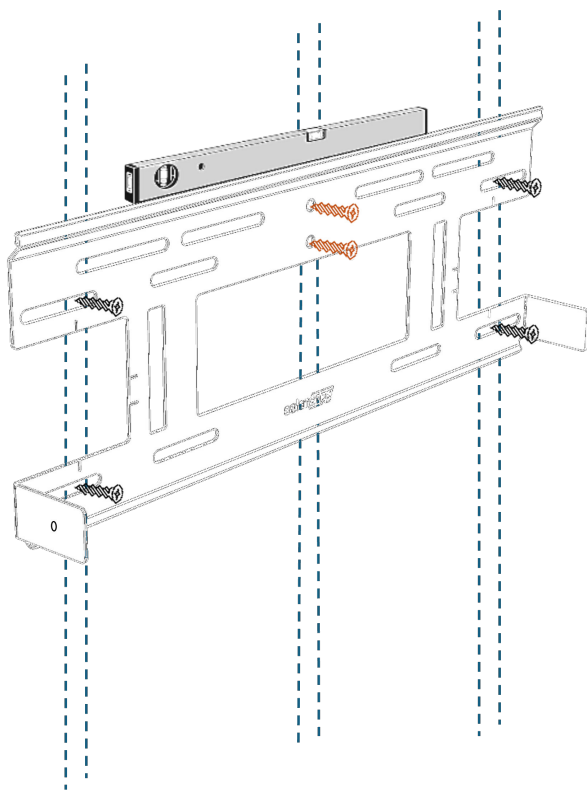
Do not mount the inverter onto the Battery Link without the wall bracket.

1. Align the SolarEdge Nexus Inverter's wall bracket using the Battery Link alignment inserts, as displayed in the following image.

**NOTE**

Aligning the inverter's wall bracket with the Battery Link inserts supports the full range of rear clearances for the all-in-one stack.

2. Use four screws to mount the inverter bracket to the wall — two at the top and two at the bottom — as displayed in the following image.

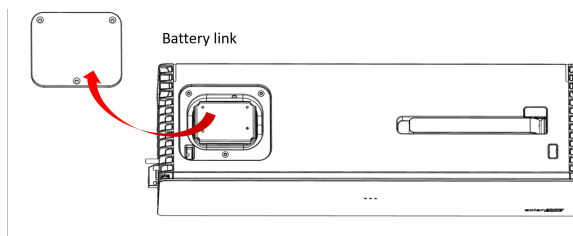
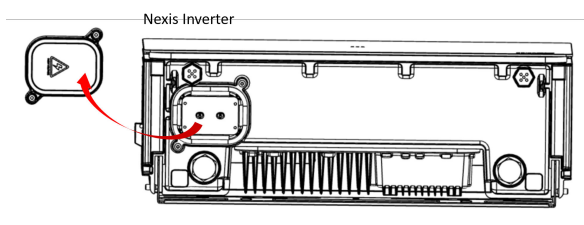
**NOTE**

If using rear entries, refer to [Unpack and mount the inverter](#).

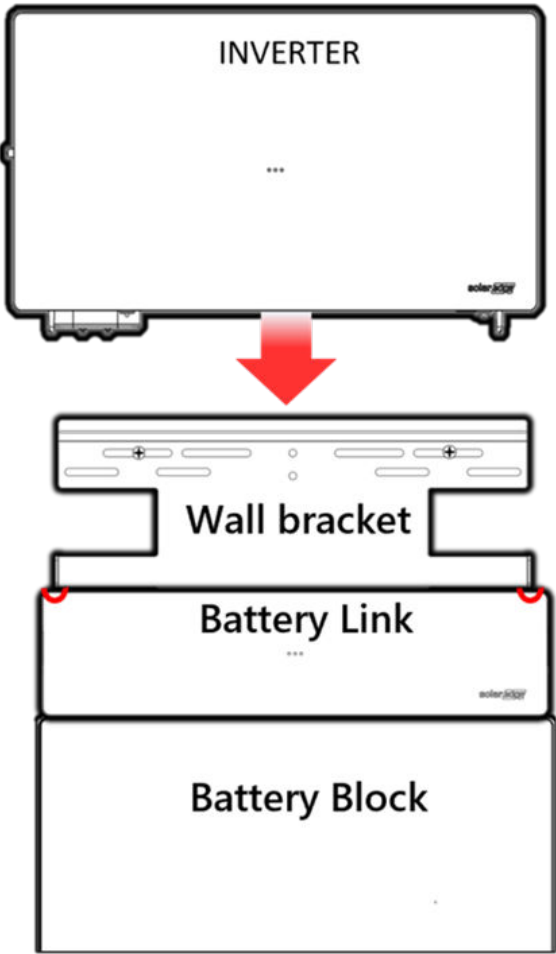
3. Remove the Battery Link Simple-Click™ cover.
4. Remove the quick connector caps on the SolarEdge Nexus Inverter and Battery Link, as displayed in the following image.

**WARNING**

Do not remove the Battery Link's quick connector cap until bracket mounting is complete.

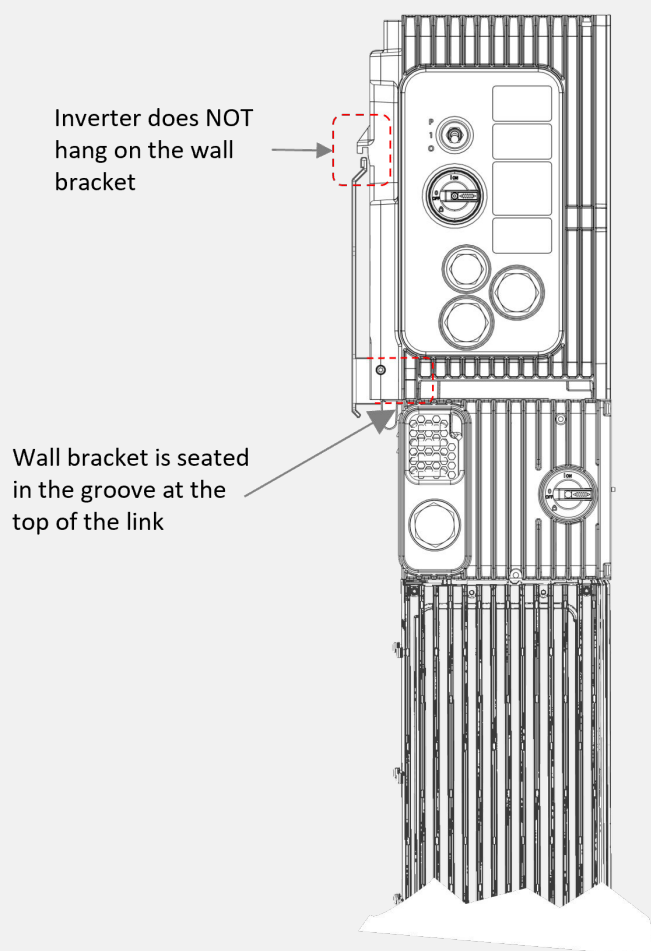


5. With SolarEdge's Simple-Click™ architecture, click the SolarEdge Nexus Inverter into place on the Battery Link, as displayed in the following image.

