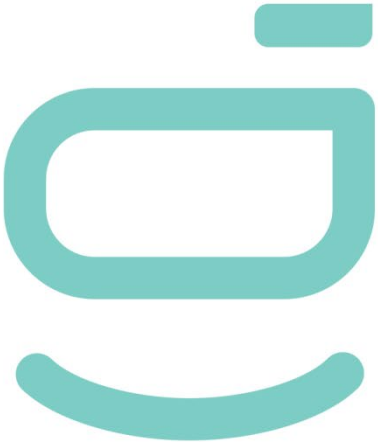
SigenStor Home Installation Guide (US)



Version: 08
Release date: 2026-09-21



Caution

- Trained or experienced electrical personnel are required to operate the equipment.
- Operators should be familiar with national and local laws, regulations, and standards, and the compositions and operating principles of relevant systems.
- Please read carefully the operating requirements and precautions in this document and "Important Notice" before operating. Failure to do so may result in damage to the equipment that is not covered by the warranty.
- Please consult with the owner for expansion requirements (for example, adding battery packs, Sigen EV DC Charging Module etc.). before operating. If any, please reserve necessary expansion space and cable length during installation.

1 System Introduction

1.1 SigenStor-A-B Model Description

SigenStor-A-B



SSA1SF00020

SN	Definition	Description
1	Brand	Sigenergy
2	A[1]	AC Input/Output Power (at 240 / 120 Va.c.) or (at 208 / 120 Va.c.) • 3.8: The rated power is 3.8 kW, Max.Continuous Currentis is 16 A • 4.8: The rated power is 4.8 kW, Max.Continuous Currentis is 20 A • 5.7: The rated power is 5.7 kW, Max.Continuous Currentis is 24 A • 7.6: The rated power is 7.6 kW, Max.Continuous Currentis is 32 A • 9.6: The rated power is 9.6 kW, Max.Continuous Currentis is 40 A • 11.4: The rated power is 11.4 kW, Max.Continuous Currentis is 47.5 A • 11.5: The rated power is 11.5 kW, Max.Continuous Currentis is 48 A
3	B[2]	Battery energy

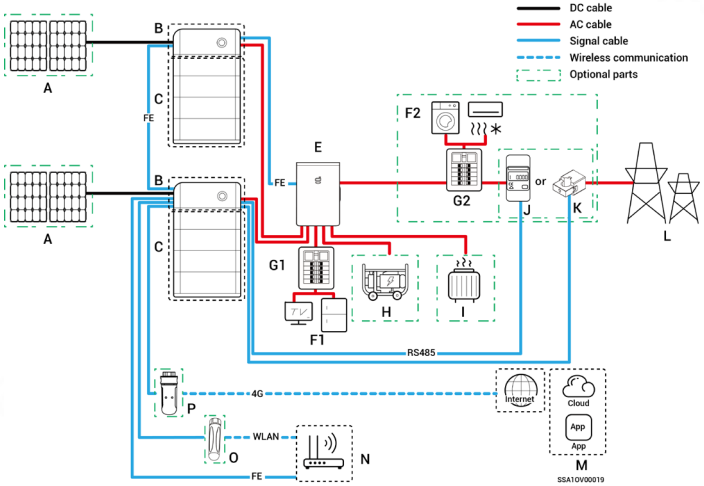
Note [1]: The rated power must match that of the Sigen inverter.

Note [2]:

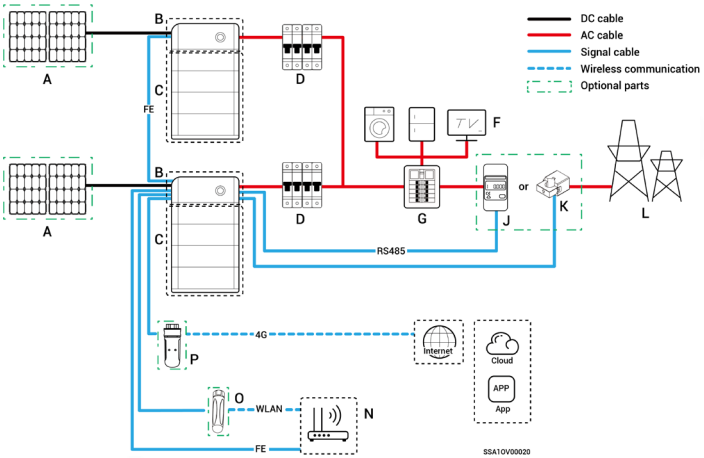
B (Battery Energy)	Number of Configured SigenStor BATs	
	SigenStor BAT 6.0 US	SigenStor BAT 9.0 US
6.02	1	0
9.04	0	1
12.04	2	0
15.06	1	1
18.08	0	2
21.08	2	1
24.10	1	2
27.12	0	3
30.12	2	2
33.14	1	3
36.16	0	4
39.16	2	3
42.18	1	4
45.20	0	5
48.20	2	4
51.22	1	5
54.24	0	6

1.2 Introduction to system wiring

Backup system wiring diagram



Non-backup system wiring diagram



Tips

It is recommended to use Fast Ethernet and WLAN for communication with inverters. WLAN supports only the 2.4 GHz band. When free 4G traffic of CommMod runs out, users must replace an SIM card.

S/N	Equipment/component	Model/version	Function specification
A	PV module	-	-
B	SigenStor EC	SigenStor EC SP US SigenStor EC 11.4 SP US	Inverter; it can be used in photovoltaic energy storage scenarios and needs to be used together with PV modules and.
C	SigenStor BAT	SigenStor BAT 6.0/9.0 US	Battery pack; it can store electric energy. Supports multiple models of batteries to be used together.
D	AC switch	–	The rated voltage of the AC switch connected to each inverter should be ≥ 240 Va.c., and the rated current is recommended: • When the Max.Continuous Currentis 16 A is checked on the SigenStor EC SP US / SigenStor EC 11.4 SP US nameplate, the circuit breaker is rated at 20 A. • When the Max.Continuous Current is 20 A is checked on the SigenStor EC SP US / SigenStor EC 11.4 SP US nameplate, the circuit breaker is rated at 25 A. • When the Max.Continuous Current is 24 A is checked on the SigenStor EC SP US / SigenStor EC 11.4 SP US nameplate, the circuit breaker is rated at 30 A. • When the Max.Continuous Currentis 32 A is checked on the SigenStor EC SP US / SigenStor EC 11.4 SP US nameplate, the circuit breaker is rated at 40 A. • When the Max.Continuous Currentis 40 A is checked on the SigenStor EC SP US / SigenStor EC 11.4 SP US nameplate, the circuit breaker is rated at 50 A. • When the Max.Continuous Currentis 47.5/48 A checked on the SigenStor EC SP US / SigenStor EC 11.4 SP US nameplate, the circuit breaker is rated at 60 A.
E	Sigen LoadHub	Sigen LoadHub	• It's applicable for PV storage and pure storage applications to facilitate data acquisition and monitoring, off-grid backup power switching, Generator control, energy management; it must be used with SigenStor BAT and SigenStor EC SP US. • Sigen LoadHub is a must-have for backup system wiring.
F	Home loads	-	In a backup system wiring, F1 represents the backup home loads, and F2 represents the non-backup home loads.
G	Electric Panel	-	• In the backup system wiring, G1 is the backup Electric Panel; G2 is the non-backup Electric Panel. • The rated voltage of the AC switch of the distribution panel should be not less than 240 Va.c., And the rated current is recommended: that is, not less than the maximum output current of an inverter × the number of inverters in parallel connection × 1.25[1].

Note [1]: The maximum output current of an inverter can be found in its respective data sheet.

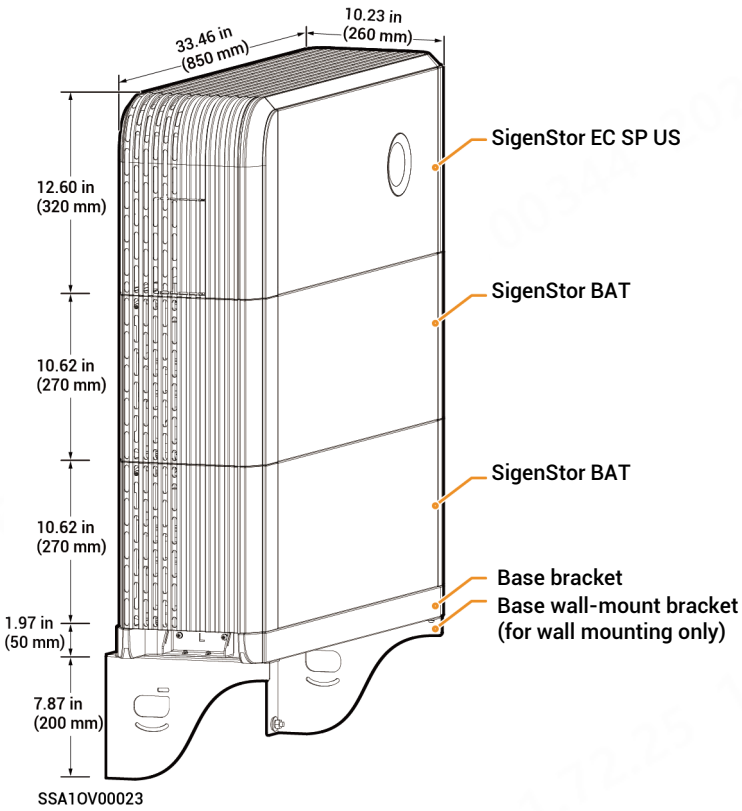
S/N	Equipment/component	Model/version	Function specification
H	Generator	-	As a backup energy source for long-term off-grid applications, it can work in tandem with the Sigen LoadHub to provide a smooth transition between PV, storage and diesel generation.
I	Smart loads	-	All the power equipment in the owner's home can be connected as smart loads. To ensure that this product maximizes the benefits to users, it is recommended that the high-power equipment be connected as smart loads (third part invertor heat pumps, pool heaters, clothes dryers, etc.), which can be cut off when the energy storage system has low power. Other low-power equipment are connected as home loads (lights, routers, etc.)
J	Power sensor	Sigen Sensor SP CT250 US (DTSU666) Sigen Sensor SP CT200-DH (SDM630MCT ETL)	Data acquisition for grid connection points enables zero-power grid connection. Power sensors are required for non-backup system wiring and partial backup system wiring + zero-power grid-connected control.
K	External CT	CT-EC	Data acquisition for grid connection points enables zero–power grid connection. The whole house backup power network does not require configuration.
L	Power grid	-	-
M	App	mySigen	Android 6.0 or later iOS 12.0 onwards
N	Router	-	To be used for FE/WLAN communication.
O	WLAN antenna	-	To be used for WLAN communication.
P	Communication module	Sigen CommMod US Sigen CommMod US 01	To be used for 4G communication.

Tips

For further information on the installation and wiring of Sigen LoadHub, refer to “Sigenergy LoadHub Installation Guide”.

1.3 Appearance and Dimensions

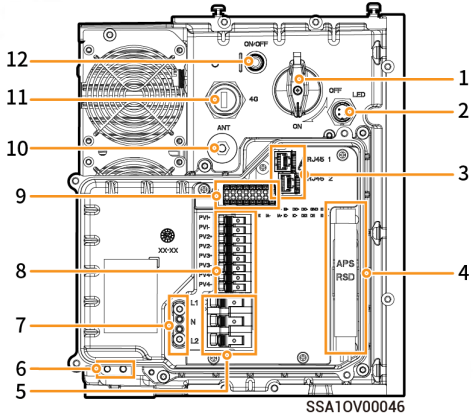
Inverter and battery pack



SSA10V00023

1.4 Port Descriptions

SigenStor EC SP US Left View



SSA10V00046

S/N	Marking	Name
1	-	RSD Initiator
2	LED	Decorative cover light strip connector
3	RJ45 1/RJ45 2	Network interface
4	RSD	Rapid Shutdown Device
5	L1/N/L2	AC terminal block
6	-	Ground screw
7	-	Grounding aluminum busbar
8	PV1+/PV1-/PV2+/PV2- PV3+/PV3-/PV4+/PV4-	DC terminal block
9	-	Signal terminal block
10	ANT	Antenna port
11	4G	CommMod port
12	ON/OFF	On-Off Switch

2 Pre-installation Check

- Check whether the components are entirely supplied against the packing list and whether the appearance is in good condition. For any problem, contact your sales representative.
- Parts and accessories supplied with the packing box are personal assets of the owner and must not be taken away from the installation site.
- Check personal protective equipment and installation tools to ensure that they are complete; If not, please make them up.
- Check and ensure the completeness of personal protective equipment and installation tools; replenish if necessary.

