

Sigen Energy Gateway C&I Series

User Manual

Version: 01

Release date: 2024-08-20



Copyright Notice

Copyright © 2024 Sigenergy Technology Co., Ltd. All rights reserved.

The information provided in this document is for reference only. The information in the document is legally collected and maintained as reliable, accurate, and complete as possible, but the accuracy or completeness of the information described in the document is not guaranteed. This document can not be used as a basis or evidence for morality, responsibility, or legality. Sigenergy Technology Co., Ltd. will supplement, correct, and revise the relevant information at any time, but will not provide any forms of guarantee on its timely release. Sigenergy assumes no responsibility for the information provided in this document or for any direct or indirect effects or consequences arising therefrom. The document is proprietary to Sigenergy Technology Co., Ltd. and shall not be reproduced, copied, or published in any form by any organization or individual without prior written permission. Sigenergy Technology Co., Ltd. has the right to modify and interpret the terms of this disclaimer.



and other Sigenergy trademarks are the property of Sigenergy Technology Co., Ltd.

Other brand trademarks or registered trademarks mentioned in this document are the property of their respective owners.



Website



LinkedIn



YouTube

Website: www.sigenergy.com

Table of Contents

Revision History	4
Preface	5
Chapter 1 Safety Precautions.....	6
1.1 General Requirements.....	6
1.2 Personnel Requirements	8
1.3 Handling and Transportation Requirements.....	9
1.4 Storage Requirements	10
1.5 Operation Requirements	11
1.5.1 Equipment Installation	14
1.5.2 Cable Connections.....	16
1.5.3 Equipment Maintenance and Replacement.....	18
Chapter 2 Product Introduction.....	19
2.1 Functions and Designation	19
2.2 Product Appearance	20
2.3 Label Description.....	22
2.4 Typical Networking	23
Chapter 3 Location Requirements	27
Chapter 4 Equipment Installation and Connection	30
Chapter 5 Searching for App.....	31
Chapter 6 System Maintenance	32
6.1 Power Off.....	32
6.2 Routine Maintenance.....	33
6.3 Common Fault Troubleshooting.....	34
6.4 Operations on Bypass Switch	35
6.5 Emergency Measures	36
Chapter 7 Appendix	37
7.1 Technical Parameters.....	37

Revision History

Version	Date	Description
01	2024.08.20	Initial release.

Preface

Overview

This document mainly describes the product introduction, networking, and system maintenance of the Sigen Energy Gateway for the C&I series (hereinafter referred to as the Gateway).




Intended Audience

This document is intended for:

- Professionally trained and qualified installers.
- Technical support engineers.

Definitions of Signs

The following signs may be used in the document to indicate safety precautions or key information. Before installation and operation of the equipment, familiarize yourself with signs and their definitions.

Sign	Definition
 Danger	Danger. Indicates an imminently hazardous situation which, if not avoided, will result in death or serious personal injury.
 Warning	Warning. Indicates a potentially hazardous situation which, if not avoided, will result in serious personal injury or property damage.
 Caution	Caution. Indicates a potentially hazardous situation which, if not avoided, will result in property damage.
Tips	Indicates important or key information and provides operation tips.

Chapter 1 Safety Precautions

1.1 General Requirements

Before installing, operating, and maintaining the equipment, familiarize yourself with this user manual. Strictly follow the instructions in the manual and adhere to all safety precautions indicated on the equipment and within the manual.

The "Danger," "Warning," and "Caution" statements described in this manual are only supplementary precautions to all safety notices.

The Company shall not be held liable for equipment damage or property loss resulting from violation of safety operation requirements or safety standards of design, production, and use of equipment, including but not limited to the following:

- The installation environment does not comply with relevant international, national, or regional standards.
- Failure to comply with local laws and regulations during the transportation, installation, operation, and maintenance of the equipment.
- The installation area does not meet the requirements of the equipment.
- Cables, tools, and other materials used do not comply with relevant international, national, or regional standards.
- Damage caused by storage conditions that do not meet the requirements of the equipment.
- Failure to operate according to the instructions and precautions in the manual.
- Failure to follow the prescribed sequence of steps for installation, operation, and maintenance in the manual, unauthorized changes to the installation sequence, unauthorized modification, additions, or changes to equipment, etc.
- Failure to handle the equipment with care or violent installation may result in equipment damage and liquid leakage and pose a risk of fire or explosion hazards.

- Failure to follow the operational requirements indicated on warning labels on the equipment or tools.
- Negligence, improper operation, or deliberate damage.
- Damage caused during transportation by you or a third party you commission.
- Damage caused by the change of the scenarios for which the equipment is intended on the customer or a third party company side.
- Equipment damage caused by failure to use the accessories supplied with the packing box or purchase and use accessories of the same specification on the customer or a third-party company side.
- Equipment damage caused by unauthorized disassembly or replacement of the equipment or modification of software code, or other improper operations.
- Equipment damage caused by force majeure (such as war, earthquake, fire, storms, lightning, floods, and debris flow).
- Damage caused by the failure of the natural environment or external power parameters to meet the standard requirements for the normal operation of the equipment. For example, the actual operating temperature of the equipment is too high or too low.
- The equipment is stolen.
- The equipment is damaged after the warranty period expires.