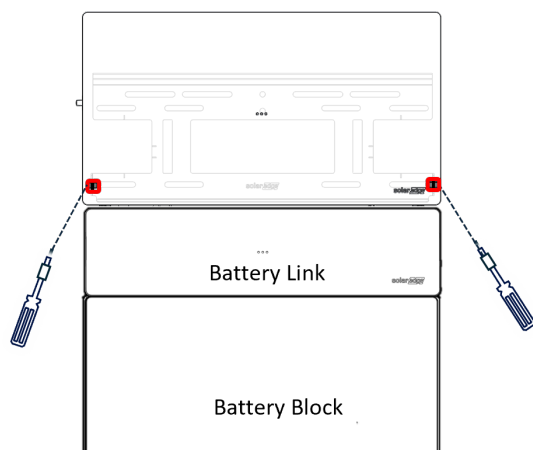


**NOTE**

The inverter's wall bracket serves as a tilt bracket, as displayed in this image.



6. Tighten the two supplied screws with a T25 Torx screwdriver through the screw holes to a torque of 17.7 in-lb , ensuring they are fully seated against the U-shaped indentations, as displayed in the following image.

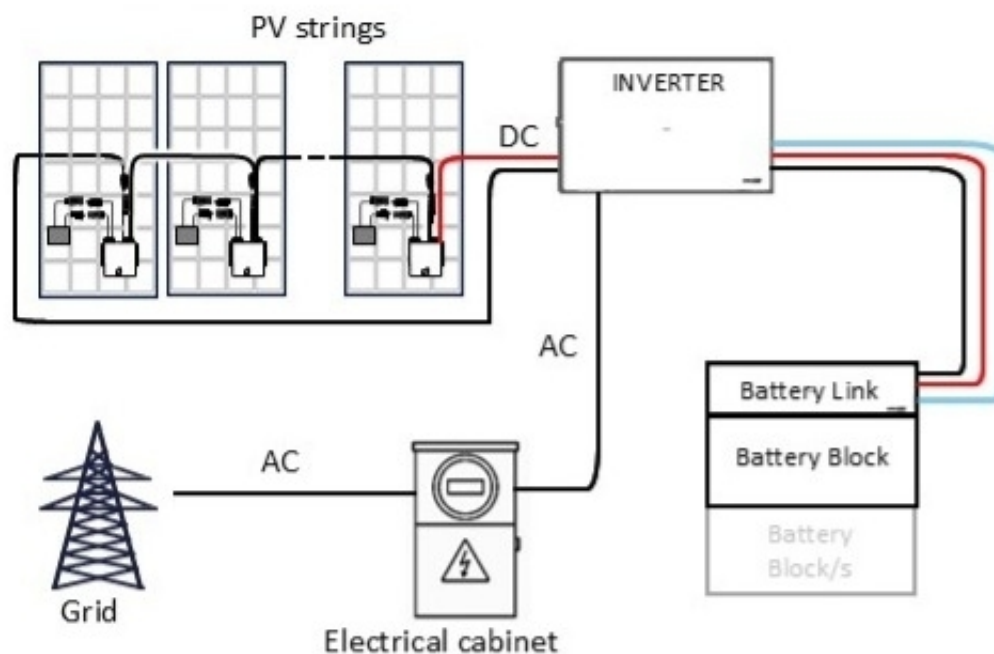


**NOTE**

- To disconnect the SolarEdge Nexis Inverter from the Battery Link, use a long-shank Torx T15 screwhead to release the simple-click screws on both sides of the Battery Link
- Before reconnecting the SolarEdge Nexis Inverter and the Battery Link, ensure the screws are fully tightened

Stand-alone installation

The SolarEdge Nexis Inverter can be mounted separately from the SolarEdge Nexis Battery system, as displayed in the following image.



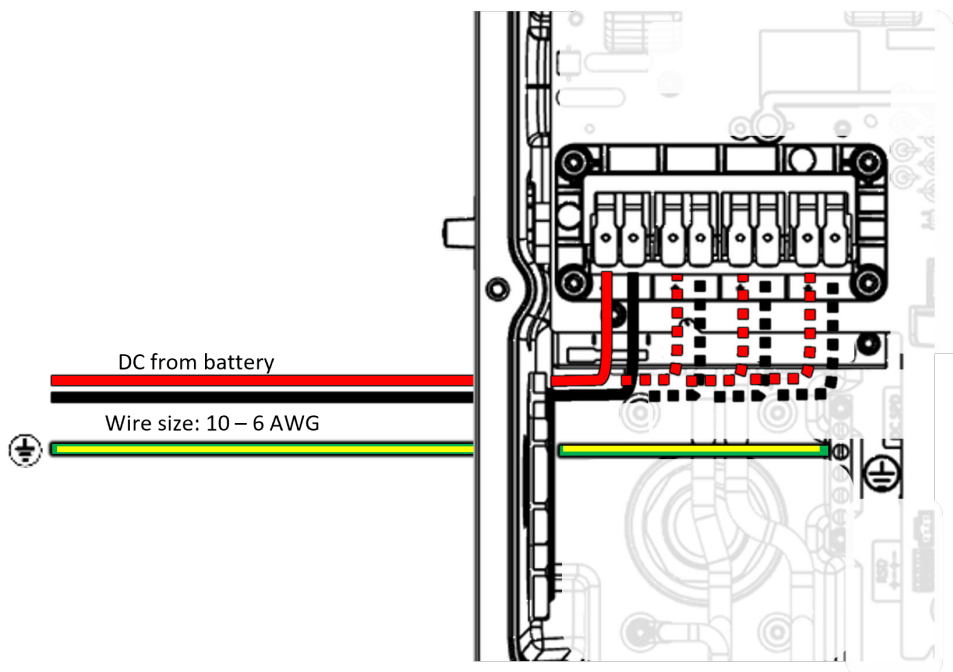
For inverter installation and mounting the battery, refer to [Install the inverter](#).

Wire the inverter for connection to the Battery Link**DC wiring****NOTE**

The battery's DC wiring is identical to PV wiring for the inverter. To wire the inverter, refer to [PV wiring](#).

**CAUTION**

Ensure the battery's DC Disconnect Switch is OFF.



To wire the inverter's communication board:

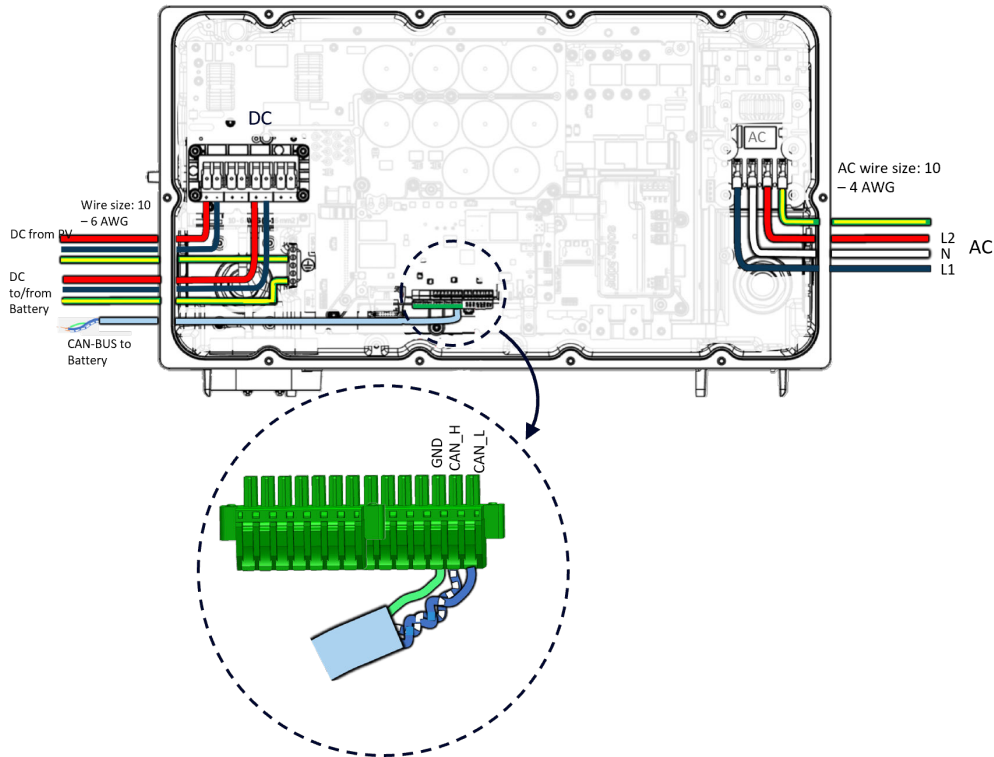
**NOTE**

The inverter's communication connector is pre-wired for the all-in-one configuration. Do not remove the wires.