Protective equipment


Safety hat


Goggles

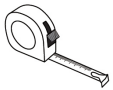

Dust mask


Protective gloves


Insulating gloves

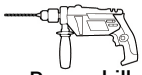

Insulating shoes

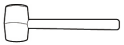
Installation tool


Tape measure


Level


Marker


Power drill


Rubber mallet

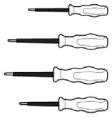

Scissors

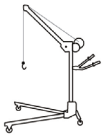

Cable tie


Wire stripper


Crimping pliers


Vacuum cleaner


Insulation screwdriver set

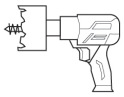

(Optional) Lift (used with ≥ 3 SigenStor BAT)

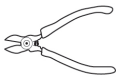

(Optional) Stainless steel covered plastic steel rope (load capacity: ≥ 551.16 lb (250 kg) Diameter: 0.12 in (3 mm))


Insulation sleeve set

Torque socket wrench

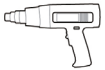

(Optional) Lock (Lock bar diameter ≤ 0.20 in (5 mm))


Hole drill (Diameter: 1.67–1.72 in (42–44 mm))


Wire cutter


Cold terminal crimping pliers


Network cable pliers


Heat gun


Heat shrinkable sleeve

Installer-provided cable

Caution

- The specifications of the Installer-provided cable must comply with the cable regulations and standards of the country or region standards.
- L1, L2, N and PE should be connected to other equipment in sequence without mixing.

S/N	Cable name	Recommended specifications
1	AC cable	Outdoor four-core copper cable (L1, L2, N, PE) • When the SigenStor EC SP US / SigenStor EC 11.4 SP US nameplate is checked with a maximum continuous current of 16 A, the core conductor cross-sectional area: ≥ 12 AWG (3 mm²) • When the SigenStor EC SP US / SigenStor EC 11.4 SP US nameplate is checked with a maximum continuous current of 20 A, the core conductor cross-sectional area is ≥ 10 AWG (5 mm²) • When the SigenStor EC SP US / SigenStor EC 11.4 SP US nameplate is checked with a maximum continuous current of 24 A, the core conductor cross-sectional area: ≥ 10 AWG (5 mm²) • When the SigenStor EC SP US / SigenStor EC 11.4 SP US nameplate is checked with a maximum continuous current of 32 A, the core conductor cross-sectional area: ≥ 8 AWG (8 mm²) • When the SigenStor EC SP US / SigenStor EC 11.4 SP US nameplate is checked with a maximum continuous current of 40 A, the core conductor cross-sectional area: ≥ 8 AWG (8 mm²) • When the SigenStor EC SP US / SigenStor EC 11.4 SP US nameplate is checked with a maximum continuous current of 47.5/48 A, the core conductor cross-sectional area: 6 AWG (13 mm²) Outer diameter: 0.2 – 0.35 in (5–9 mm) Cable temperature: 90 °C or 105 °C (194 °F or 221 °F)
2	Signal cable	Outdoor shielded twisted pair Cross-sectional area of core conductor: 20–18 AWG (0.5–0.75mm²) Outer diameter: 0.18–0.25 in (4.5–6.5 mm) Cable length: ≤ 3280.84 ft (1000 m) Baud rate: ≤ 9600 bps
3	Network cable	Outdoor eight-conductor shielded twin-twisted pair cable Cross-sectional area of conductor: 26–24 AWG (0.13–0.20 mm²) Outer diameter: 0.16–0.30 in (4–7.5 mm) Single cable length: ≤ 328.08 ft (100 m)[1]

S/N	Cable name	Recommended specifications
4	DC cable	Outdoor photovoltaic cable Cross-sectional area of core conductor: 11–9 AWG (4–6 mm²) Outer diameter: 0.18–0.31 in (4.5–7.8 mm) Cable temperature: 90°C (194°F)

Note [1]: The cable length should be limited for good communication. Too long cable degrades the communication effect.

Tips

Recommended specifications for cables connecting power sensors to Electric Panel and to the grid, as well as step-by-step instructions for wiring, can be found in the accompanying documentation for each respective model.

3 Site Requirements

Tips

- Before installing the equipment, please be sure to carefully read the following installation requirements. The company will not be liable for any functional abnormalities or damages arising from the operation of the equipment if the installation requirements are not followed, even in cases leading to personal safety incidents.
- During actual installation, the selection of the installation location should comply with local regulations, firefighting regulations, and other relevant laws. The specific installation location planning should be subject to the installer or engineering, procurement, and construction (EPC) contracts.

Installation Environment

- Do not install the equipment in a smoky, flammable, or explosive environment.
- Avoid exposing the equipment to direct sunlight, rain, standing water, snow, or dust. It is suggested to install the equipment in a sheltered place. Take preventive measures in operating areas prone to natural disasters such as floods, mudslides, earthquakes, and typhoons.
- Do not install the equipment in an environment with strong electromagnetic interference.
- The temperature and humidity of the installation environment should meet equipment requirements.
- The equipment should be installed in an area that is at least 1640.42 ft (500 m) away from corrosion sources that may result in salt damage or acid damage. Corrosion sources include but are not limited to seaside, thermal power plants, chemical plants, smelters, coal plants, rubber plants, and electroplating plants.
- In areas with good marine environments (such as California, where the nearshore salinity is ≤ 28 psu), the mounting distance of the device from the coastline can be appropriately relaxed to ≥ 656.17 ft (200 m).
- If the outer surface of the device is damaged, please repaint the device in time.

Installation Location

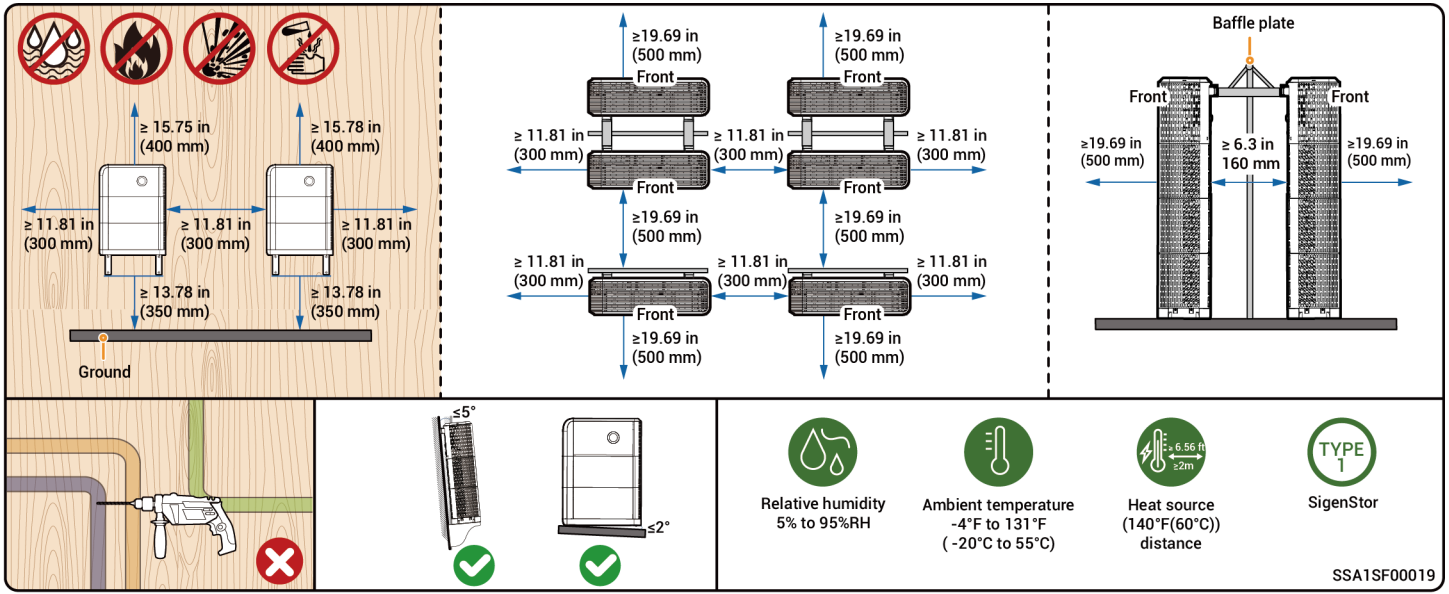
- Do not tilt the equipment or place it upside down. Ensure that the equipment is horizontally installed.
- Do not install the equipment in areas easily accessible to children.
- Do not install the equipment in a place with fire hazards or is prone to moisturizing.
- The equipment produces sound when it is operating. Please install the equipment in a place with appropriate distance at which there is no impact to daily work and life.
- Do not install the equipment in a sealed, poorly ventilated location without fire protection measures and inaccessible for firefighters.
- The equipment is hot when it is operating. If the equipment is installed indoors, please ensure good indoor ventilation and avoid significant indoor temperature rise by more than 37.4°F (3°C) while the equipment is operating. Otherwise, the equipment will be derated.
- Do not install the equipment in mobile scenarios such as recreational vehicles, cruise ships, and trains.
- It is recommended to install the equipment in a location where you can easily access, install, operate, and maintain it, and view the indicator status.
- Do not place the equipment in the vehicle passage when installed in a garage to avoid collisions.
- The minimum installation volume is 7.57 m^3 (267.33 ft^3).

Mounting surface

- Do not install the equipment on a flammable base.
- The installation base should meet the load-bearing requirement. Solid brick-concrete structures, wooden walls, concrete walls, and floors are recommended.
- The installation base should be flat, and the installation area should meet the installation space requirements.
- No plumbing or electrical alignments are allowed inside the installation base to avoid potential drilling hazards during equipment installation.
- The equipment base is made of aluminum. If the equipment is installed on a metallic substrate that is prone to electrochemical corrosion (such as high-chromium stainless steel, austenitic stainless steel, and nickel-plated steel), insulating gaskets must be fully installed between the equipment and the substrate. (Non-metallic insulating gaskets such as PC, PTFE, or PVDF can be used)

Tips

To ensure optimal performance of the device, it is suggested that the installation distance between the device and surrounding obstacles be planned with reference to the diagram. If the installation site is well-ventilated, the optimal solution may be deployed based on actual conditions.



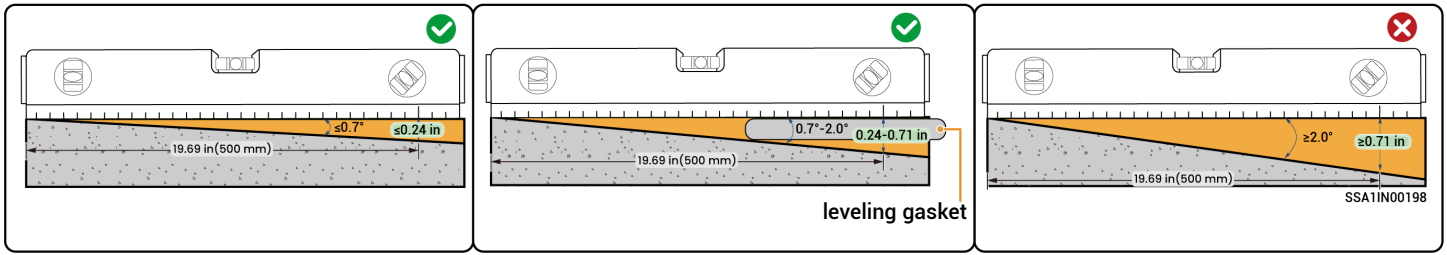
4 Installation of inverter and battery pack

Tips

- Up to six SigenStor BATs are supported for floor installation and up to two for wall installation.
- When installing three or more SigenStor BATs on the floor, use the Lift.
- Multiple SigenStor BATs can be installed onsite based on the actual configuration.
- If the floor is prone to stagnant water, please set up a waterproofing platform or install it on the wall.
- The equipment is heavy, do not slip off when handling the equipment to avoid the equipment falling and injuring the operator.
- SigenStor BAT is forbidden to be used after falling, please buy a new one.
- Do not drag the equipment during installation.
- This section uses a wooden wall as an example. To install the equipment onto other structures, use appropriate screws and tools.
- SigenStor-A-B is flood resistant in water depths of up to 1.97 inches (50 mm).