1.2 Personnel Requirements

- Professionals or well-trained personnel must be assigned to install, operate, and maintain the equipment. During operations, irrelevant personnel are prohibited from approaching the work area.
 - Professionals: Personnel who are familiar with the composition and working principle of the system or equipment, have participated in training or operated the equipment, and are familiar with the factors that may lead to risks during the installation, operation, and maintenance of the equipment and risk levels.
 - Well-trained personnel: Personnel who have participated in relevant technical and safety training, have relevant experience, can identify operational risks, and can take relevant corrective measures to reduce the impact of risks.
- For special operations, such as climbing and electrical operations on high-voltage equipment, the operator must be certified for special operations as required by the local country/region.
- Only authorized professionals can replace the equipment or components (including software), remove safety devices, or repair the equipment.

1.3 Handling and Transportation Requirements

- Wear personal protective equipment such as protective gloves and safety shoes while handling the equipment.
- Select an appropriate handling method according to the equipment weight.
- When handling the equipment, always follow the package orientation marking. Do not turn the equipment upside down or tip it over.
- The tilt angle of the equipment with packaging must be less than or equal to 15°. After the equipment is unpacked, its tilt angle must be less than or equal to 10°. Take into account the heights of persons assigned to handle the equipment to ensure that the equipment is handled stably.
- Lift or move the equipment slowly to avoid personal injury.
- When using a forklift, position the forks so that the center of gravity of the equipment is aligned and secure the equipment as needed. Designate a person to keep an eye on the handling. Do not stand under the forks.
- Place the equipment according to the stack requirement indicated on the packaging.
- Ensure the equipment is placed on a flat and stable surface and do not tilt or place the equipment upside down.
- Transport the equipment with proper protective measures to avoid exposure to rain or water.

1.4 Storage Requirements

- The storage location must comply with local laws and regulations.
- Do not store the equipment without packaging.
- Do not expose the equipment to direct sunlight, humidity, condensation, dirt, rain, or a flammable, explosive, or corrosive environment.
- Regularly check the equipment (recommended once every three months) during the storage period. Take measures to prevent pests and rodents in the storage area. Replace the packaging immediately if the packaging is damaged by pests or rodents.
- Store the equipment according to the storage requirements indicated on the packaging.
- Regularly record the temperature, humidity, and other conditions of the storage environment during the storage period.
 - Storage temperature: -40°C to 70°C , with a recommended range of 20°C to 30°C .
 - Relative humidity: 0% RH to 95% RH.
- Follow the First-in First-out (FIFO) principle for shipment.
- If your equipment has been stored for more than 2 years, please go through professional inspection and testing before putting it into operation.

1.5 Operation Requirements

Danger

High Voltage and Hazards:

- Do not perform operations on the equipment with power on (including but not limited to installation, wiring, replacement). 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. Operation with power on may lead to fire, electric shock, arcing, or explosion, resulting in personal injury or property loss.
- Do not power on the equipment before the installation or professional evaluation is complete.
- Do not operate the equipment in bad weather conditions, including but not limited to lightning, rain, snow, or typhoon.
- Do not expose the equipment to high temperatures or heat sources for an extended period of time, such as sunlight, ignition sources, or heaters.
- Do not clean or soak the equipment with water, alcohol, oil, or other liquids to avoid leakage current and electrical shock.
- Do not impact, drag, or step on the equipment. In case of accidental impact, stop using the equipment immediately and contact your sales representative. The equipment shall be subject to inspection and evaluation by professionals before being put into operation again.
- Before operating the equipment, check whether the equipment is damaged. For any abnormality, such as appearance deformation or odor, contact your sales representative instead of disassembling the equipment without authorization.
- If you find that the equipment works abnormally or that the equipment may cause personal injury, such as appearance deformation, odor, or arcing, stop your operation immediately, report the fact to the person in charge, and take effective measures.

- Wear personal protective equipment such as insulating gloves, insulating shoes, and safety hats while operating the equipment. Do not wear conductive accessories such as metal bracelets, rings, or necklaces.
- Use insulated tools when installing or wiring.
- Equipment that must be grounded is permanently connected to the PGND. Connect the PGND in the first step before connecting cables, and when replacing an equipment, remove the PGND in the last step.
- Do not touch terminals with bare hands or conductors or damp objects. Measure the voltage of the contact before touching a terminal to avoid the risk of electric shock.
- Prevent foreign objects from falling into the equipment while operating the equipment. Otherwise, the equipment may be short-circuited or damaged, or power supply to loads may be derated or power failure may occur, or this may even result in personal injury.
- Before powering off the 10 kV or higher medium-voltage equipment, it is recommended to turn off the inverter and switch off the low-voltage equipment first.
- Touch up paint scratches on the surface of the equipment.



Warning

- Do not disable any protective devices, including but not limited to protective covers and surge arresters.
- Do not touch the hot surface in the heat dissipation area when the equipment is operating.
- Do not cover the heat dissipation area, and maintain a 300 mm to 600 mm channel for heat dissipation to prevent high temperatures from causing a fire when the equipment is operating.

Caution

- You must obtain a license for power utilities in the country or region where the equipment is located before the equipment can be connected to the grid.
- Do not use damaged or unqualified cables or tools. Before operating the equipment, ensure that all cables and tools comply with the requirements, and keep records. Upon completion of operation, make an inventory and recovery the cables and tools in full to prevent them from being left in the equipment to avoid safety hazards.
- Comply with the power station safety regulations of the country or region where the equipment is located when operating the equipment, including but not limited to operation tickets and work tickets.
- Carbon dioxide fire extinguishers or ABC dry powder fire extinguishers are recommended.
- Keep irrelevant personnel away from the operation site. Please install a temporary fence or set a warning line around the operation site, and attach "No Entry for Irrelevant Personnel" and other signs.
- Do not cover or damage the warning label or nameplate on the equipment. Replace the warning label or nameplate if it is damaged or cannot be clearly recognized due to long-term use.
- Before operating or maintaining the equipment, check whether there is water, snow, or other debris on the top of the equipment. Clean it up when necessary.