Attach the communication wires to the top entry of the communication connector, as displayed in the following image.

**NOTE**

Leave a small amount of extra wire length to allow routing flexibility and accommodate future changes.



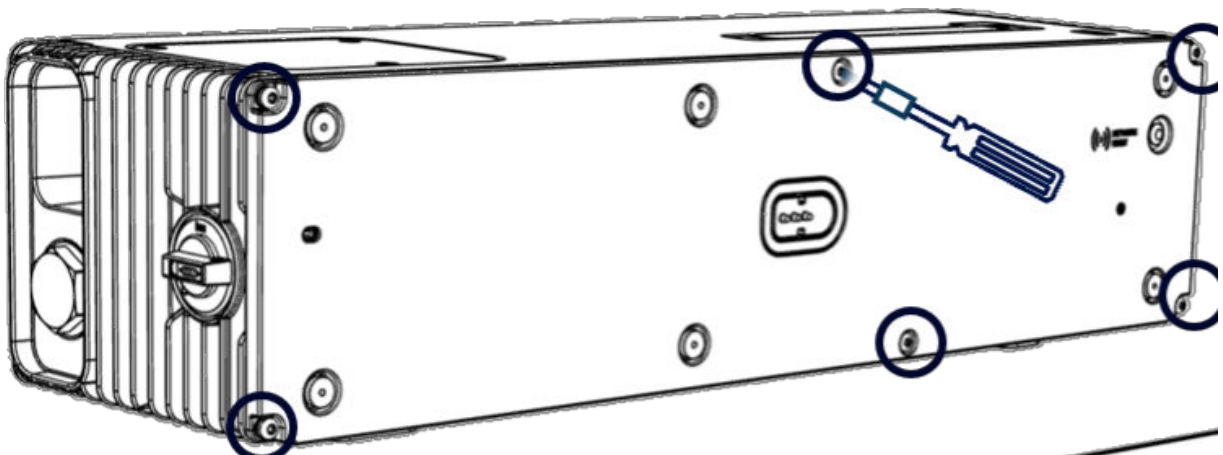
Open the Battery Link



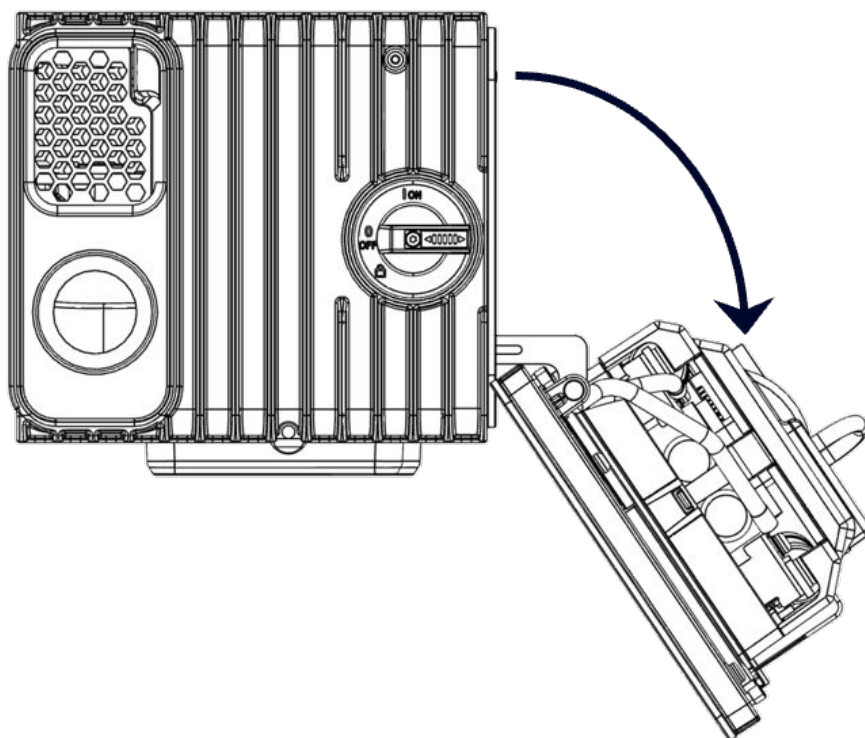
WARNING

Turn off the DC Disconnect Switch on the Battery Link, then wait at least five minutes before opening the Battery Link.

- Loosen the screws from the metallic cover, as displayed in the following image.



The Battery Link cover folds down, as displayed in the following image.

**NOTE**

The Battery Link screws are captive.

Wire the Battery Link**NOTE**

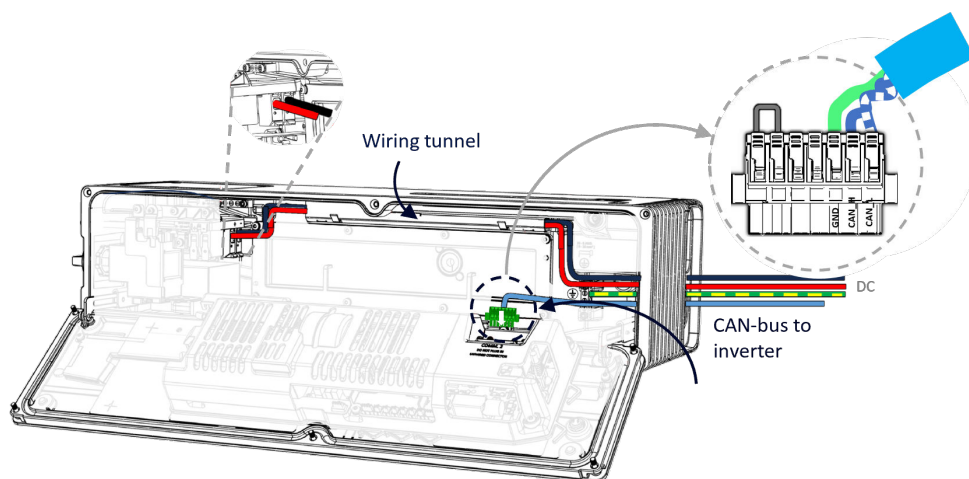
You can insert DC wires into the conduit entries on the left or right side of the Battery Link. For left side entries, there are different DC connectors and grounding bars.

1. Insert the DC, grounding, and communication wires through one of the conduit entries.
2. Connect the DC wires to the DC terminals, as displayed in the following image.
3. Connect the grounding wire to the grounding bar, as displayed in the following image.
4. Connect the communication wires to the communication connector, as displayed in the following images.