4.1 Floor Installation

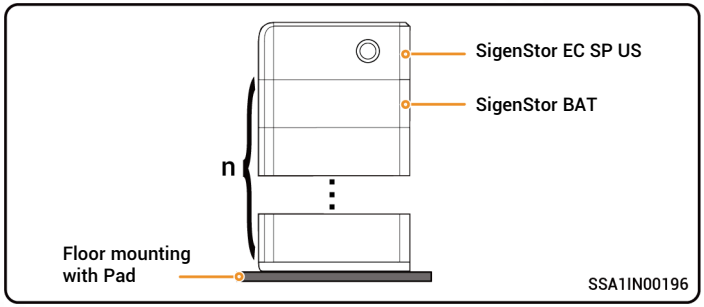
Ground requirements

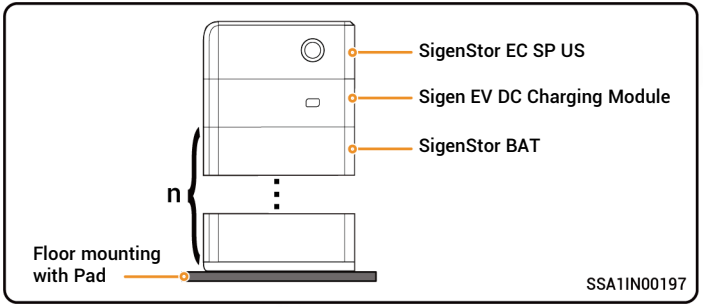


(Optional) Requirements for floor mounting with Pad

Tips

- When using floor mounting with pads, all requirements specified by the manufacturer must be met, and the maximum load limit shall not be exceeded.
- The floor mounting pad must have a thickness of ≥2 in (51 mm) and dimensions of ≥16 x 36 in (406 x 914 mm).
- The equipment must be placed in the center of the floor mounting pad to prevent it from tipping over or overturning.
- When the equipment is placed on the floor mounting pad, it must be stable, free from shaking, and there should be no risk of settlement, water accumulation, or mud buildup.
- If equipment is stacked ≤ 4 layers, either wall mounting or floor mounting may be used. If equipment is stacked > 4 layers, both wall mounting and floor mounting must be used simultaneously.





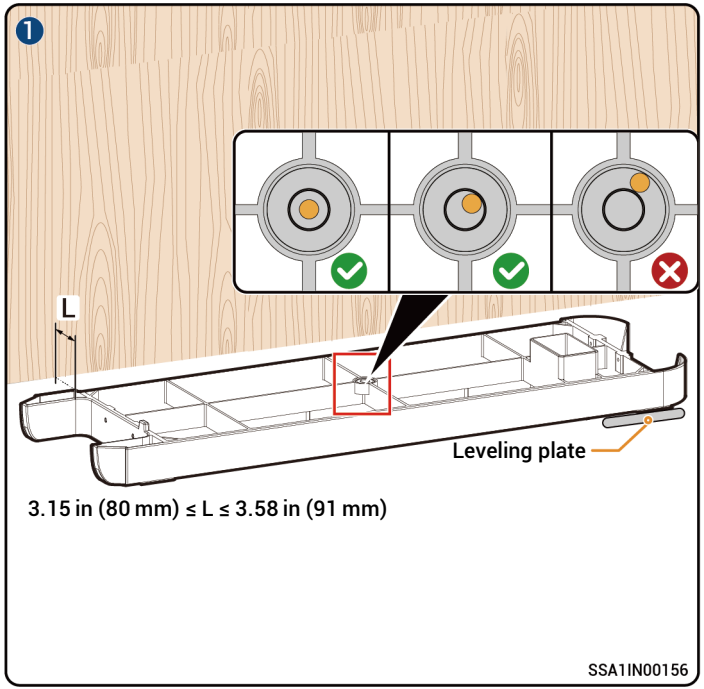
n (SigenStor BAT units)	Floor mounting with Pad bearing capacity requirements
1	317 lb (144 kg)
2	520 lb (236 kg)
3	723 lb (328 kg)
4	927 lb (420 kg)
5	1130 lb (513 kg)
6	1333 lb (604 kg)

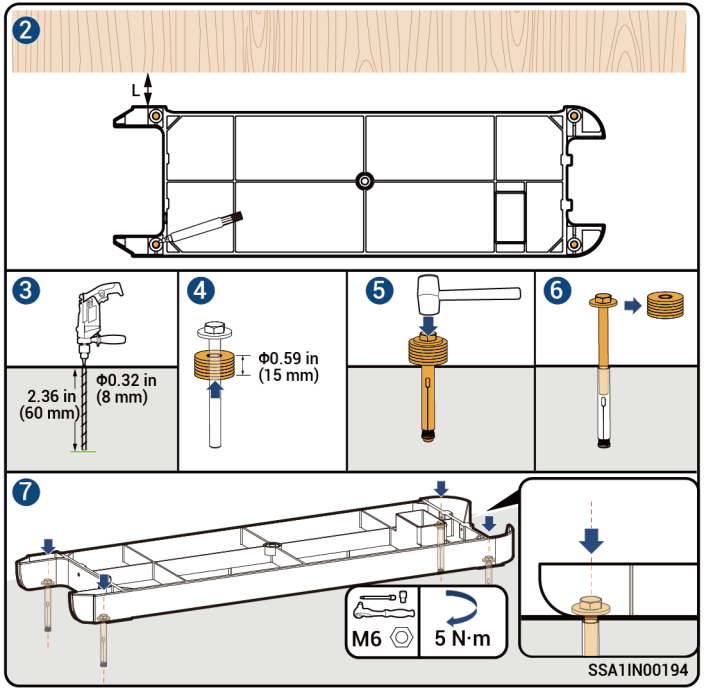
n (SigenStor BAT units)	Floor mounting with Pad bearing capacity requirements
1	430 lb (195 kg)
2	633 lb (287 kg)
3	836 lb (379 kg)
4	1040 lb (472 kg)
5	1243 lb (564 kg)

1

Tips

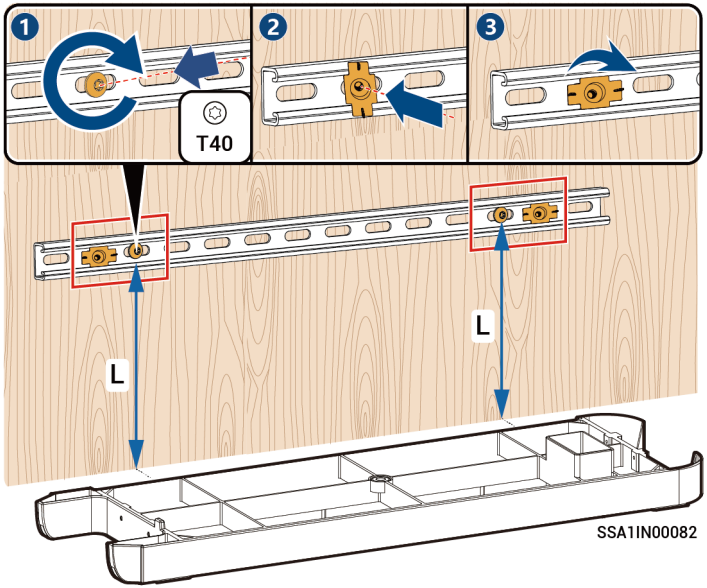
- If the bubble level is not centered, use a Leveling plate to adjust.
- If the installer opts for pipes with a large bending radius, the recommended wall clearance may not be sufficient for the pipe installation, in which case the customer will need to purchase elevation brackets separately.





2

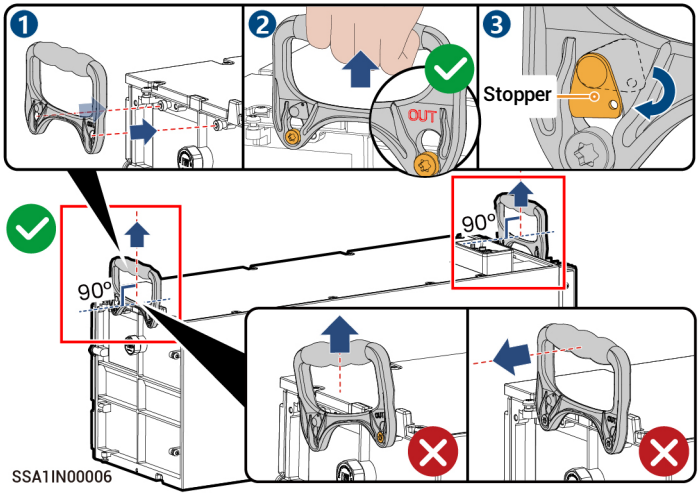
SigenStor BATunits	L (Length from Controller wall-mount bracket of inverter to ground)
one	22.60 in (574 mm) to 22.87 in (581 mm)
two	33.23 in (844 mm) to 33.50 in (851 mm)
three	43.86 in (1114 mm) to 44.13 in (1121 mm)
four	54.49 in (1384 mm) to 54.76 in (1391 mm)
five	65.12 in (1654 mm) to 65.39 in (1661 mm)
six	75.75 in (1924 mm) to 76.02 in (1931mm)



3 Before installing the handle, please use a Torque socket wrench to measure the screws and confirm that the screws on Sigen BAT are securely tightened with a torque of 4.5 N·m (±0.45 N·m).

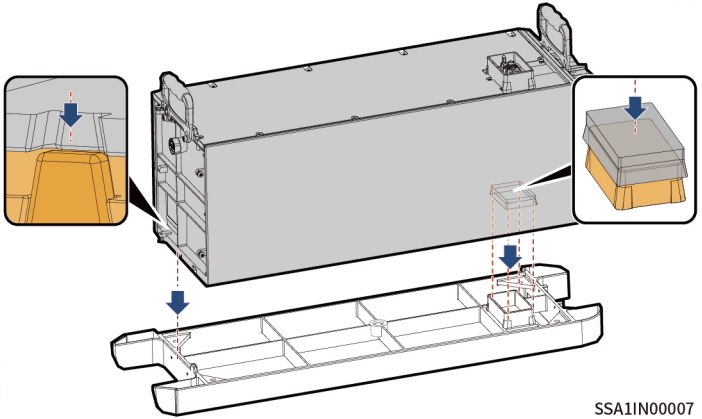
Caution

- Use the new handle supplied with the inverter for your installation operation.
- The "OUT" lettering on the handle must face outwards.
- Do not use a handle with stoppers that fell off or damaged for your installation operation. (Including but not limited to rust, paint peeling, deformation, and fracture)
- The handle is a personal asset of the owner. After use, it must be handed over to the owner for future use and must not be taken away from the installation site.
- The handle shall not be used more than 100 times. The handle that exceeds the use limits shall be scrapped.