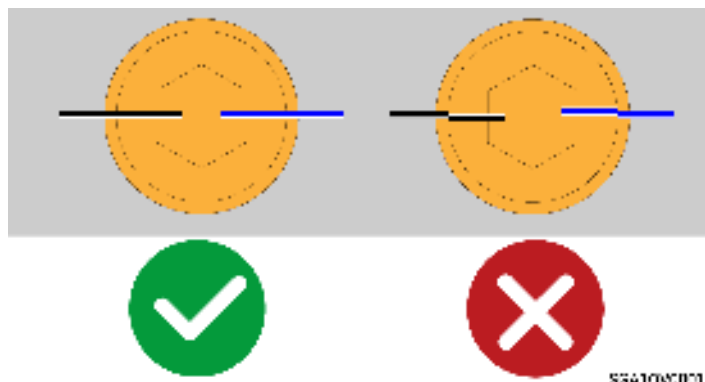
Do not use the equipment in the following situations:

- When connected to public infrastructure systems, such as traffic lights or security systems.
- When connected to emergency medical equipment.
- When connected to elevators and other control devices.
- Any other critical systems.

1.5.1 Equipment Installation

Warning

- Before installing the equipment, check whether the screws installed before delivery are secured. Before delivery, the tightened screws are marked with lines. If the marks are misaligned, the screws are loose. Tighten the screws again.



- Get well prepared for the bearing load when handling the equipment to prevent it from falling and causing injury.

Ladder Safety

- Do not use ladders if you are not well-trained or instructed.
- Do not use unqualified ladders, including but not limited to damaged, broken, deformed, or temporary ladders.
- Do not use a ladder that does not meet the load-bearing requirements.
- Use wooden or fiberglass ladders when you climb up for electrical operations.
- A straight ladder must be set at a gradient of 60° to 70°.
- Do not throw objects from heights when operating on a ladder.
- We recommend that you designate a person to monitor when operating on a ladder.
- Lock the door when using a ladder at the entrance of the passageway.

Drilling Safety

- Do not drill holes on the equipment.
- Wear safety goggles and protective gloves when drilling holes.
- Do not place the equipment near drilling positions to prevent debris from falling into the equipment.
- Clean up any debris promptly after drilling.

1.5.2 Cable Connections

Danger

- Before connecting cables, ensure that the equipment is not damaged. Otherwise, electric shock or fire hazard may occur.
 - Before connecting or removing cables, ensure that the upstream and downstream switches of the equipment and the switches on the equipment are turned off.
-
- Do not intertwine cables or route cables across each other. It is recommended that cables be bundled by category.
 - Do not route cables through the air inlet and air outlet of the equipment.
 - Do not use cables with damaged insulation. No sharp edges or burrs are allowed in cable holes. Replace cables with insufficient length. Do not extend cables using welding or similar methods.
 - The ground impedance of the equipment should meet national and regional standards.
 - Verify the cable selection by referring to IEC-60364-5-52 or local laws and regulations if there are changes in cabling methods or environmental conditions such as temperature and humidity.
 - Keep cables at least 100 mm away from the heat source to prevent cable aging at high temperatures.
 - The lower the ambient temperature is, the more brittle the cable plastic sheath becomes. To prevent sheath cracking during installation, install cables at temperatures above 0°C and handle them with caution when transporting. If cables have been stored in an environment below 0°C for an extended period of time, move cables to an environment above 0°C for at least 24 hours before using again.
 - Before installing cables, ensure that cables are properly labeled, insulated, and identified. Connect cables correctly and completely according to the labels and installation instructions.

- For underground cabling, fix cables with cable trays and clips. Before backfilling, reserve a proper cable length to ensure that cables are tightly fitted against the ground in the backfilling area. Otherwise, terminals may be deformed, damaged, or loosened due to stress on cables.

1.5.3 Equipment Maintenance and Replacement

- Before maintaining or replacing the equipment, power off and wait for the delay time as instructed on the label on the equipment before operation.
- When maintaining the power equipment or power distribution equipment at the downstream direction of the power supply equipment, turn off the output switch of the power supply equipment.
- When maintaining the power distribution equipment or power equipment at the downstream direction of the power supply equipment, turn off the output switch of the power supply equipment. To maintain a load, disconnect the load from the power switch.
- During equipment maintenance, attach labels, for example, "Do Not Turn On", on the upstream and downstream switches or circuit breakers and set warning signs to prevent accidental reconnection. Power up and put the equipment back into operation only after trouble is eliminated, or replacement is complete.
- Damaged cables, if any, should be replaced by professionals.

Chapter 2 Product Introduction

2.1 Functions and Designation

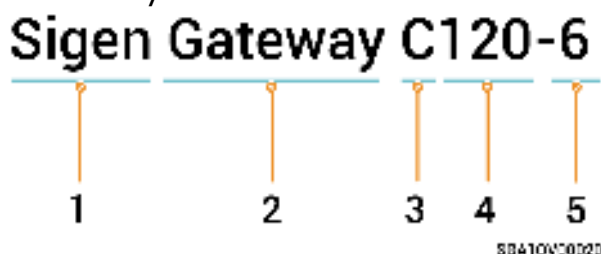
Functions

The product can be used in industrial and commercial PV storage and pure storage applications for data collection and monitoring, switchover between off-grid and backup power, diesel generator control, and energy management. The product must be used in conjunction with our battery packs and inverters.