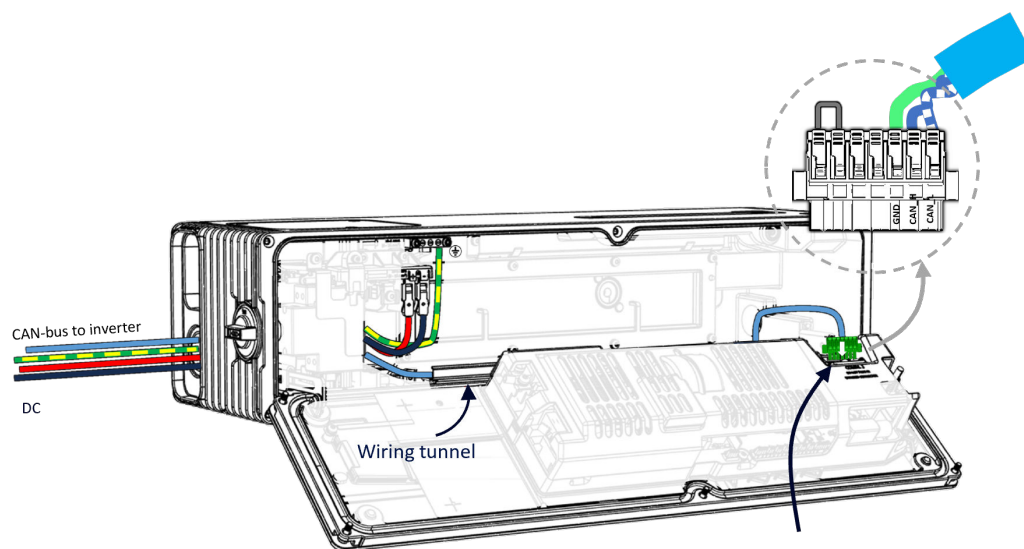
**NOTE**

Do not insert an unwired plug into the communication connector.

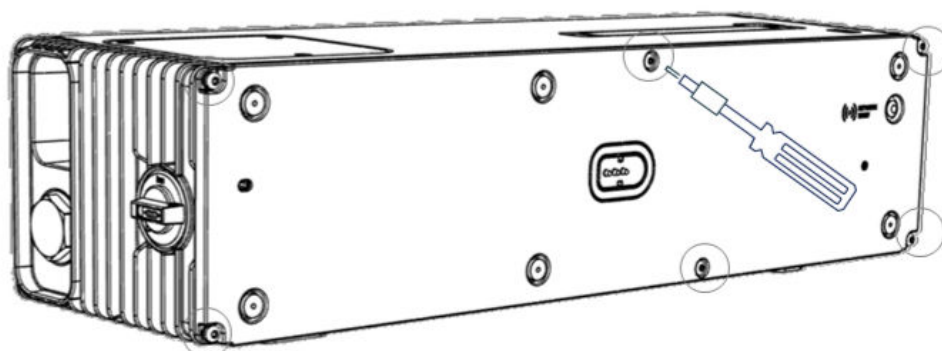
Right entry wiring



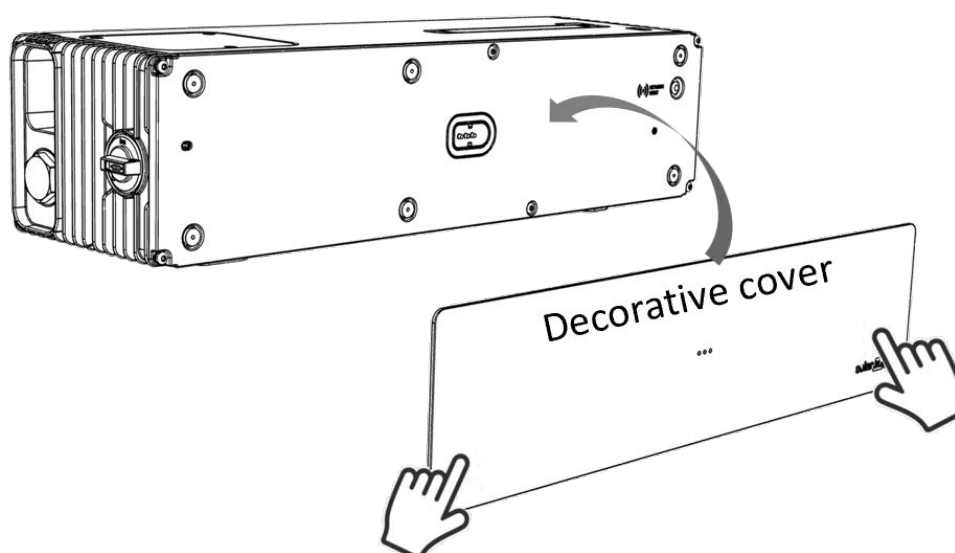
Left entry wiring



5. After wiring the Battery Link, tighten the metal cover's screws.



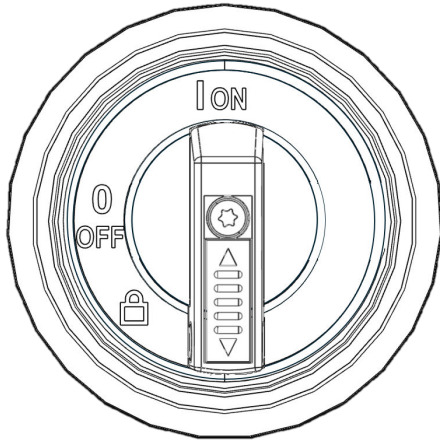
6. Attach the decorative cover to the metal cover.



7. Turn the battery's DC Disconnect Switch ON.

**WARNING**

Do not turn the battery's DC Disconnect switch ON until wiring is complete and the inverter's metal cover is reattached.



Battery self-test automated health verification

The SolarEdge Nexis battery system includes a built-in battery self-test that verifies the health and operational readiness of battery components.

During commissioning and routine operation, the system runs diagnostics on each Battery Block and the Battery Link. The self-test checks:

- Voltage
- Temperature
- Communication integrity
- Internal resistance

The self-test helps identify issues early and supports safe, reliable operation. Results are reported on the SolarEdge Monitoring platform, providing installers and service teams with actionable information that reduces the need for manual diagnostics.

Backup and rapid shutdown

The SolarEdge Nexis Solution integrates with the SolarEdge Nexis IslandDER™ Meter Collar, disconnecting house loads from the grid and supporting grid-tied solar, battery backup, and smart energy management.

The SolarEdge Nexis IslandDER™ Meter Collar is required to operate the inverter and batteries during backup mode. It includes the following functions and hardware:

- **Energy meter:** The inverter monitors export, import, production, and consumption. It also supports smart energy management features such as export limitation, time-of-use scheduling, and self-consumption maximization. It includes current and voltage sensors.
- **200A Microgrid Interconnection Device:** Disconnects house loads from the grid during a power outage

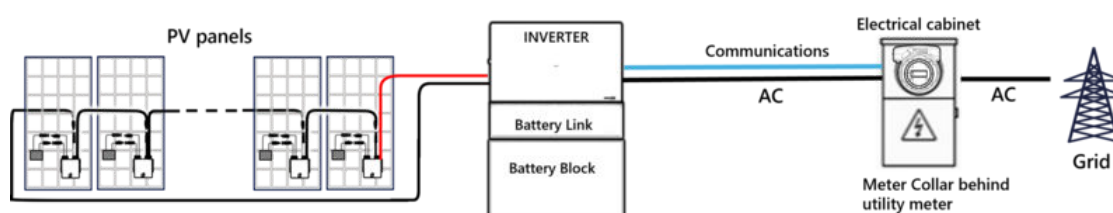
- **Manual override:** Authorized personnel manually reconnect house loads after safely shutting down all energy production systems, such as generators, SolarEdge, or third-party inverters and batteries, if they malfunction

For more information, refer to the [Nexis IslandDER Installation Manual](#) and the [Technical Specifications](#).