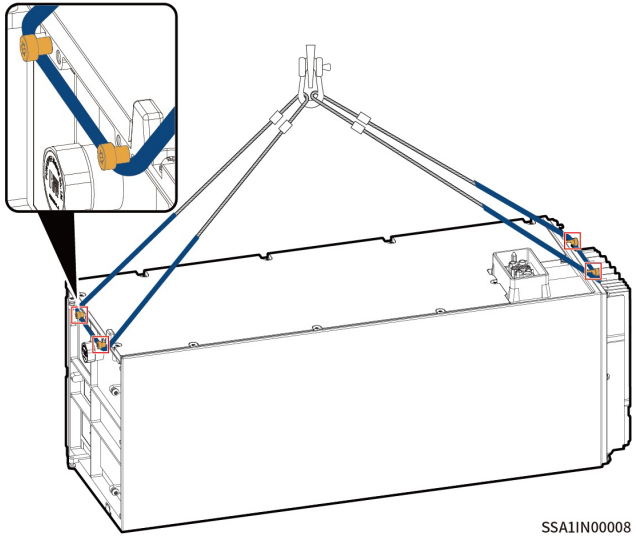
4 SigenStor BAT is kept horizontally and mounted vertically downwards.

SigenStor BAT≤ 2



SSA1IN00007

SigenStor BAT ≥ 3

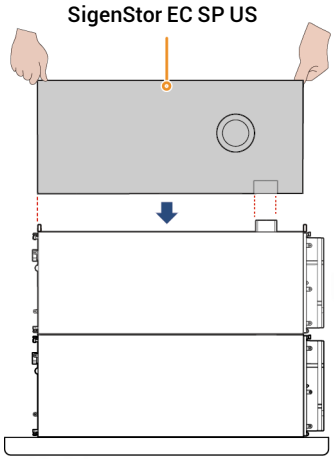


SSA1IN00008

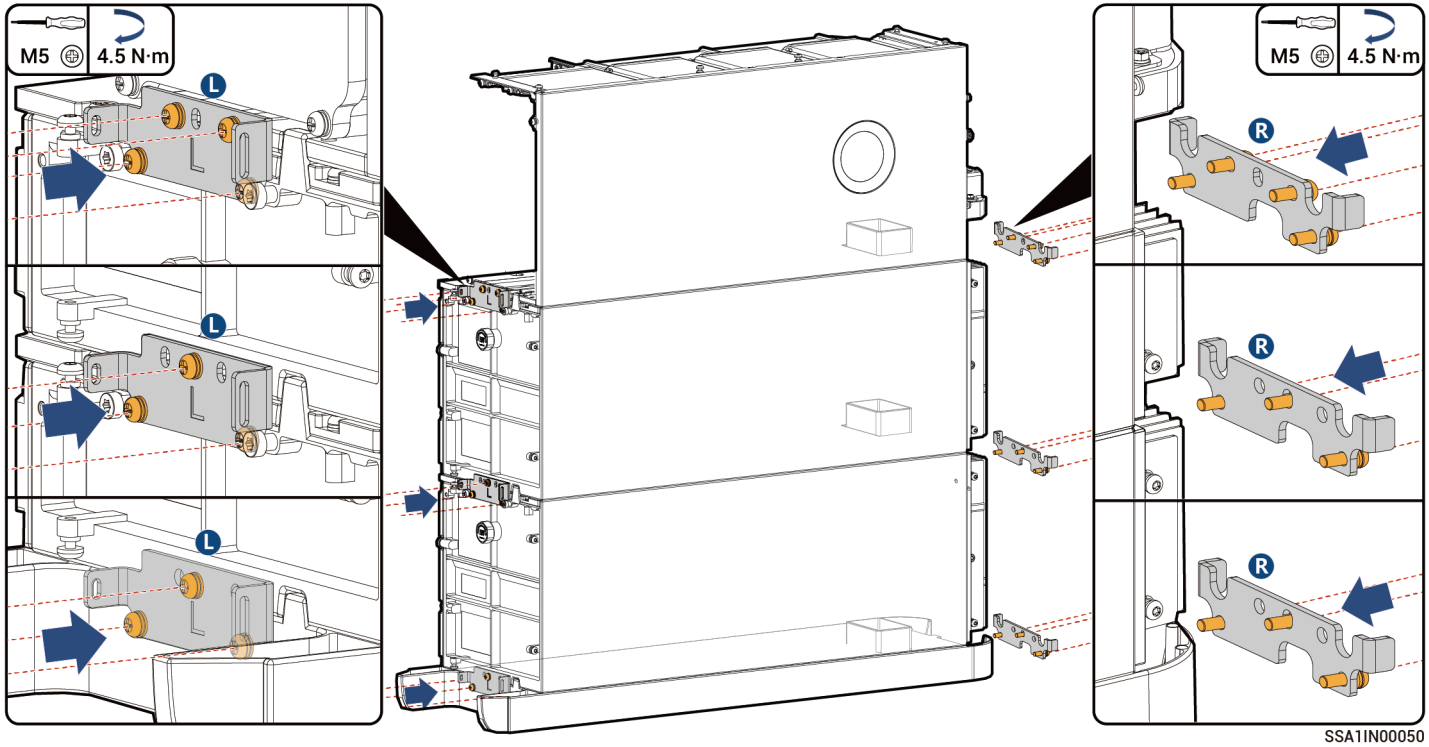
Tips

During lifting operations, the area where the sling comes in contact with the equipment should be wrapped with a protective layer to avoid damage to the equipment.

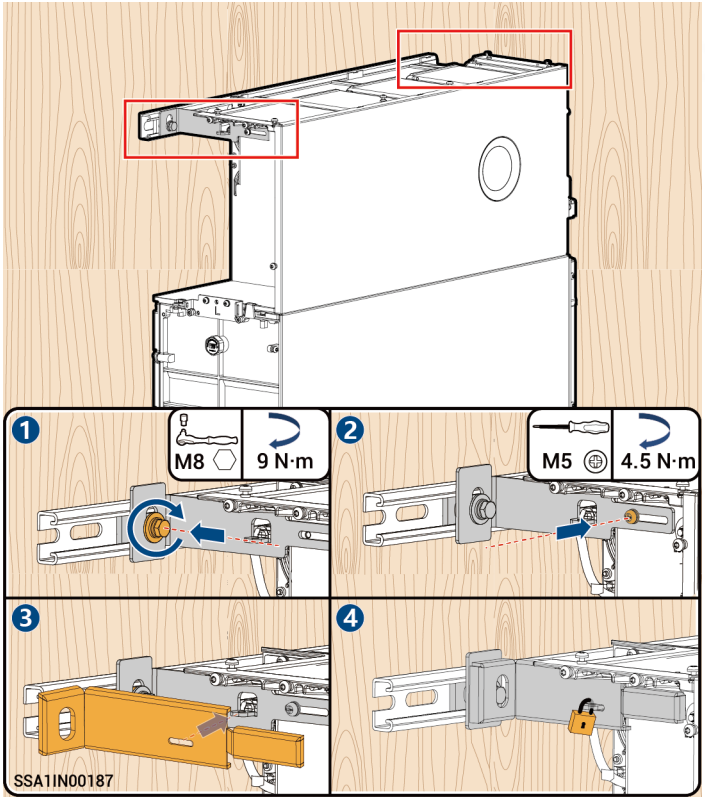
5 Arrange SigenStor EC SP US.



6

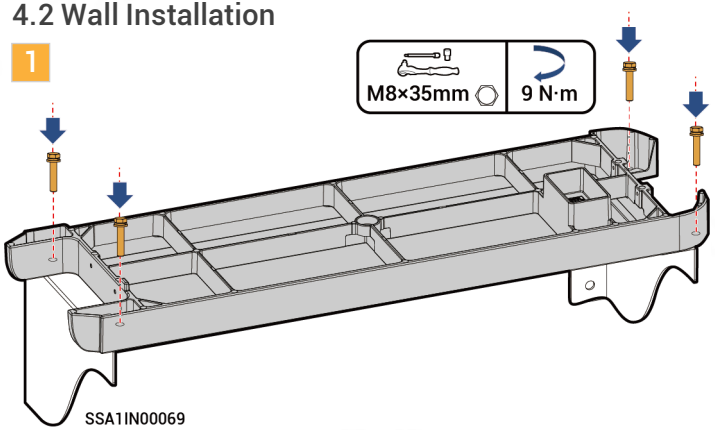


7 3 4 are optional steps. Simply installing the right-side inverter padlock can help prevent theft of the equipment.

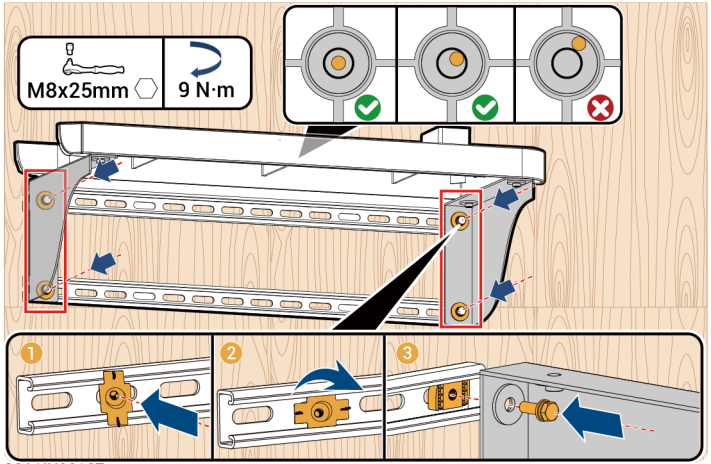


4.2 Wall Installation

1

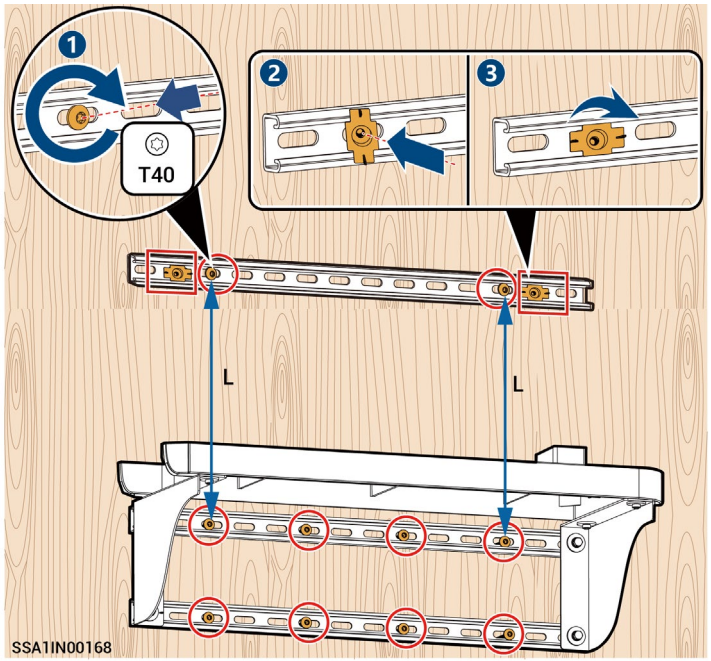


2



3

SigenStor BATunits	L (Length from Controller wall-mount bracket of inverter to Base wall-mount bracket)
one	23.70 in (602 mm) to 23.94 in (608 mm)
two	34.33 in (872 mm) to 34.57 in (878 mm)