- The Gateway provides backup power for the whole house or part of the loads. In the event of a grid power outage, the inverter seamlessly switches to the off-grid mode, and this switchover is insensible to backup loads.
- The Gateway can be connected to a diesel generator for an extended period of power supply in off-grid mode, and PV storage and diesel generator mode can be switched seamlessly.

Model

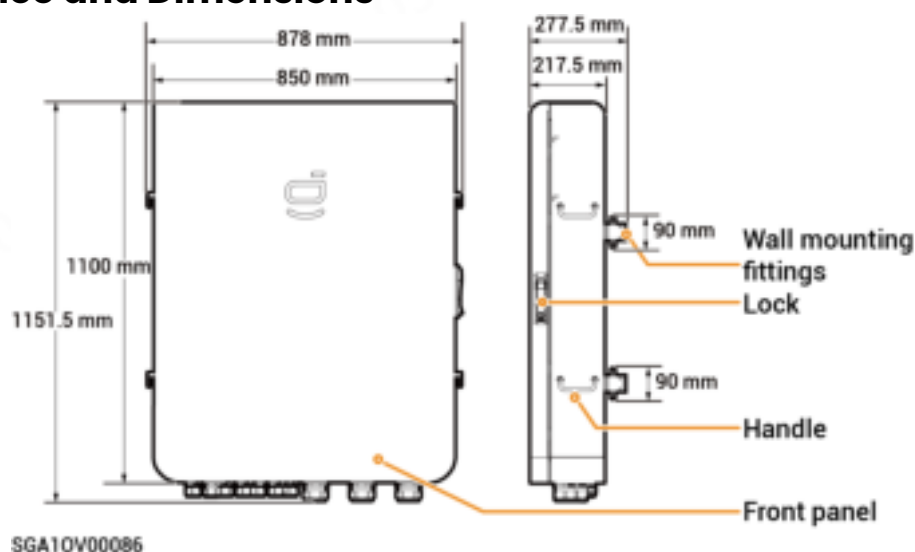
Gateway Model: Sigen Gateway C120-6



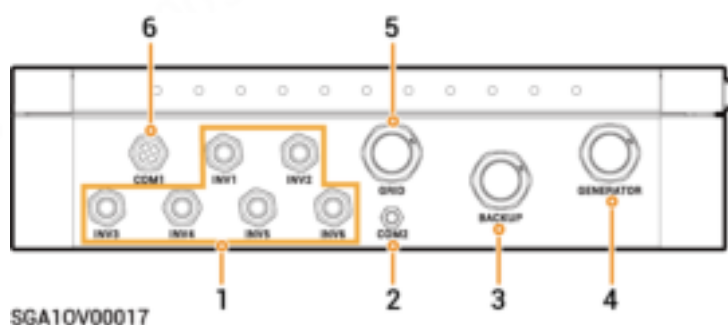
No.	Definition	Description
1	Brand	Sigen
2	Product series	Gateway
3	Application scenario	C: industrial and commercial scenario
4	Maximum power on grid side	120: 120 kW
5	Number of supported inverters	6: 6 units

2.2 Product Appearance

Appearance and Dimensions

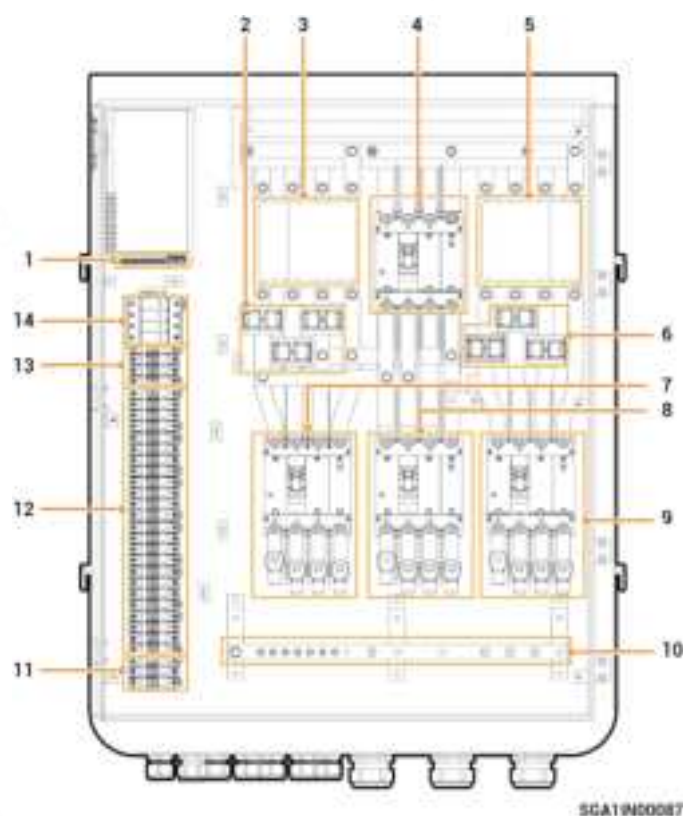


Bottom View








No.	Name	Marking
1	Inverter routing hole	INV1 to INV6
2	(Reserved) routing hole for communication cable	COM2
3	Routing hole for backup loads	BACKUP
4	Routing hole for diesel generator	GENERATOR
5	Routing hole for power grid	GRID
6	Routing hole for FE, DI, and DO communication cables	COM1

Interior View



No.	Name
1	FE, DI, and DO interfaces
2	Grid current transformer
3	Grid contactor KM1
4	Bypass switch QS1
5	Diesel generator contactor KM2
6	Diesel generator current transformer
7	Molded case circuit breaker QF1 (connecting to the power grid)
8	Molded case circuit breaker QF3 (connecting to the backup load)
9	Molded case circuit breaker QF2 (connecting to the diesel generator)
10	Grounding copper busbar
11	(Reserved) molded case circuit breaker QF11
12	Molded case circuit breakers QF5 to QF10 (connecting to inverters)
13	Surge protective device switch QF4
14	Surge protective device FC1