Backup installation

Install the SolarEdge Nexis IslandDER™ behind the utility meter

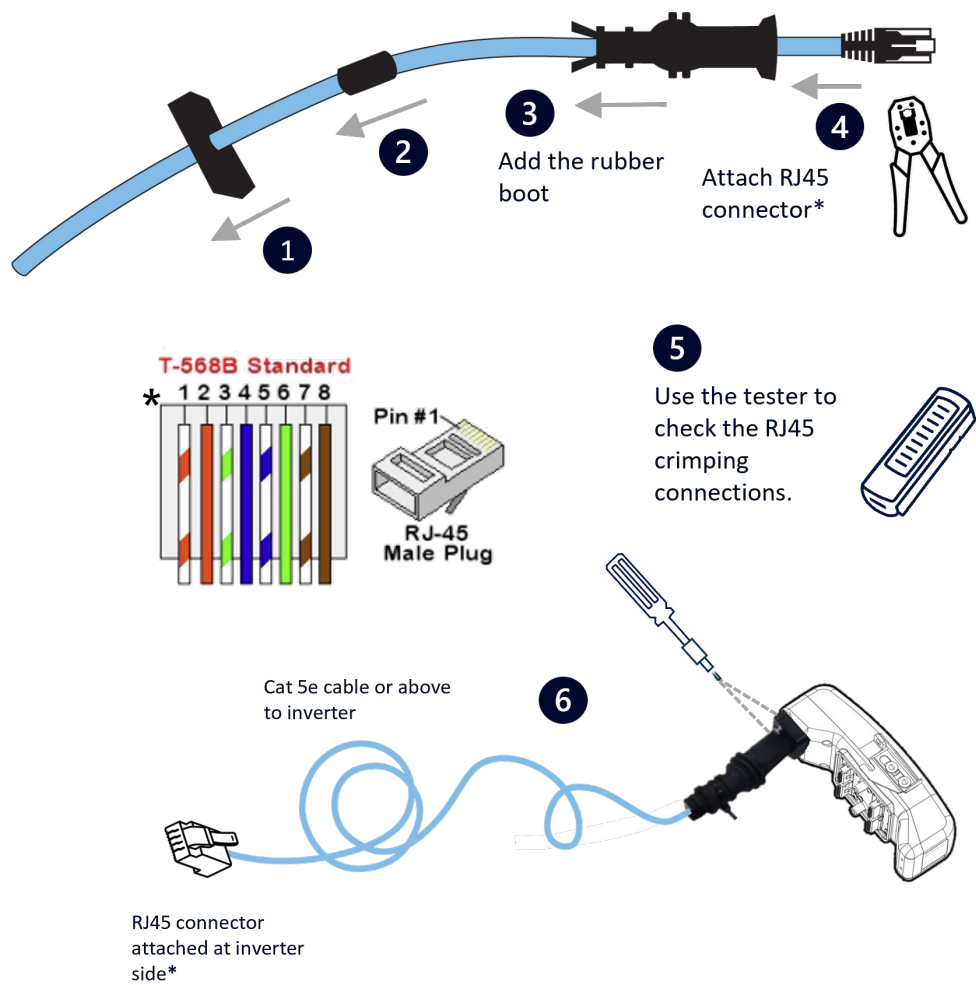
The following image displays the Meter Collar installed behind the utility meter.



NOTE

If the cable is routed outside the conduit, verify that it is rated for the installation environment.

1. Crimp the communication wire, as displayed in the following image.

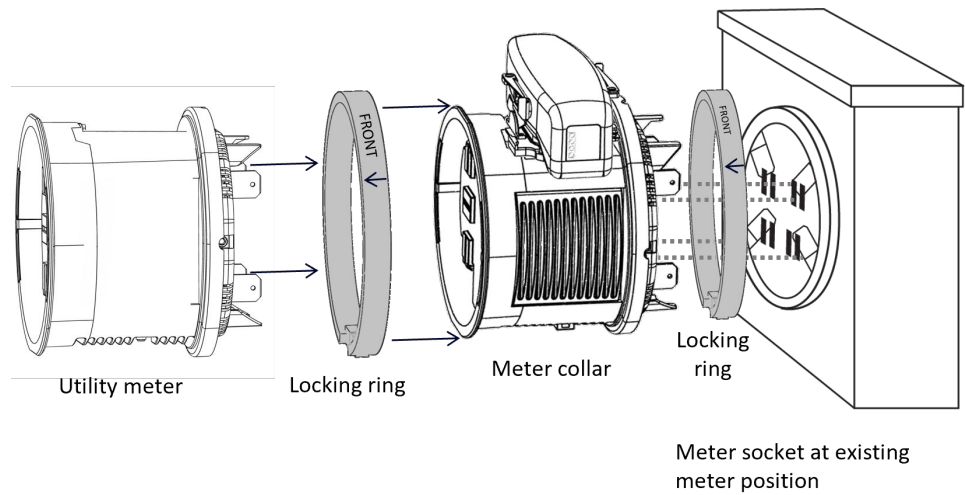


2. Install the Meter Collar behind the utility meter, as displayed in the following image.



NOTE

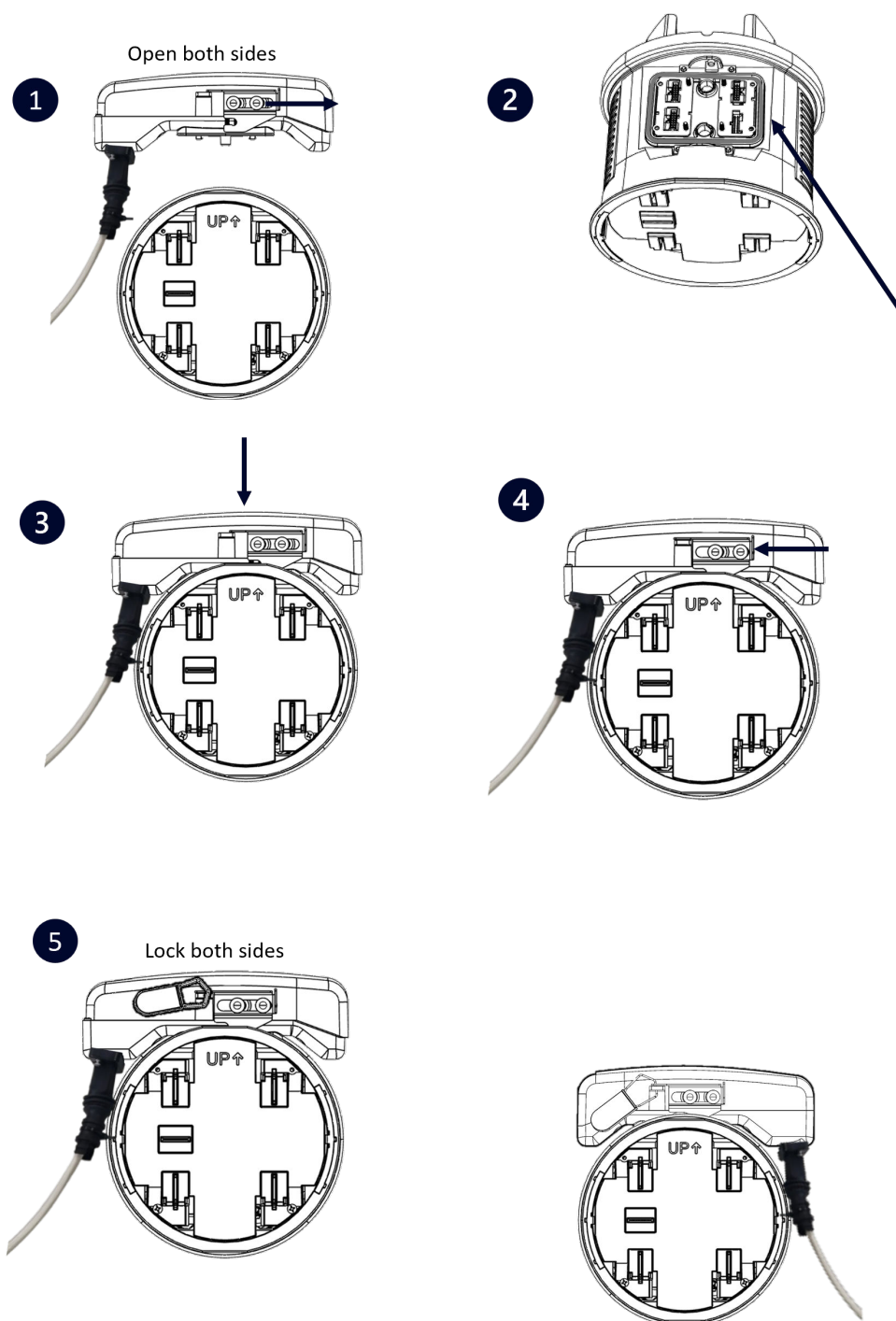
Only qualified and authorized personnel should handle the utility meter and install the Meter Collar.