4 For details about how to place the SigenStor BAT, see Steps 3 4 in Section 4.1 Floor installation.

5 For details about how to place the inverter, see Steps 5 in Section 4.1 Floor installation.

6 For the installation of the cascaded plate, please refer to Step 6 in Section 4.1 Floor Installation.

7 For the installation of the Controller wall fastener, please refer to Step 7 in Section 4.1 Floor installation.

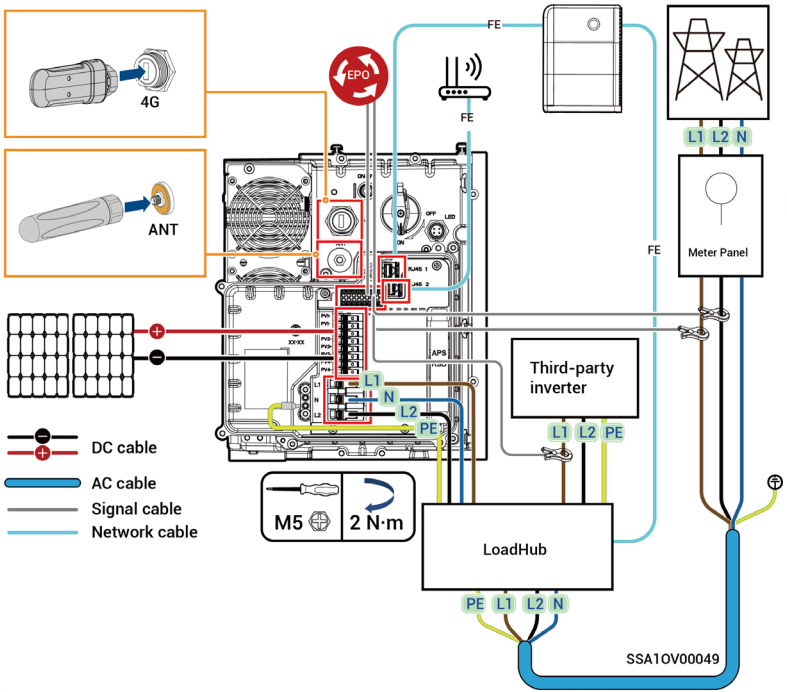
5 Cable Connection and Component Installation

Danger

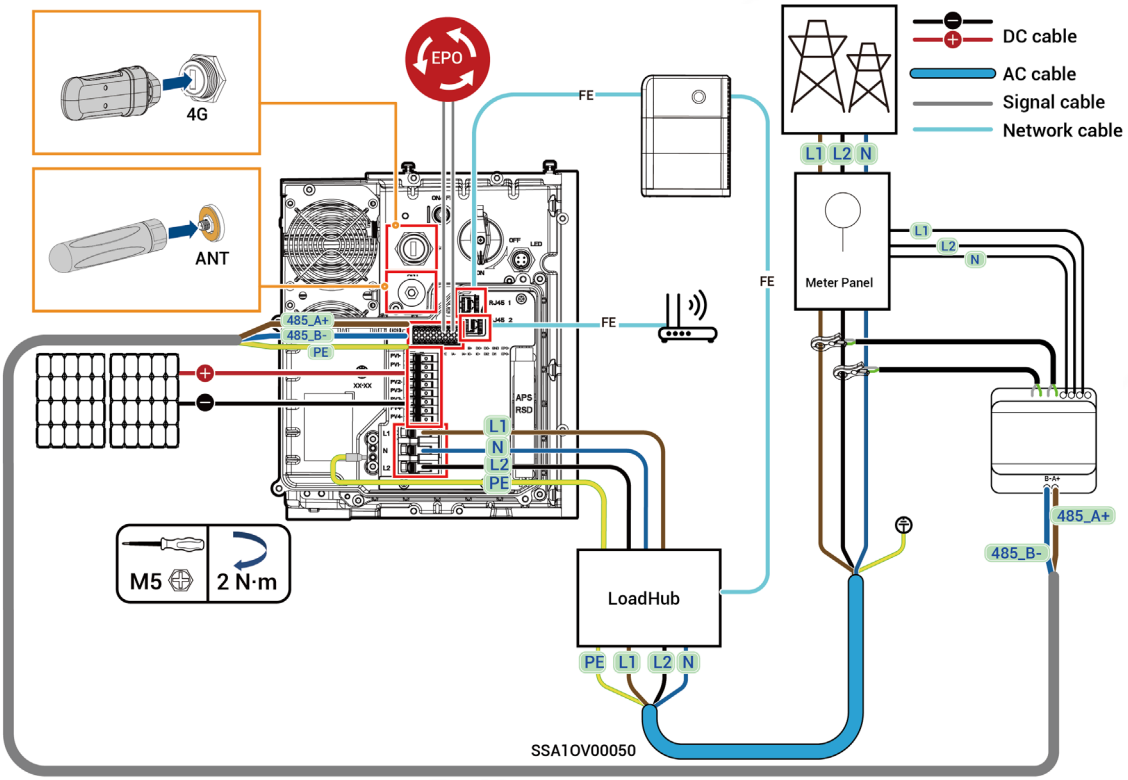
- Before connecting cables, ensure that RSD trigger switchis in the OFF state, and the front switch of the AC line is off.
- Do not perform operations on the equipment with power on. Before operation, please make sure all power supplies to the equipment have been disconnected, including but not limited to the grid side, inverter and diesel generator power switches.
- Do not leave construction residues, for example, cut cores of cables, in or around the equipment, such as, in terminals and in or around fans.

5.1 Connection Relationships

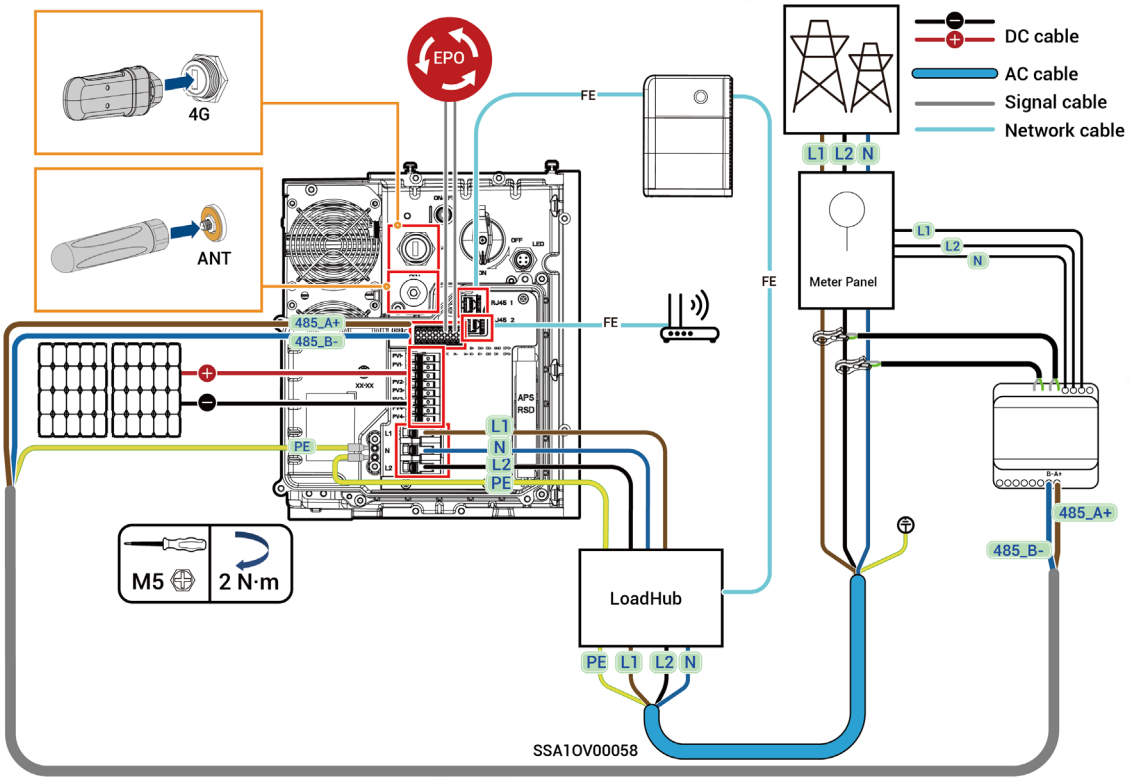
Option 1: Connect an external CT sensor



Option 2: Connect a power sensor
(Pin 2 of the signal terminal is PE)



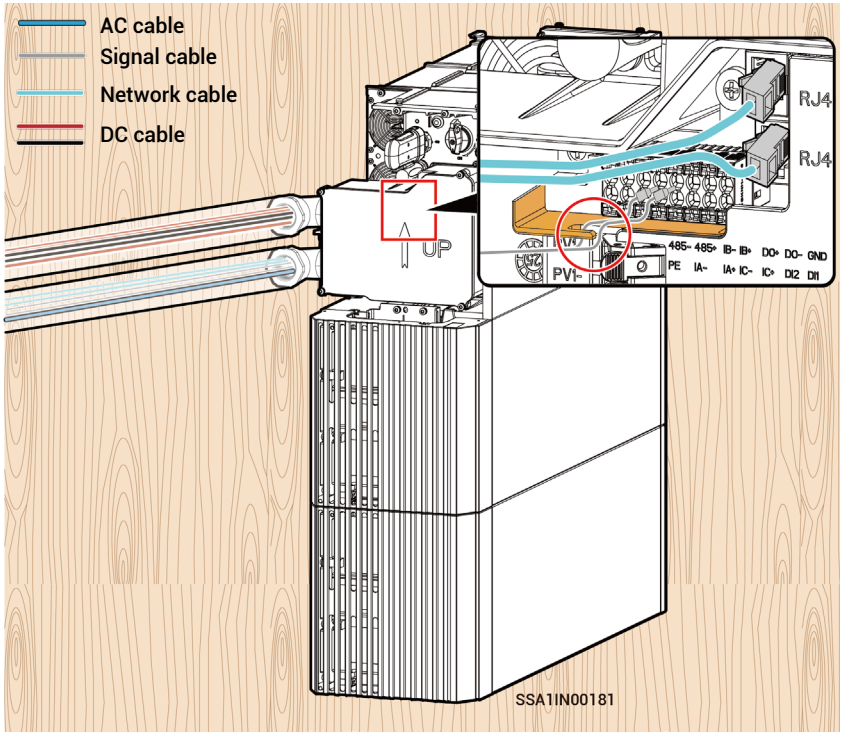
Option 3: Connect a power sensor
(Pin 2 of the signal terminal is GND)



5.2 Recommended Cabling installation

Tips

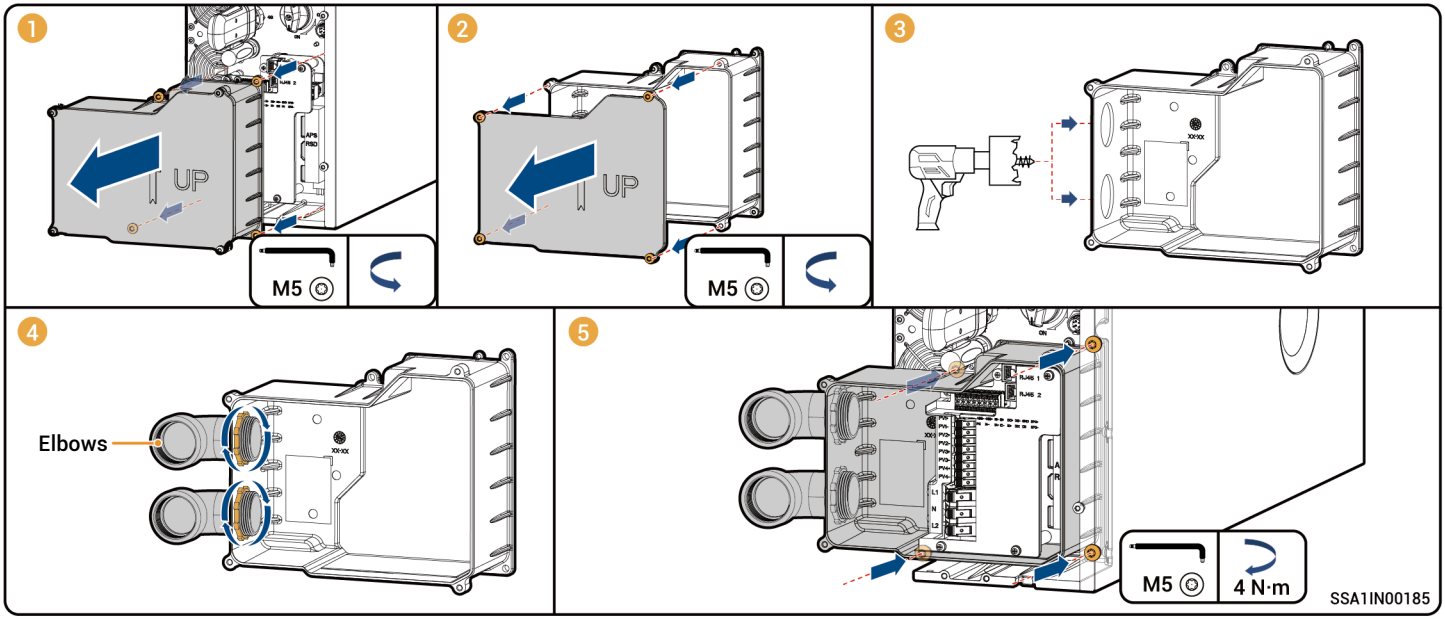
- The cable colors in the figure are used only to distinguish different lines. The cable colors are based on actual conditions.
- When pipe routing is used onsite, the recommended pipe diameter is at least ≥ 1 in (25.40 mm) or 1-1/4 in (31.75 mm).