2.3 Label Description

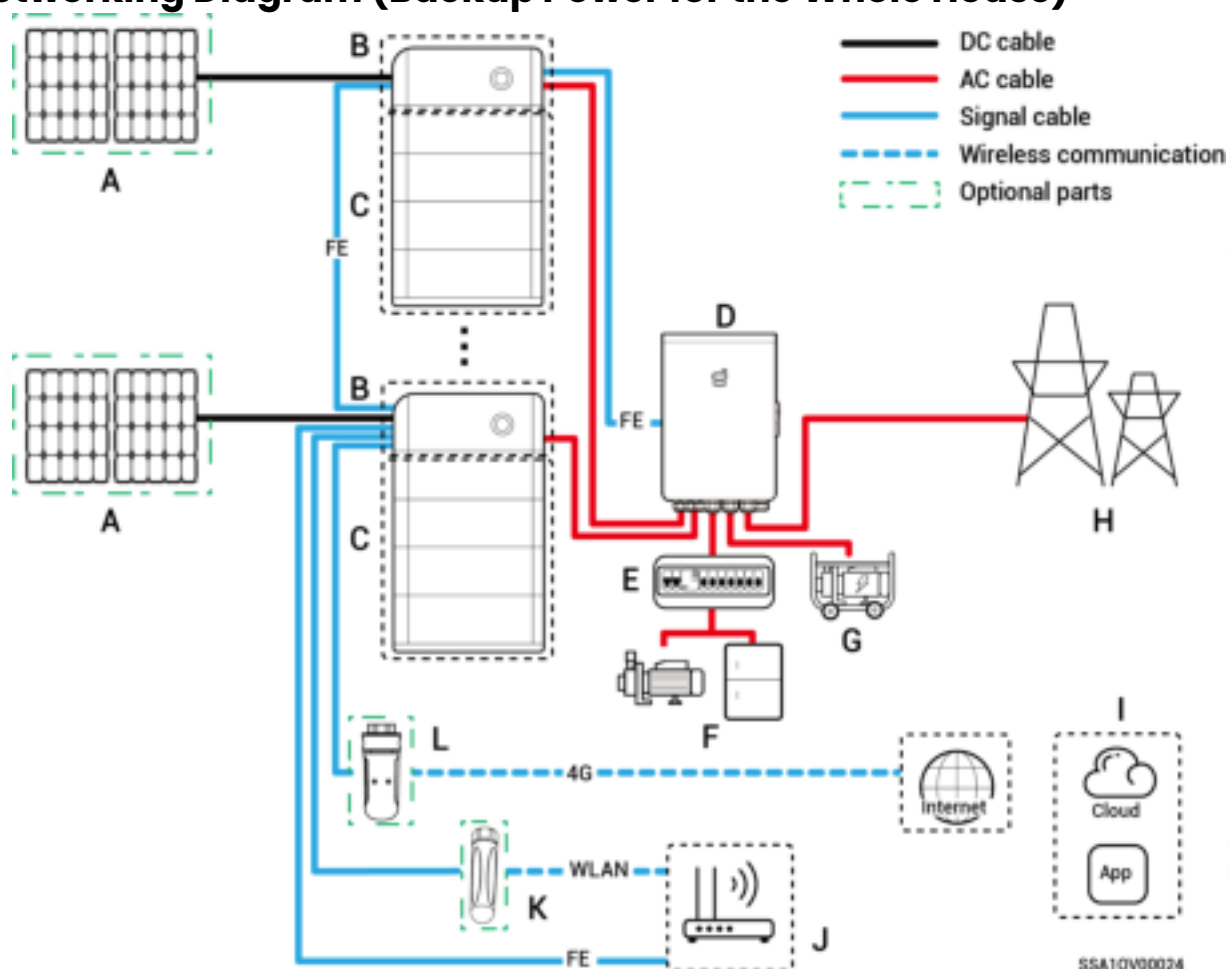
Symbol	Definition
	Warning! Danger! High Voltage High voltage may exist on the cover of the equipment. Please take protective measures before operating the equipment.
	After the equipment is powered off, internal components discharge in a delay time. Wait for 5 minutes according to the delay time on the label until the equipment is fully discharged.
	Warning! Danger! Hot The surface of the equipment is hot when the equipment is operating. Do not touch it to avoid burns.
	Operate the equipment by referring to the User Manual.
	GND symbol

2.4 Typical Networking

Tips

Under backup power networking, the duration of off-grid operation of the backup load is related to the power supply capacity of the PV storage system. If there is an abnormality in the power supply of the PV storage system during off-grid operation (including but not limited to abnormal PV power generation, insufficient battery power, and abnormal power supplies to the diesel generator), the backup load will still be unable to operate.