3. Connect the digital adapter to the Meter Collar, as instructed in the following image.

**IMPORTANT**

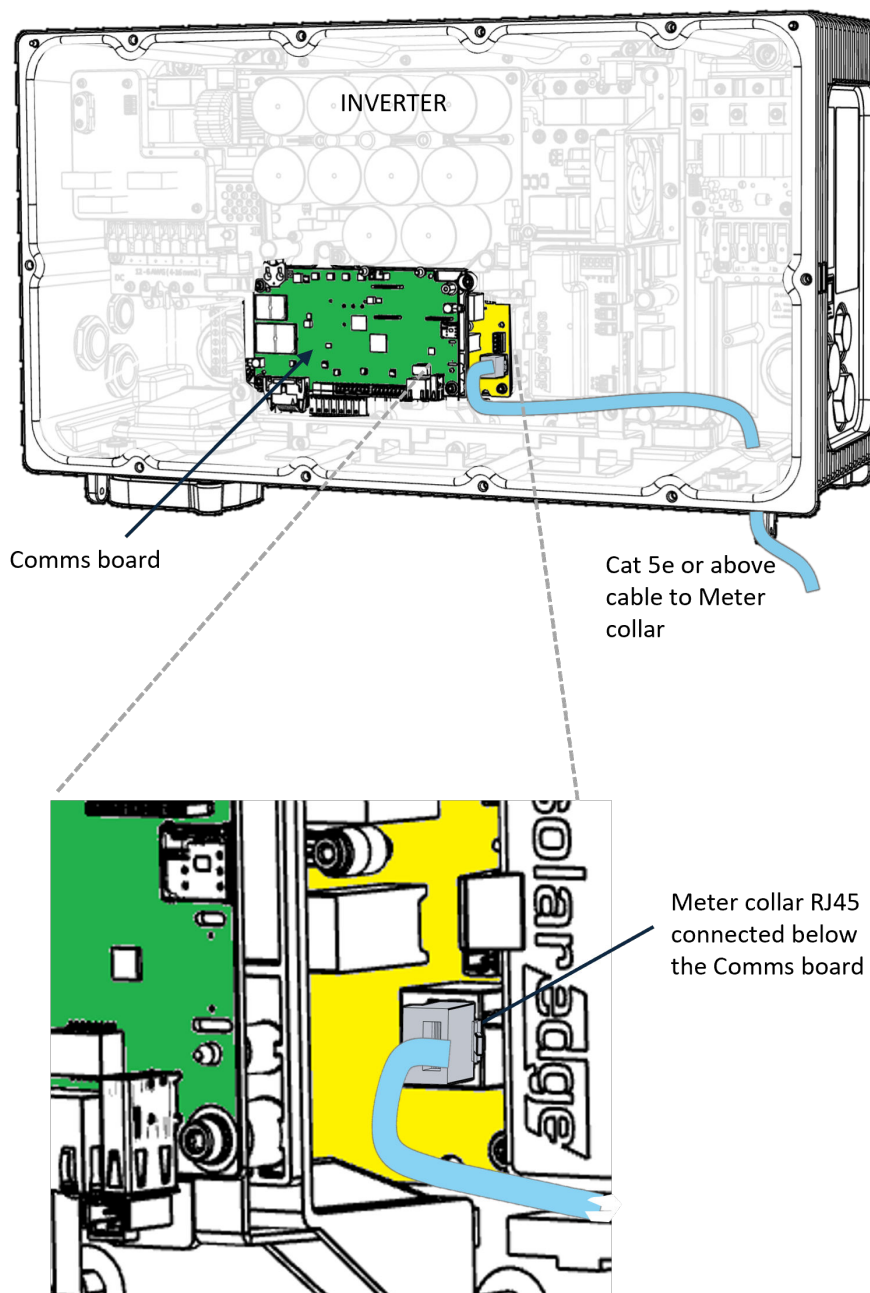
Ensure that the O-ring is properly seated before attaching the digital adapter to the collar.



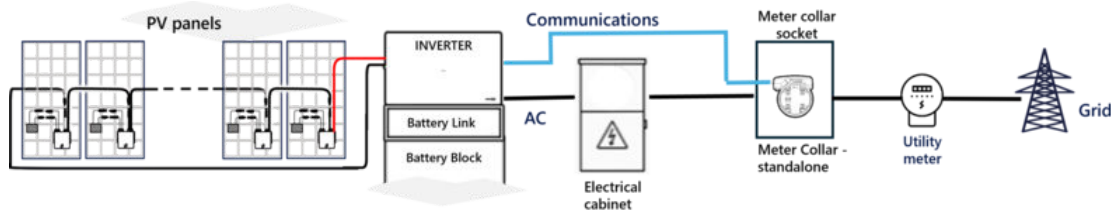
**NOTE**

The digital adapter can be connected to the Meter Collar with the communication wire on either the left or right side of the collar.

4. Insert the communication wire through one of the conduit entries or the wiring gland.
5. Connect the communication wire to the RJ45 plug next to the Meter Collar marking, as displayed in the following image.

**Install the SolarEdge Nexis IslandDER™ on a separate meter socket**

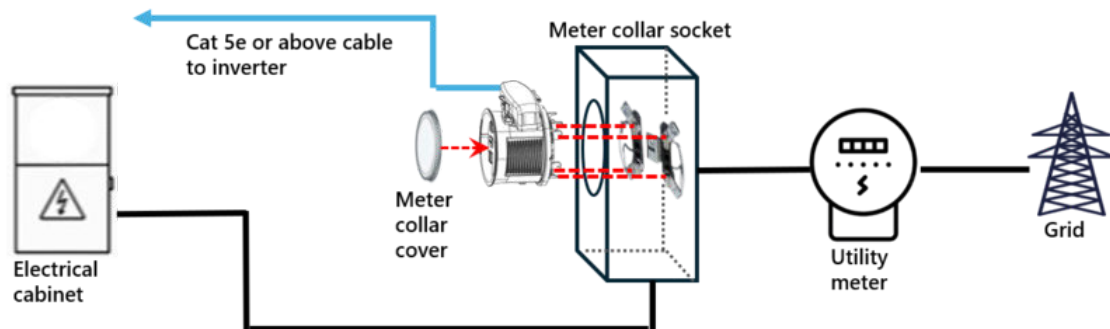
The following image displays the Meter Collar installed on a separate meter socket.