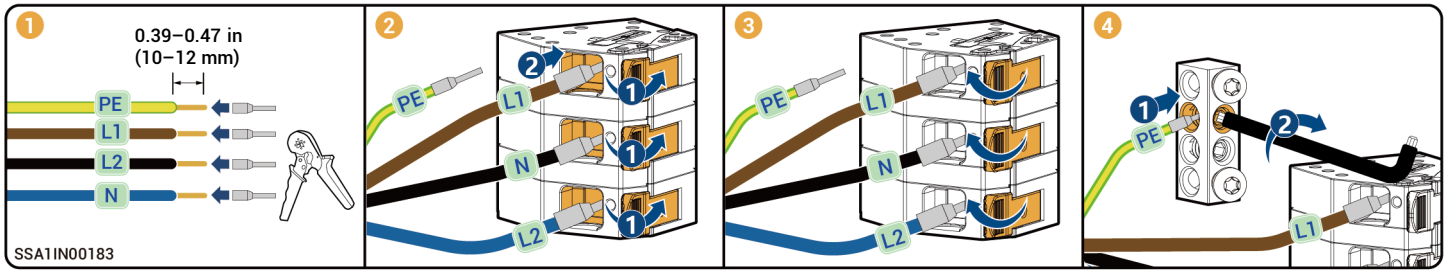
5.3 Junction box through pipe

Caution

- In step 3 determine the size of the hole on the side of the junction box based on the conduit size.
- The elbows in Step 4 must be prepared by users. Match the elbows with the hole size and take waterproof measures.



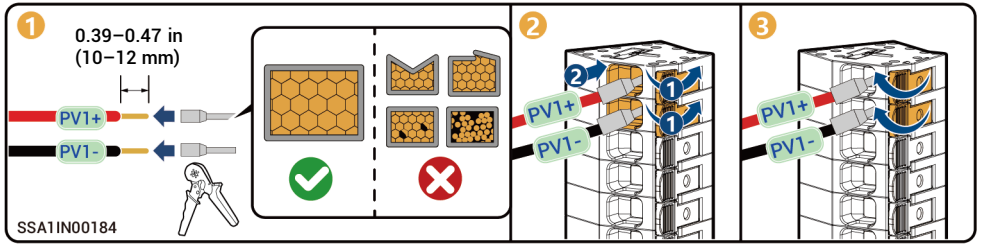
5.4 AC Cable Connection



5.5 DC cable Connection

Tips

- Please make sure that the circuit breaker on the PV side is electrically neutral before connection.
- The DC cable is connected to the inverter from the PV string.



5.6 Signal Cable Connection

Tips

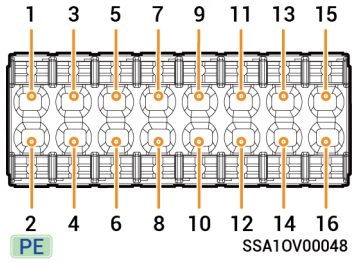
- CT sensor and power sensor have the same function. Only one of them can be connected. Do not connect CT sensor and power sensor at the same time.
- The CT sensor and power sensor needs to be purchased from our company's official channels.
- If you buy a CT sensor, you can refer to "5.7.2 CT sensor Signal Cable Connection" Connection for information on how to connect the signal cable.
- If you buy a power sensor, you can refer to "5.7.3 Power sensor RS485 Signal Cable Connection" Connection for information on how to connect the signal cable.
- The appearance and specific wiring of the CT sensor and power sensor can be found in the instruction manual delivered with the case.

5.6.1 Signal terminal introduction

Tips

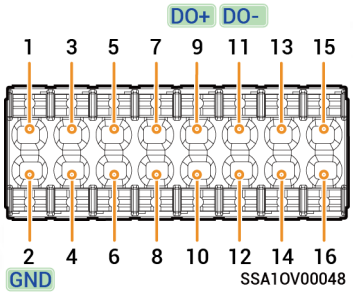
Signal terminals have two different Marking. Refer to the Marking on the device you received.

Marking 1
(Pin 2 of the signal terminal is PE)



Description	Pin Definition		Pin Number	Sigen Sensor SP CT250 US (DTSU666)	Sigen Sensor SP CT200-DH US (SDM630MCT ETL)
RS-485, used to connect a grid side power sensor.	485-	RS485 signal_B-	1	B	13
	485+	RS485 signal_A+	3	A	14
	PE	PE signal-shield ground	2	-	-
Used to connect an external CT sensor.	IA-	L1 connection point on the grid side CT-	4	-	-
	IA+	L1 connection point on the grid side CT+	6	-	-
	IB-	L2 connection point on the grid side CT-	5	-	-
	IB+	L2 connection point on the grid side CT+	7	-	-
	IC-	Third-party inverter connection point CT-	8	-	-
	IC+	Third-party inverter connection point CT+	10	-	-
(Reserved)	(Reserved)	(Reserved)	9	-	-
	(Reserved)	(Reserved)	11	-	-
Used to connect Sigen Backup switch.	MC+	12V+ Sigen Backup switch power supply	12	-	-
	GND	Common point for digital inputs	13	-	-
(Reserved) Digital input signal.	DI1	Digital input signal 1	14	-	-
The default factory setting is short-circuited.	EPO+	Emergency stop button+	15	-	-
	EPO-	Emergency stop button-	16	-	-

Marking 2
(Pin 2 of the signal terminal is GND)

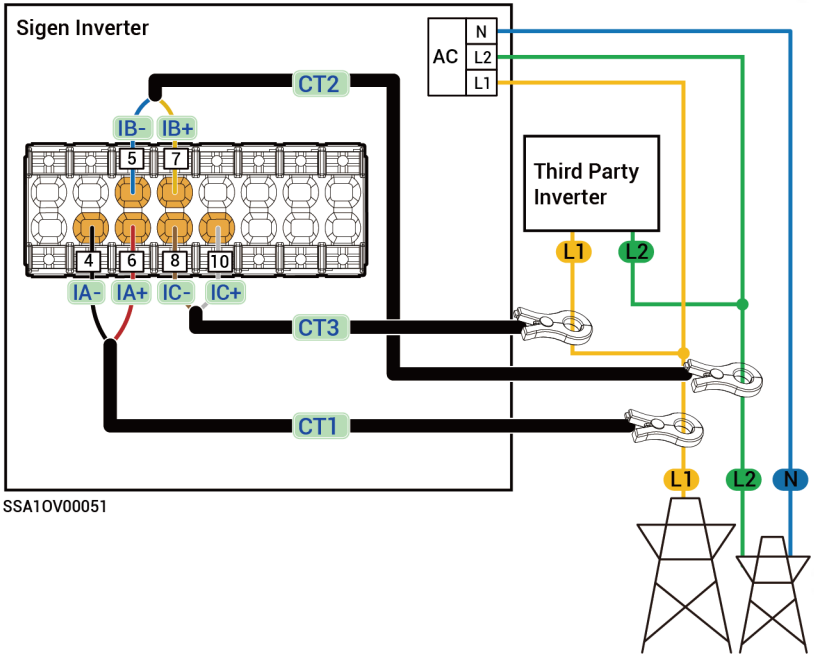


Description	Pin Definition		Pin Number	Sigen Sensor SP CT250 US (DTSU666)	Sigen Sensor SP CT200-DH US (SDM630MCT ETL)
RS-485, used to connect a grid side power sensor.	485-	RS485 signal_B-	1	B	13
	485+	RS485 signal_A+	3	A	14
Used to connect an external CT sensor.	IA-	L1 connection point on the grid side CT-	4	-	-
	IA+	L1 connection point on the grid side CT+	6	-	-
	IB-	L2 connection point on the grid side CT-	5	-	-
	IB+	L2 connection point on the grid side CT+	7	-	-
	IC-	Third-party inverter connection point CT-	8	-	-
	IC+	Third-party inverter connection point CT+	10	-	-
Supports a maximum signal voltage of 12 V and a signal current of 1 A. Connecting to third-party smart power equipment, such as switch controllers and heat pumps.	DO+	Digital output signal+	9	-	-
	DO-	Digital output signal-	11	-	-
Used to connect Sigen Backup switch.	MC+	12V+ Sigen Backup switch power supply	12	-	-
	GND	Common point for digital inputs	13	-	-
(Reserved) Digital input signal.	GND	Digital GND	2	-	-
	DI1	Digital input signal 1	14	-	-
The default factory setting is short-circuited.	EPO+	Emergency stop button+	15	-	-
	EPO-	Emergency stop button-	16	-	-

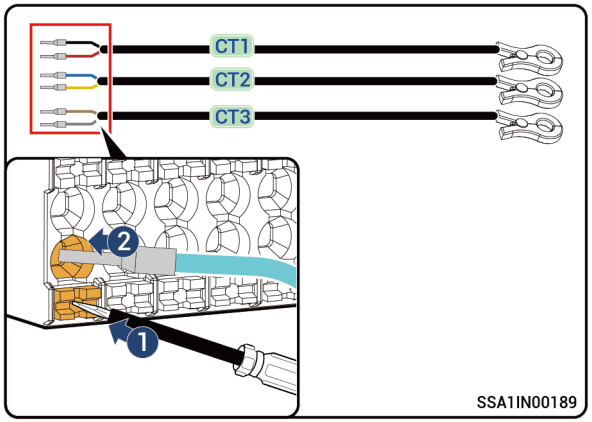
5.6.2 CT sensor Signal Cable Connection

Tips

- Do not perform this step if a power sensor is connected.
- The CT cable length is 19.69 ft (6 m). Please configure according to the actual situation.



SSA1OV00051



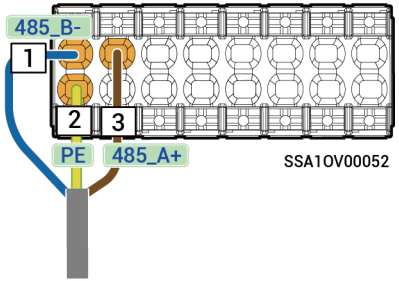
SSA1IN00189

5.6.3 Power sensor RS485 Signal Cable Connection

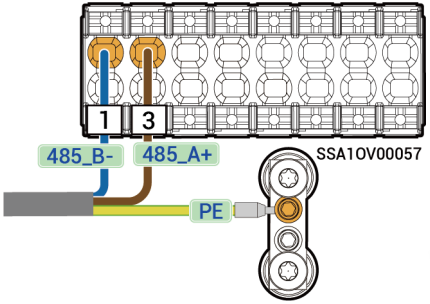
Tips

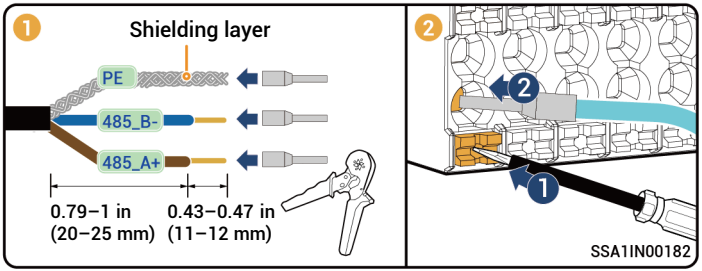
- Do not perform this step if a CT sensor is connected.
- The CT cable length is 19.69 ft (6 m). Please configure according to the actual situation.