Networking Diagram (Backup Power for the Whole House)

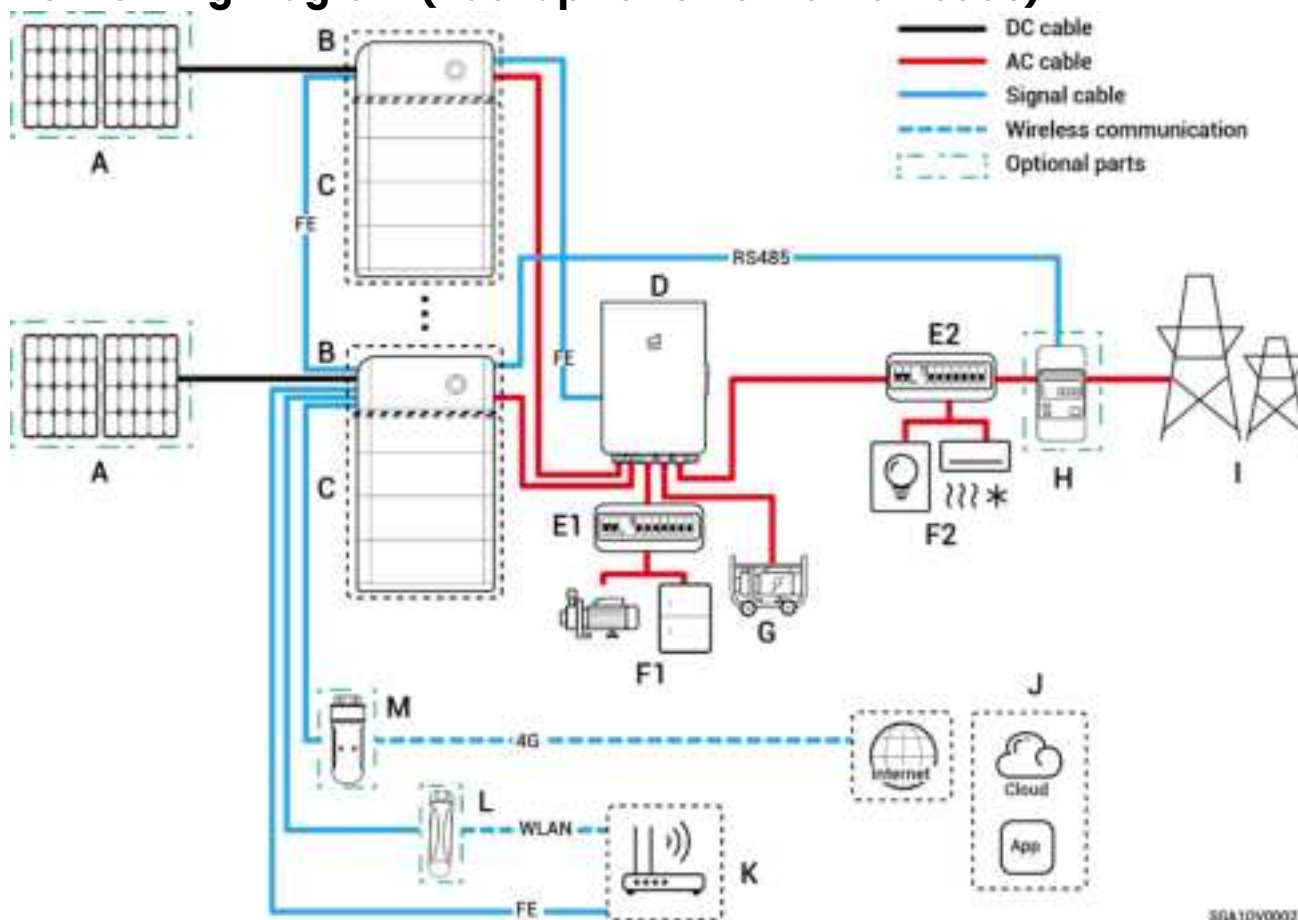


- A.** PV panel **B.** SigenStor EC/SigenStor AC/Sigen Hybrid **C.** SigenStor BAT
D. Gateway **E.** Backup power distribution panel **F.** Backup load
G. Diesel generator **H.** Power grid **I.** mySigen
J. Router **K.** Antenna **L.** CommMod

Tips

- A is not configured when B is SigenStor AC.
- The diesel generator can be used as backup energy for an extended period of off-grid operation and can be used in combination with Gateway to achieve a seamless switchover between PV storage and diesel generator.
- It is recommended to use Fast Ethernet and WLAN for communication with inverters. Free 4G data traffic of Sigen CommMod CN can be used for 5 years, and that of other CommMod models can be used for 2 years. Users must replace their SIM cards or top up their accounts when this service becomes unavailable.

Networking Diagram (Backup Power for Part of Loads)



SGA10V00023

- A.** PV panel **B.** SigenStor EC/SigenStor AC / Sigen Hybrid **C.** SigenStor BAT
D. Gateway **E1.** Backup power distribution panel
E2. Non-backup power distribution panel **F1.** Backup load
F2. Non-backup load **G.** Diesel generator **H.** Power sensor **I.** Power grid
J. mySigen **K.** Router **L.** Antenna **M.** CommMod

Tips

- A is not configured when B is SigenStor AC.
- The diesel generator can be used as backup energy for an extended period of off-grid operation and can be used in combination with Gateway to achieve a seamless switchover between PV storage and diesel generator.
- The power sensor features data collection at the grid connection point to achieve zero-power grid connection. When backup power is only available for part of the loads, the power sensor is not required. When partial backup power is combined with zero-power grid connection, the power sensor

must be configured.

- It is recommended to use Fast Ethernet and WLAN for communication with inverters. Free 4G data traffic of Sigen CommMod CN can be used for 5 years, and that of other CommMod models can be used for 2 years. Users must replace their SIM cards or top up their accounts when this service becomes unavailable.

Chapter 3 Location Requirements

Tips

- **The warranty applies when the equipment has been installed properly for its intended use and in accordance with the operating instructions.**
- **During actual installation, the selection of installation location should comply with local firefighting, environmental protection 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 Requirements

- Do not install the equipment in a smoky, flammable, or explosive environment.
- Do not install the equipment in an environment with conductive metal dust or magnetic dust.
- Do not install the equipment in an environment that is prone to mold and fungi.
- Avoid exposing the equipment to direct sunlight, rain, standing water, snow, or dust. 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 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).