NOTE

The Meter Collar socket and the Meter Collar cover are bought separately. For details on installing the SolarEdge Nexis IslandDER on a separate socket, refer to the [SolarEdge Nexis IslandDER Meter Collar Application Note](#).

1. Prepare the Meter Collar for installation as described in [step 1 in Install the SolarEdge Nexis IslandDER™ Meter Collar behind the utility meter](#).
2. Install the Meter Collar in the socket, as displayed in the following image.



3. Connect the digital adapter to the Meter Collar, as displayed in [step 3 in Install the SolarEdge Nexis IslandDER™ Meter Collar behind the utility meter](#).



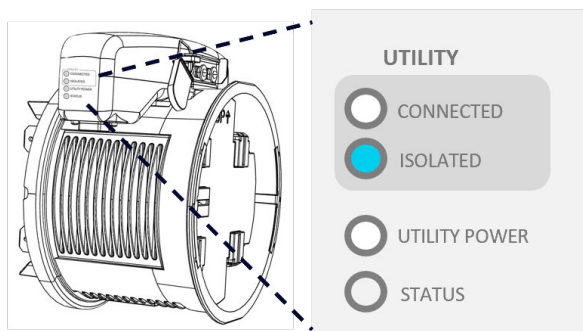
NOTE

For ringless socket adapters, close the socket adapter cover before connecting the digital adapter.

4. Wire the Meter Collar communication wire to the SolarEdge Nexis Inverter, as described in [steps 4-5 in Install the SolarEdge Nexis IslandDER™ behind the utility meter](#).

SolarEdge Nexis IslandDER Meter Collar LEDs

METER COLLAR



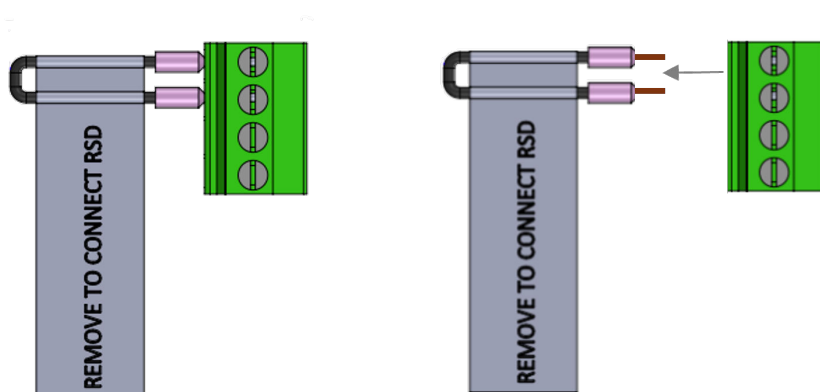
- Solid White: Utility Connected
- Solid Blue: Utility Isolated

- Solid White: Grid Power available. If grid power is unavailable or meter collar is out of panel, LED is OFF.
- **Blinking green:** getting ready to operate / **Solid Green:** ready to operate
- **Solid or Blinking Red:** Fault

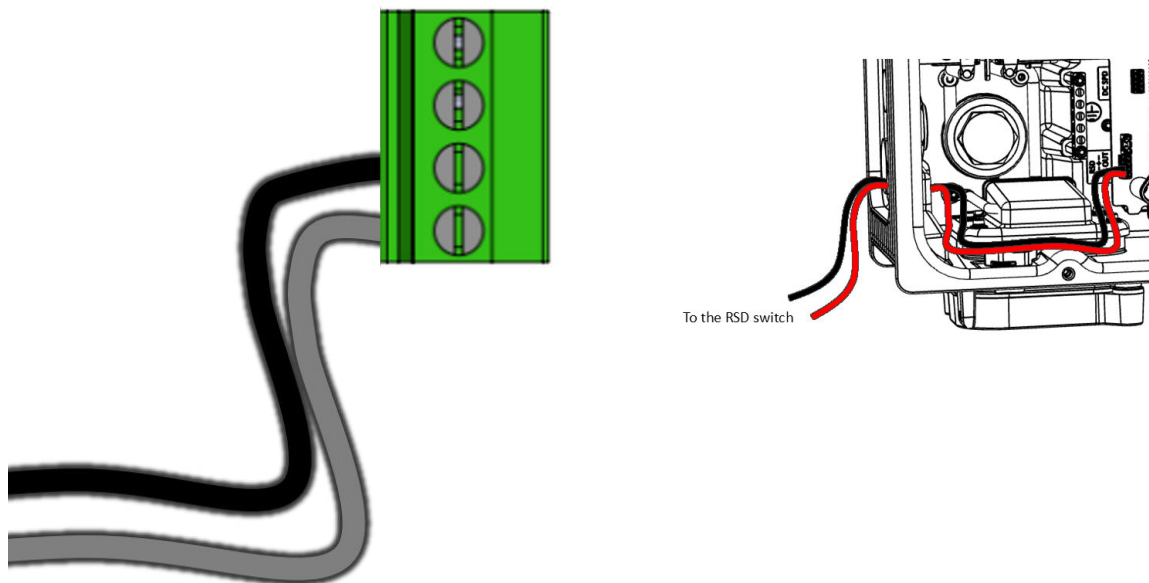
Rapid Shutdown

To connect an external RSD switch to an inverter:

1. Locate the RSD 4-pin connector inside the inverter.
2. Remove the connected RSD jumper pins, as displayed in the following image.



3. Insert the RSD switch +/- wires through any of the inverter's conduit entries.
4. Connect the wires to the two bottom pins of the marked connector's matching female connector, with the +/- marking, as displayed in the following images.



Post Commissioning RSD Test:

After installation and commissioning, verify the correct Rapid Shutdown operation, as described in the following procedure.

1. Log in to the SolarEdge Go application and select **Equipment > Inverter > General Measurements**.
2. Verify that the DC voltage is within normal operating range.
3. Press the RSD switch and wait thirty seconds.
4. Confirm the DC voltage has dropped below 30 V.
5. Release the RSD switch and wait ninety seconds.
6. Verify that DC voltage has returned to its normal operating range.

Automatic Daily RSD Test:

- The inverter performs an automatic RSD self-test once per day
- If an issue is detected, an alert is generated in SolarEdge Go and on the Monitoring platform
- No installer action is required unless an alert is displayed

Troubleshooting

The following information explains how to troubleshoot general system problems. For further assistance, contact [SolarEdge Support](#).

Identify errors

Errors may be indicated in various system interfaces:

- A red LED on the inverter or battery indicates an error
- On the Monitoring platform and SolarEdge Go, errors are displayed with codes

Identify the error type on the Monitoring platform

1. Open the site dashboard, click **Layout**.
2. Right-click on **Inverter** and select **Info** from the menu.

The inverter details window is displayed.

3. Click **Errors**.

The error list is displayed.

SolarEdge Nexis Inverter troubleshooting

Malfunction	Description or possible cause	Corrective action
The inverter does not turn on.	External shutdown is on.	If an external shutdown switch is installed, ensure it is in the ON position.

Troubleshooting Ethernet (LAN) communication

The errors and their troubleshooting procedures are detailed in the following table:

Error message	Possible cause and troubleshooting
LAN cable disconnected	Physical connection fault. Check the cable pin-out assignment and cable connection.
No DHCP. Configure Static IP or set to DHCP	IP settings issue. Check the router and inverter configuration. Consult your network IT support staff.
No Internet connection	Ping to google.com failed. Connect a laptop and check for internet connection. If internet access is unavailable, contact your IT admin or your internet provider.