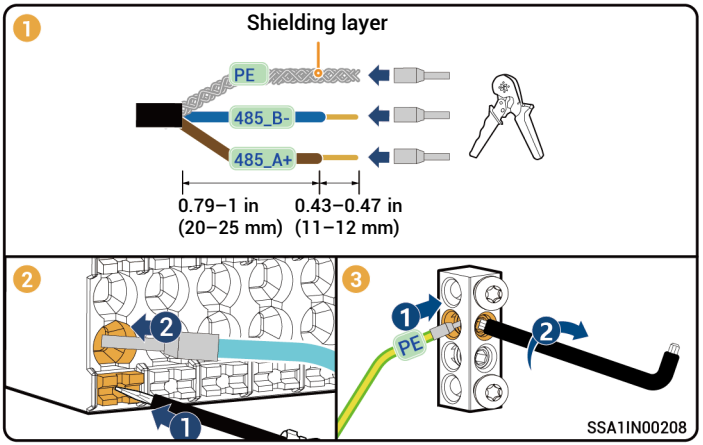
Marking 1 (Pin 2 of the signal terminal is PE)



Marking 2 (Pin 2 of the signal terminal is GND)



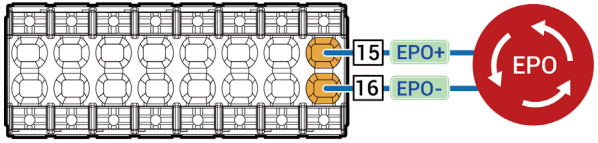




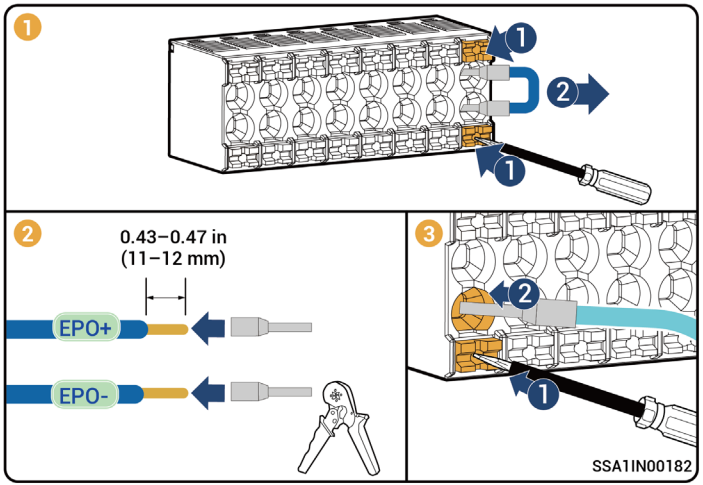
5.6.4 (Optional) Emergency Power Off Switch (EPO) Cable Connection

Tips

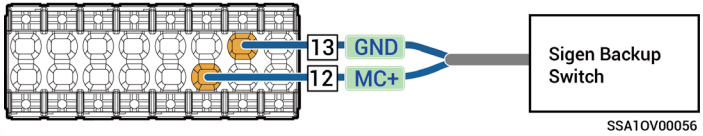
- Prepare the EPO (Emergency Power Off switch) and cable before installation. The recommended cable size is 20 AWG to 18 AWG (0.5 mm² to 0.8 mm²).
- Equip the EPO switch with a protective cover to prevent misoperations, and protect the cable with a protective tube.



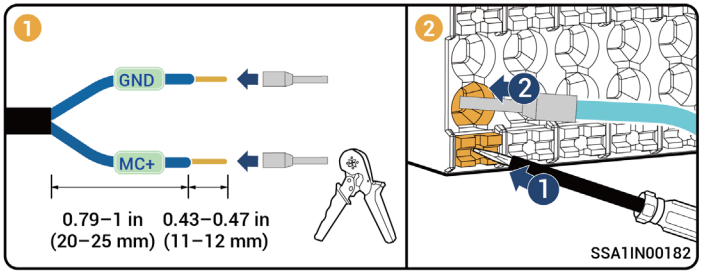
SSA1OV00053



5.6.5 (Optional) Sigen Backup Switch Power cable connection



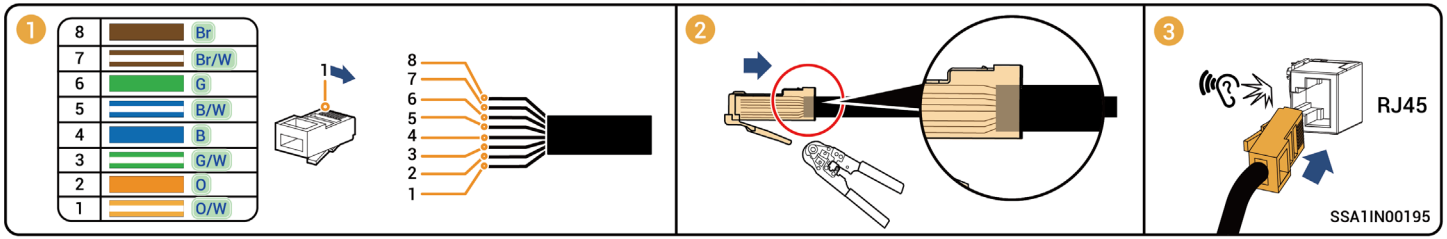
SSA1OV00056



5.7 Network Cable Connection

Tips

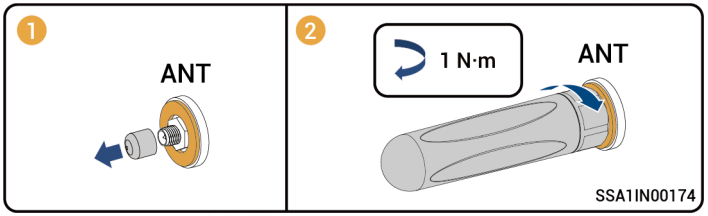
- Network cables are EIA/TIA 568B standard cables.
- Two RJ45 Ethernet ports, one is connected to the router, and the other is connected to other equipment.(e.g., inverter, Sigen LoadHub etc.)



5.8 WLAN antenna stick Installation

Tips

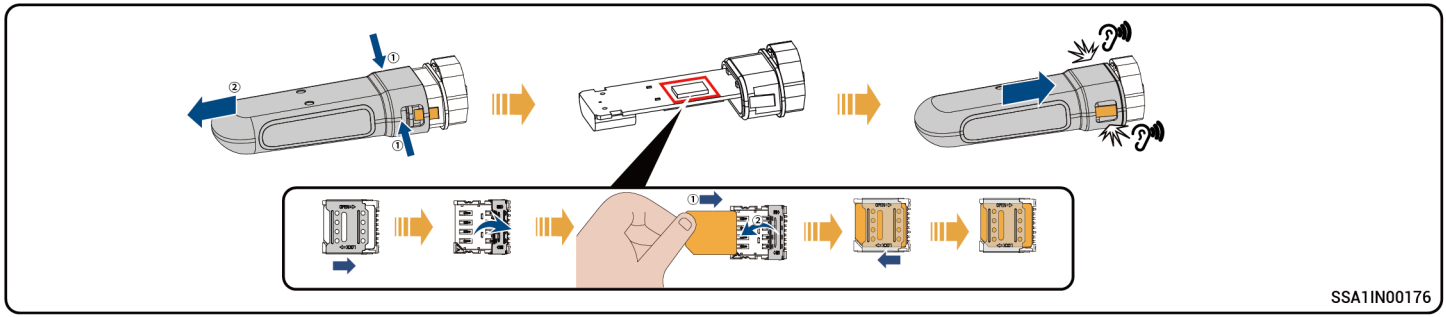
- WLAN communication requires the installation of WLAN antenna stick.
- To ensure good communication, tighten the antenna rod up clockwise. The antenna rod is tightened up when it cannot be easily turned counterclockwise.



5.9 (Optional) Replacing SIM card of Sigen CommMod

Tips

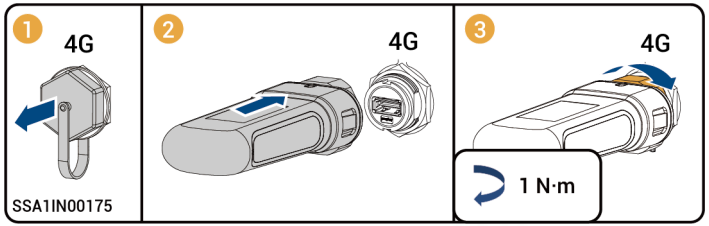
- When free 4G traffic of CommMod runs out, users must replace an SIM card.
- Please replace the SIM card in Sigen CommMod with a SIM card of your country or region. Recommended data plan: ≥ 50 MB/month × N. (Wherein, N is the number of inverters)

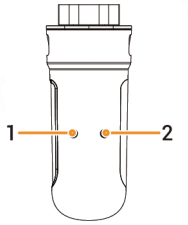


5.10 Sigen CommMod Installation

Tips

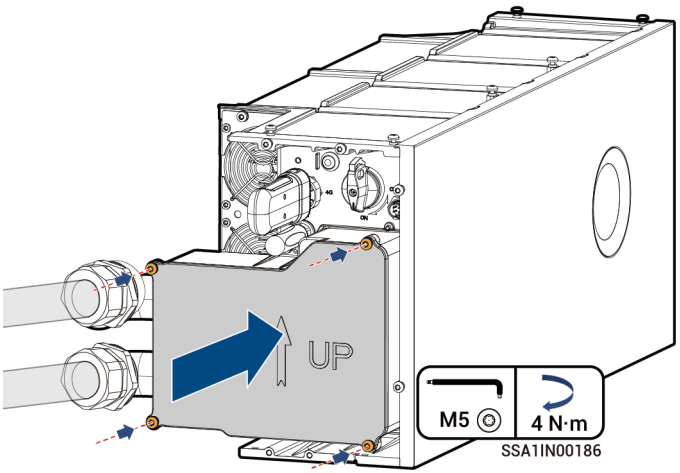
Sigen CommMod is required for 4G communication.





S/N	Indicator	Description
1	Power indicator	-
2	Network state indicator	• Slow flashing(200 ms on/1800 ms off): The network is being connected • Slow flashing(1800 ms on/200 ms off): Standby • Quick flashing(125 ms on/125 ms off): Data is being transferred