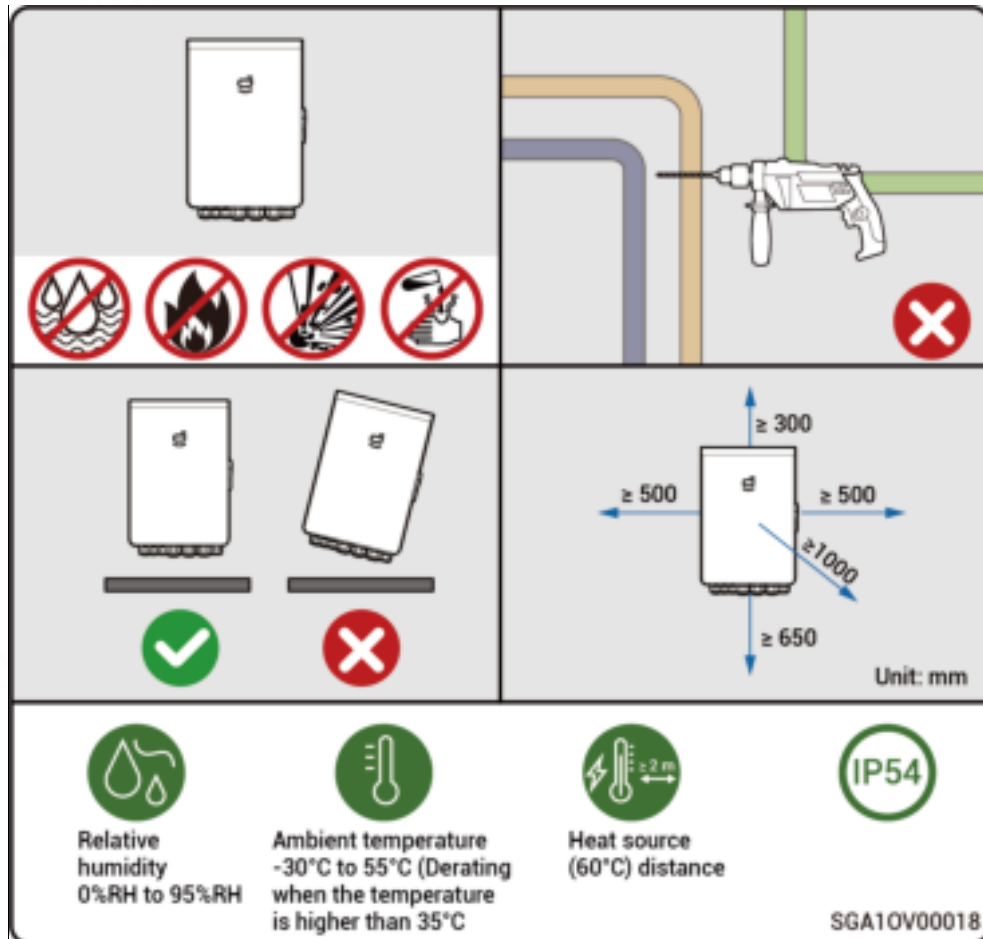
Installation Location Requirements

- Do not tilt the equipment or place it upside down. Ensure that the equipment is horizontally installed.
- Do not install the equipment in a place with fire hazards or is prone to moisturizing.
- Do not install the equipment in a sealed, poorly ventilated location without fire protection measures and difficult access for firefighters.
- Do not install the equipment under water sources, including but not limited to water pipes and air conditioner outlet windows, where condensate or water leakage may occur. Otherwise, liquid may enter the equipment and cause short circuit.
- Do not install the equipment in mobile scenarios such as recreational vehicles, cruise ships, and trains.
- 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 3°C while the equipment is operating. Otherwise, the equipment will be derated.
- The equipment generates heat when it is operating. Do not install the equipment in areas easily accessible to heat dissipation surfaces.
- You are advised to install the equipment in a location where you can easily access, install, operate, maintain it, and view the indicator status.
- The on-grid/off-grid switchover makes noise. It is recommended that the equipment be installed near the AC distribution box, away from the rest area.

Installation Base Requirements

- Do not install the equipment on a flammable base.
- The installation base should meet the load-bearing requirement and should be free of adverse geological conditions including but not limited to rubber soil and soft soil. Solid brick-concrete structures and concrete walls are recommended.

- The installation base should be flat, and the installation area should meet the installation space requirements.
- No plumbing or electrical alignments should be inside the installation base to avoid potential drilling hazards during equipment installation.

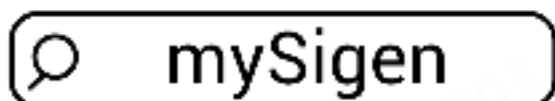
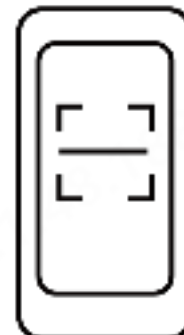


Chapter 4 Equipment Installation and Connection

- Equipment installation and connection must only be completed by the installer certified by the Company. For more information on the installation procedure, please refer to the Installation Guide of the respective Gateway mode.
- Parts and accessories supplied with the packing box are the property of the purchaser and must be kept safe.

Chapter 5 Searching for App

You can download the App using the following methods. For more information, refer to the App User Manual.