Additional troubleshooting

1. Check that the modem or hub/router is functioning properly.

2. Check that the connection to the internal connector on the communication board is properly done.
3. Check that the selected communication option is properly configured.
4. Use a method independent of the SolarEdge device to check whether the network and modem are operating properly. For example, connect a laptop to the Ethernet router and connect to the Internet.
5. Check whether a firewall or another type of network filter is blocking communication.

Troubleshooting SolarEdge Power Optimizers

Malfunction	Possible cause and corrective action
Pairing failed	• Power Optimizers are in shade • If you connect the inverter to the Monitoring platform, retry pairing remotely when there is adequate sunlight. Make sure to leave the inverter P/I/O switch ON and that S_OK appears in the status screen.
PV string Voltage is 0V	Power Optimizer output is disconnected. Connect all Power Optimizer outputs.
PV string voltage not 0V but lower than number of Power Optimizers	Power Optimizers are not connected in the PV string. Connect all Power Optimizers. Panels not connected properly to the Power Optimizer inputs (not applicable to smart panels) Connect the panels to the power optimizer inputs. PV string reverse polarity Check PV string polarity using a voltmeter and correct if needed.

Malfunction	Possible cause and corrective action
PV string voltage is higher than the number of Power Optimizers 1	Extra Power Optimizer(s) connected in the PV string (not applicable to smart panels) Check if an extra Power Optimizer is connected in the PV string. If not, proceed to the next solution. A panel is connected directly to the PV string, without a Power Optimizer (not applicable to smart panels) Verify that only power optimizers are connected in the PV string and that no panel outputs are connected without a Power Optimizer. If the problem persists, proceed to the next step. Power Optimizer malfunction 1. Disconnect the wires connecting the power optimizers in the PV string. 2. Measure the output voltage of each Power Optimizer to locate the power optimizer that does not output a 1V safety Voltage. If a malfunctioning Power Optimizer is located, check its connections, polarity, panel, and voltage. 3. Contact SolarEdge Support. Do not continue before finding the problem and replacing the malfunctioning Power Optimizer. If a malfunction cannot be bypassed or resolved, skip the malfunctioning Power Optimizer, to connect a shorter PV string.

¹Warning: If the measured voltage is too high, the installation may not have a safe low voltage. PROCEED WITH CARE! A deviation of +/- 1% per PV string is reasonable. Si la tension mesurée est trop élevée, l'installation pourrait ne pas avoir une basse tension sécuritaire. PROCÉDEZ AVEC PRÉCAUTION! Une déviation de +/- 1 % par chaîne PV est raisonnable.

Troubleshooting battery alerts

The SolarEdge Nexis Battery Stack consists of one to four Battery Blocks and a Battery Link.

Alerts are divided into several levels:

- Battery stack level alert
- Battery Link alert
- Battery Block alert - with an indication of which block is at fault and where it is in the stack

Alerts are presented on the Monitoring platform, the SolarEdge Go mobile app, and on SolarEdge's API.

Alerts

#	Alert name	Description	Installer action	Comments
1	Battery DC wiring error	When DC "+" and "-" wiring between the battery and the inverter are crossed, the system detects, "There is a DC wiring error with the battery".	Happens during system commissioning, and the installer needs to fix the wiring	Battery Stack Level Alert: Designed to easily resolve installation errors during system installation.
2	Battery is NOT communicating	Indicates the battery is not communicating with the Inverter.	Check the communication wiring.	Battery Stack Level Alert
3	Battery Turned Off	Each battery stack has an On-Off switch (the same button as DC disconnect). "Battery turned off and cannot be charged/discharged".	Turn the battery On/Off switch to On.	Battery Stack Level Alert: Reduces the risk of battery drain if the installer forgets to turn the battery back on before leaving the site.
4	Battery Stack Failure	Indicates that all the Battery Blocks in the stack are at fault or the Battery Link is at fault and the battery stack can't charge or discharge.	Contact SolarEdge support.	Battery Stack Level Alert
5	Battery Link Fault	Indicates the Battery Link has a failure.	Contact SolarEdge support; the Battery Link may need replacing.	Battery Link Level Alert

#	Alert name	Description	Installer action	Comments
6	Battery Link Fuse Burnout	Indicates the Battery Link protective fuses (2 units on DC+ & DC-) burnout.	Understand the source of the fuse burnout, and once all OK, replace fuses from the Support Kit.	Battery Link Level Alert
7	Battery Link Fan Failure	Indicates the fans in the Battery Link are at fault, and the battery stack active cooling system is not working.	Contact SolarEdge support, the Battery Link fans may need replacing (Support Kit)	Battery Link Level Alert: The battery stack remains fully operational (charge/discharge). It may enter power derating if the Battery Blocks heat up.
8	Battery Block # Fault	Indicates a failure in a specific Battery Block, including its location within the stack.	Contact SolarEdge support; the Battery Block may need replacing.	Battery Block Level Alert: If the Battery stack contains multiple Battery Blocks, it remains operational (charge/discharge) with derated Energy and Power (minus 4.9 kWh & 3.5 kW).
9	Battery Block # Alarm	An alarm, unlike fault, is an event that can be resolved on its own once battery/system conditions change. Indicate that a specific Battery Block is in alarm (with indication on its location within the stack).	If the alarm does not resolve itself, or repeats itself several times, contact SolarEdge support for further investigation.	Battery Block Level Alert: If the battery stack contains multiple Battery Blocks, it remains operational (charge/discharge) with derated Energy and Power (minus 4.9 kWh & 3.5 kW)

#	Alert name	Description	Installer action	Comments
10	Battery Block # DC-DC Fault	Indicates that a specific Battery Block has DC-DC power board failure (with indication on its location within the Stack).	Contact SolarEdge support; the DC-DC power board (Support Kit) may need replacing.	Battery Block Level Alert: If the battery stack contains multiple Battery Blocks, it remains operational (charge/discharge) with derated Energy and Power (minus 4.9 kWh & 3.5 kW)
11	Battery Block # is below minimum SOE	Indicates that a specific Battery Block entered power saving mode because it reached its minimum SOE level and failed to be charged.	Contact SolarEdge support	Battery Block Level Alert: If the battery stack contains multiple Battery Blocks, it remains operational (charge/discharge) with derated Energy and Power (minus 4.9 kWh & 3.5 kW)
12	Battery Block # is at Lockout	Indicates that a specific Battery Block entered lockout status to protect itself.	Contact SolarEdge support	Battery Block Level Alert: If the battery stack contains multiple Battery Blocks, it remains operational (charge/discharge) with derated Energy and Power (minus 4.9 kWh & 3.5 kW)

SolarEdge Nexis IslandDER troubleshooting

Malfunction	Possible root cause and course of action
During on-grid operation, the SolarEdge Nexis IslandDER communicates successfully, but transitions to off-grid fail.	The SolarEdge Nexis IslandDER is not receiving 12V power. Verify that the polarity of the 12V wire in the inverter–IslandDER RJ45 cable is correct.

Support

Return merchandise authorization

A return merchandise authorization (RMA) enables the following:

- Replace a SolarEdge Nexis Inverter
- Replace earlier SolarEdge inverter models—such as Home Hub and Home Wave—in sites that use P- or S-Series power optimizers, which provide backward compatibility.
- 5 and 6kw inverter power models are supported by the RMA

Support contact information

If you have technical problems with SolarEdge products, contact <https://www.solaredge.com/us/support>.



Before contacting SolarEdge support, have the following information ready:

- The model and serial number of the inverter
- The error displayed in the SolarEdge Go mobile app, on the Monitoring Platform, or by the LEDs (if available).
- The system configuration information including the type and number of panels connected, and the number and length of strings.
- The communication method to the SolarEdge server, if the site is connected. The product's software version appears in the status screen.