5.11 Junction box Protective cover installation

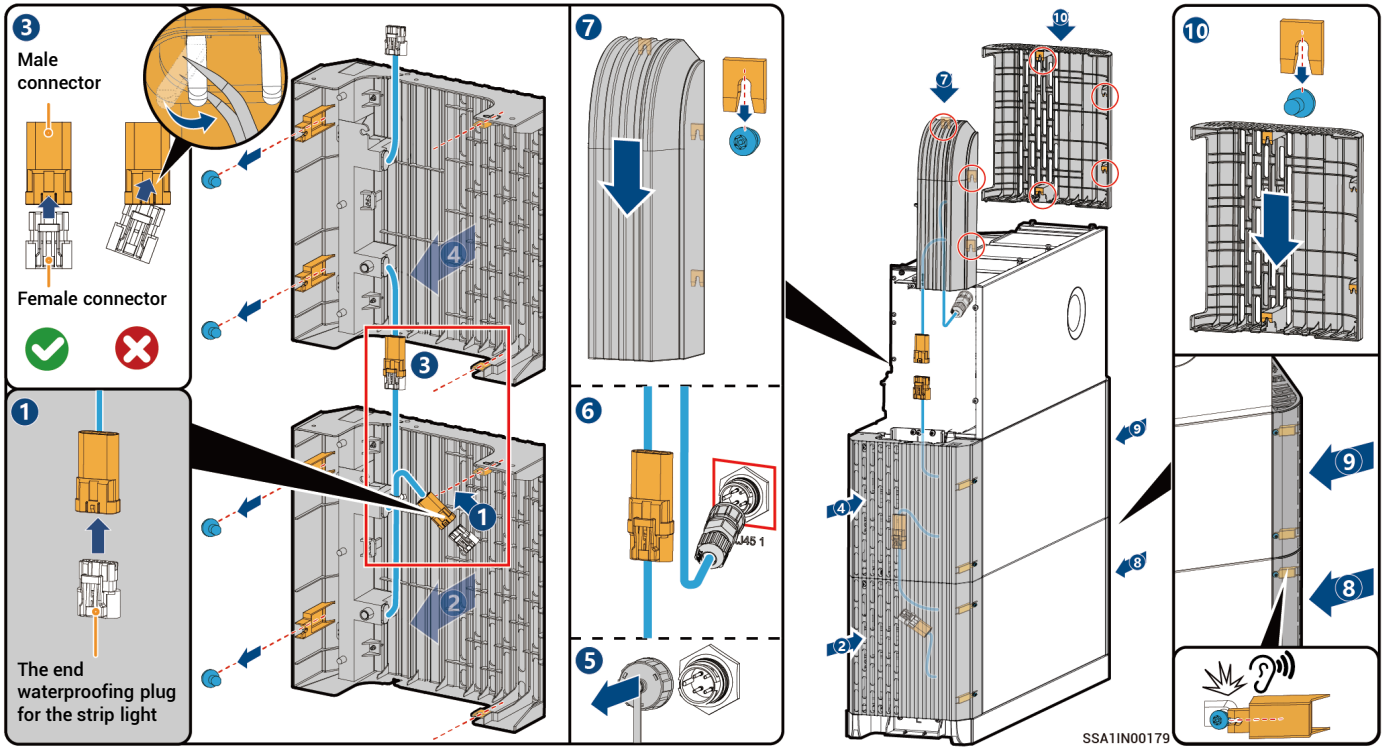


6 Post-installation Check

S/N	Check Item
1	The equipment has been securely installed.
2	Ground cables, DC cables, signal cables, etc. are installed accurately without leftovers.
3	There are no sharp spikes or acute angles at the cut point of the cable tie.
4	RSD trigger switch is in the OFF state.
5	Ports that are not in use have waterproof covers or plugs installed.
6	There is no construction left inside or outside the equipment.

After confirmation, install the SigenStor BATand Sigen Energy Controllerdecorative covers.

7 Installation of the Decorative Cover

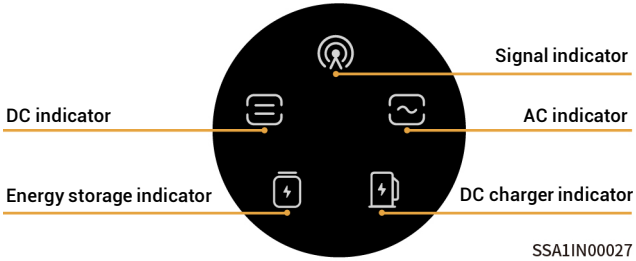


Caution

- The end waterproofing plug for the strip light in step 1 is at the lower end of the decoration on the left side of the inverter, please remove it for spare.
- If the strip light display is abnormal after the device is power-on, please check whether the pin in the male connector is tilted. If it is tilted, please correct it. And then to unplug and re-plug the male and female connectors at the abnormal location, or unplug and re-plug the terminals in the step 6 to resume operation.

8 Equipment Power-On

1. Turn on the upstream switch of equipment.
2. Rotate RSD trigger switch to ON.
3. Observe the indicators on the front side of the inverter to learn about the equipment status.



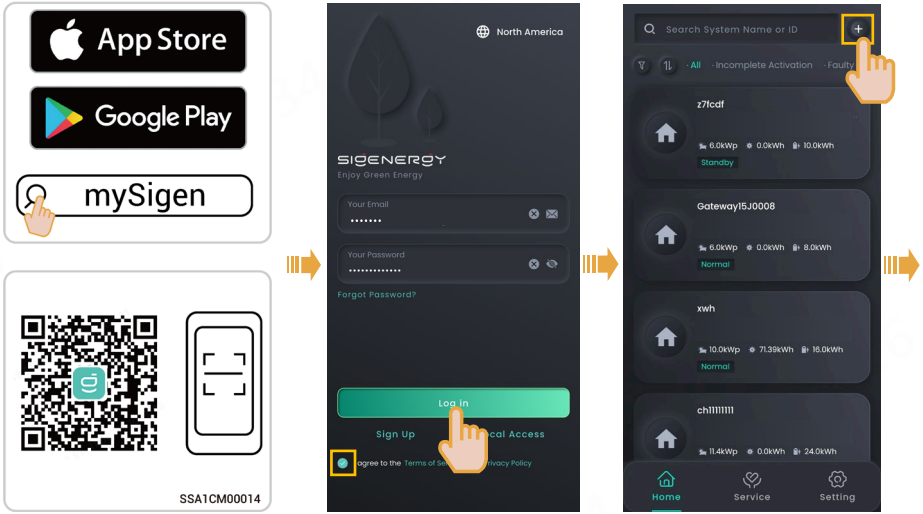
Indicator	Color	State	Description
		Always on	The DC side is connected but not running.
		Always on	The DC side is running.
		-	The DC side is not connected.
		Flash	The DC side is faulty.
		Always on	The inverter is faulty.
		Always on	The AC side is connected but not running.
		Always on	Grid-connected operation.
		Always on	Off-grid operation.
		-	The AC side is not connected.
		Flash	Off-grid overload operation.
		Flash	The AC side is faulty.
		Always on	The inverter is faulty.

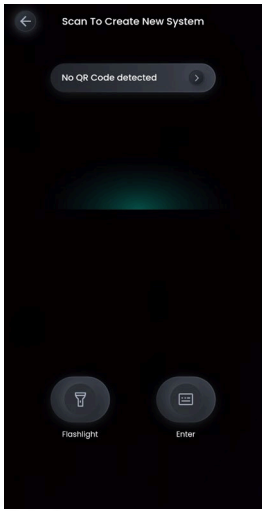
Indicator	Color	State	Description
		Always on	All SigenStor BATs are connected but not running.
		Flash	SigenStor BATis charging.
		Flash	SigenStor BATis discharging.
		-	All SigenStor BATs lie dormant.
		Flash	Some SigenStor BATs are faulty.
		Always on	All SigenStor BATs are faulty.
		-	The management system is not connected.
		Flash	Connected to local App.
		Always on	Connected to the management system using an FE or WLAN.
		Always on	Connected to the management system over 4G.
		Flash	Insufficient traffic for Sigen CommMod.

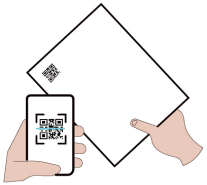
9 Download and create new system for mySigen APP

1. Please visit our company's website https://business.sigencloud.com/business-service/user/register and complete the account registration based on your circumstances.

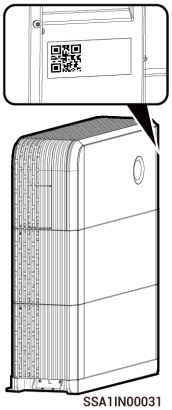
2. Download the mySigen app to initiate the creation of a new system for your equipment.







or

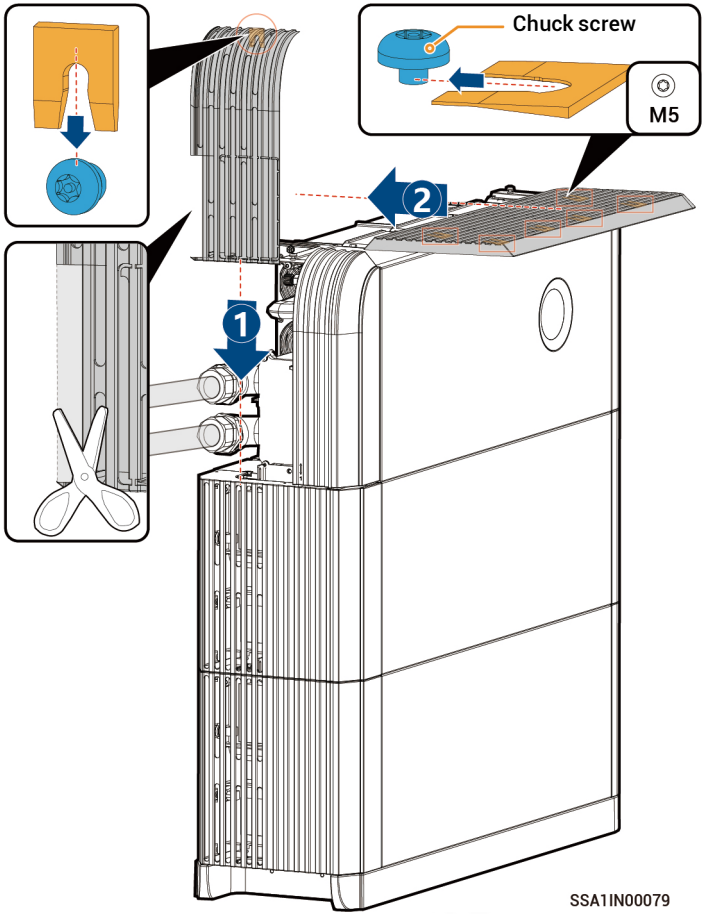


According to the interface prompts, complete the startup or refer to the "mySigen App Creating New Systems Guide" to obtain the operation method of startup.

Scan the SN code label on the accompanying box material. If the SN is lost, scan the SN on the side of the inverter.

3 An installer should ask the owner to check the email titled "sigencloud" to activate the account within 24 hours after creating a new system.

4 After powering on the equipment, install the remaining decorative covers.



- SigenStor Home comply with UL 9540: 2025(report No. 80172701) and UL 9540A: 2025 (report No. 80263447 - Unit level, No. 80263446 - Module Level) and issued by CSA Group Testing & Certification Inc.
- When install SigenStor Home system, the service ground bond shall be connected to the grounding terminal located in the Sigen Loadhub or residential home service Panel. The ground bond for the system shall have only one connection. The end installation shall comply with NEC Article 250.
- The end installation for the SigenStor Home system requires the directory plaques for all service equipment identifying all electric power sources comply with NEC Article 705, 706 and 710.
- When off-grid enable is disabled, the Sigen Energy Controller detects and determines whether a grid fault has occurred based on parameters such as voltage and frequency in accordance with grid code requirements. When the fault duration meets the clearing time specified by the grid code, the Sigen Energy Controller will switch to Anti-islanding mode within 2 seconds, shut down, stop operating, disconnect the DER relay switch, and maintain isolation from the power grid.
- The ac output short-circuit ratings for the output breaker for the interactive inverter is equal to or greater than the peak current of 313.04Arms and duration of 162ms.

Battery Energy Storage System (BESS) Capacity & Location Compliance (Canada)
1. Increased Capacity Authorization
In accordance with the Canadian Electrical Code (CEC) Rule 64-1100 and local amendments, this system is authorized to exceed standard residential capacity limits (typically 20 kWh per stack / 80 kWh per system) provided that it meets the rigorous safety requirements of UL 9540 and UL 9540A.
2. UL 9540A Compliance & Test Results
This BESS has been tested for fire characterization according to the UL 9540A standard.
Test Report Reference: [report No. 80263447 - Unit level]
Compliance Level: This system meets the Unit Level test criteria.
Allowable Capacities in residential non-habitable space: Per the referenced UL 9540A test report, the increased allowable capacities for this system are:
Maximum Capacity per Stack: [54 kWh]
Maximum Total System Capacity: [216 kWh]
Mimum Room Volume: 7.57 m^3 (267.33 ft^3)
3. Required Field Marking (Inspection Requirement)
For the system to be accepted by the Authority Having Jurisdiction (AHJ) (e.g., ESA in Ontario), the installer must apply a permanent, legible marking to the exterior of the BESS enclosure stating:
- The UL 9540A Unit Level Test Report Number: [80263447]
- The actual maximum battery capacity installed in the system: _____ kWh

4. Mandatory Installation Locations
Installations across Canada must strictly follow the CEC Section 64 location requirements.

Sigenergy Technology Co., Ltd.

Website	LinkedIn	YouTube

www.sigenergy.com

Service Provider Information

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