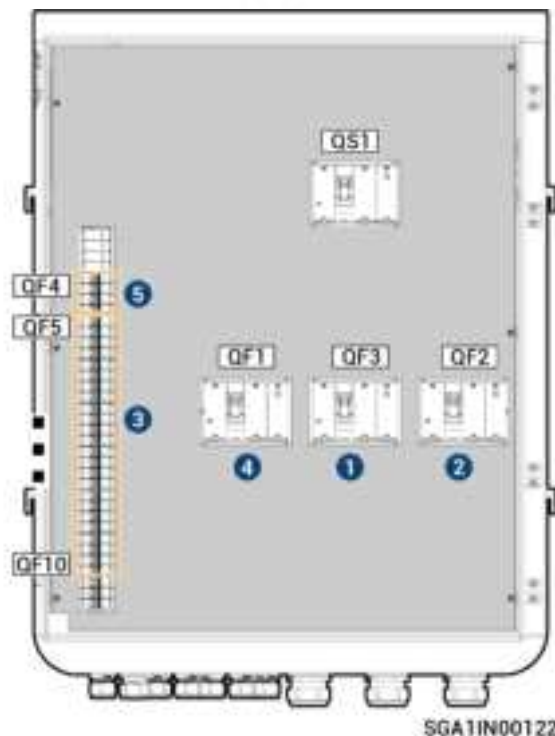
SSA1CM00014

Chapter 6 System Maintenance

6.1 Power Off

Warning

- When the equipment is faulty, disconnect all circuit breakers in the equipment immediately, and check and remove the fault before turning it on again.
- Do not operate circuit breakers that are not connected to corresponding equipment when the equipment is powered off. Keep these circuit breakers disconnected.



1. Turn off the molded case circuit breaker QF3 (connecting to a backup load).
2. Turn off the molded case circuit breaker QF2 (connecting to a diesel generator).
3. After shutting down the inverter, turn off the molded case circuit breakers QF5–QF10 (connecting to an inverter).
4. Turn off the molded case circuit breaker QF1 (connecting to the power grid).
5. Turn off the surge protective device switch QF4.

6.2 Routine Maintenance

To ensure the long-term operation of the equipment, you are advised to perform routine maintenance according to this section.

Inspection Items	Inspection Method	Power Off or Not	Maintenance Interval
System cleaning	Regularly check whether the equipment is covered and dirty. Clean it up when necessary. Do not use tools that may cause electric shock or with damaged insulation when cleaning up, such as wire brushes or wet towels.	Yes	Once every 3 months
System operating state	<ul style="list-style-type: none"> ● Check whether the equipment appearance is damaged or deformed. ● Check for noise when the equipment is operating. ● Check whether the equipment parameters are correctly set when the equipment is operating. 	No	Once every 6 months
Electrical connection	<ul style="list-style-type: none"> ● Check whether cable terminals are tightly connected. ● Check whether cable sheath is damaged. ● Check whether scratches exist on the surface where the cable contacts the metal. ● Check whether unused routing holes are sealed. 	Yes	Check once every 6 months after creating new systems and once every 6 to 12 months thereafter.
Grounding reliability	Check whether the ground cable is properly and reliably connected.	No	Check once every 6 months after creating new systems and once every 6 to 12 months thereafter.

6.3 Common Fault Troubleshooting

Fault	Cause Analysis	Corrective Action
<p>The inverter repeatedly shuts down/restarts in off-grid mode</p>	<ul style="list-style-type: none"> ● The backup load is greater than the rated power of the inverter. ● The bypass switch is turned on by mistake. 	<ul style="list-style-type: none"> ● Turn off some power equipment to ensure the load is not greater than the rated power of the inverter. ● Turn off the bypass switch. ● If the problem persists, please contact our technical support.

6.4 Operations on Bypass Switch

Tips

- In normal cases, the bypass switch is turned off. Do not operate the bypass switch. In this case, the Gateway can automatically switch between on-grid and off-grid.
- When the Gateway fails to supply power to loads, you can turn on the bypass switch to supply power to loads through the power grid.

1. Check that the grid normally supplies power.
2. Power off by referring to 6.1 Power Off.
3. By referring to the delay time as instructed on the label on the equipment, wait for the specified time and turn on the bypass switch.

Warning

- There is residual current and the equipment is hot immediately after the equipment is powered off. Operating the equipment immediately upon power off may lead to electric shock or burns.
- High voltage exists in the equipment. Wear insulating gloves when turning on the switch.

Caution

After turning on the bypass switch, do not turn on the circuit breaker connected to the inverter and the circuit breaker connected to the diesel generator. Otherwise, the circuit breaker connected to the power grid will be charged, resulting in the risk of electric shock.

4. Turn on the switches in the following order: SPD switch → circuit breaker connected to the power grid → circuit breaker connected to the load.
5. Close the Gateway door.

6.5 Emergency Measures

Fire Emergency Measures

Danger

- Shut down the equipment or cut off the mains switch if it is safe to do so.
- If the fire is small, use a carbon dioxide or ABC dry powder fire extinguisher to extinguish the fire.
- If the fire is spreading, evacuate from the building or equipment area immediately and call the fire department. Do not go back inside the building.
- Do not expose firefighters to high-voltage components during firefighting. Otherwise, the risk of electric shock may exist.
- Do not use the equipment after extinguishing the fire. Please contact your installer.

Flood Emergency Measures

Danger

- Shut down the equipment or cut off the mains switch if it is safe to do so.
- Do not use the equipment after the floodwaters recede. Please contact your installer.

Chapter 7 Appendix

7.1 Technical Parameters

For more information on the parameters of the equipment, please refer to their respective data sheets.