SigenMicro Series Photovoltaic Micro Inverter

User Manual

Version: 01

Release date: 2026-03-03



Copyright Notice

Copyright© 2026 SigenergyTechnology Co., Ltd. All Rights Reserved.

Description in this document may contain predictive statements regarding financial and operating results, product portfolio, new technology, configurations and features of product. Several factors could cause difference between actual results and those expressed or implied in the predictive statements. Therefore, description in this document is provided for reference purpose only and constitutes neither an offer nor an acceptance. Sigenergy Technology Co., Ltd. may change the information at any time without notice.

SIGENERGY and other Sigenergy trademarks are owned by Sigenergy Technology Co., Ltd.

All trademarks and registered trademarks in this document belong to their owners.

Website | LinkedIn | YouTube

www.sigenergy.com

Contents

Preface 04

Chapter 1 Revision History 05

Chapter 2 Safety Precautions 06

Chapter 3 Product Introduction 08

3.1 Function Description 08

3.2 Product Models 09

3.3 Product Appearance 10

3.4 Label Description 11

3.5 Typical System Wiring 12

Chapter 4 Location Requirements 15

Chapter 5 Equipment Installation and Connection 17

Chapter 6 Use of Equipment 18

6.1 LED Indicator Status 18

6.2 mySigen App Download and Login 19

6.3 Power on/off 20

6.4 Other Settings of mySigen App 21

Chapter 7 Emergency Measures 22

Chapter 8 Technical Parameters 23

Preface

Overview

This document applies to the SigenMicro series PV micro inverters (hereinafter referred to as SigenMicro), containing product introduction, system wiring, system operation, etc.

Intended Audience

This document is intended for product users and professionals.

Icon Definition

The following icons may be used in the document to indicate safety precautions or key information. Before installation and operation, please be familiar with and master the icons and the corresponding definitions.

Icon	Definitions
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 Revision History

Version	Date	Description
01	2026-03-03	First official release.

Chapter 2 Safety Precautions

Basic Information

Before installation, operation, and maintenance of the equipment, familiarize yourself with this document.
The "Caution," "Warning," and "Danger" statements described in this manual are only supplementary precautions to all safety notices.
The Company shall not be liable for device damage or property damage caused by the following reasons:

- Approval not obtained from national or regional power authorities.
- The installation environment does not comply with relevant international, national, or regional standards.
- Failure to comply with local laws, regulations, and standards when operating or maintaining the equipment.
- The installation area does not meet the requirements of the equipment.
- Failure to operate according to the instructions and precautions in the manual.
- Failure to follow the operational requirements indicated on warning labels on the equipment or tools.
- Negligence, improper operation, or deliberate damage.
- Damage resulting from unauthorized use of the equipment by the buyer or a third party in a scenario other than the specified one.
- The equipment is damaged because the customer or a third-party company fails to use the accessories supplied with the packing box or purchase and install accessories of the same specification.
- 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.

Safety Requirements

Danger

- Do not expose the equipment to high temperatures or heat sources (such as sunlight, fire, and heaters) for a long period of time.
- Do not clean or soak the equipment with water, alcohol, oil, or other liquids to prevent leakage current or battery pack leakage.

Danger

- Do not strike or hit the equipment. If an accidental impact occurs, immediately stop using the equipment and promptly contact your installer or sales representative. The equipment may be used again only if it passes the inspection and evaluation by a professional.

Warning

Do not touch the hot surface around the heatsink when the equipment is in operation.

Caution

- Do not use the equipment with faults. In case of any abnormalitiessuch as appearance deformation,contact your installer or sales representative.
- Carbon dioxide fire extinguishers or ABC dry powder fire extinguishers are recommended.

Do not use the equipment in the following situations:

- When connected to public infrastructure systems.
- When connected to emergency medical equipment.
- When connected to elevators and other control devices.
- Any other critical systems.

Radio Frequency Interference Statement

SigenMicro complies with CE EMC/FCC requirements and is free from electromagnetic interference. However, improper installation may result in electromagnetic interference. If the radio or television signals are abnormal, power off this equipment, wait for a period of time, and then turn on the radio or television to confirm whether the interference is caused by this equipment. If it is this equipment that affects the reception of radio or television signals, take the following measures to eliminate the electromagnetic interference:

- Adjust the positions of the antennas of other electrical appliances.
- Increase the distance between this equipment and other electrical antennas.
- Shield this equipment from the antennas of other electrical appliances with objects made of metal or concrete, or rooftops.
- If the electromagnetic interference remains, contact your local distributor or radio/television professionals for help.

Chapter 3 Product Introduction

3.1 Function Description

SigenMicro is a high-efficiency, high-power-density grid-tied PV micro inverter that can convert the DC power generated by PV modules into AC power fed into the grid.
SigenMicro has the following features:

Easy installation

- No need to install additional communication gateways: SigenMicro ensures networking among multiple inverters and communication with home WLAN routers through WLAN Mesh technology.
- Supports rooftop mounting and plug-and-play.

Module-level power control

Module-level maximum power point tracking (MPPT) and monitoring: PV modules generate power independently, contributing to a high total power generated by the PV system (i.e., shading or failure of a PV module does not affect the power generation of other modules).

Low-voltage safety

DC voltage on the PV module side is lower than 60 V.

Rapid system creation in the app

- Image recognition technology is adopted to automatically generate electronic maps from photos. In this way, a new system can be created as fast as within five minutes, without the need to add or arrange PV modules one by one. This technology can be used for PV plants in either an orderly or complex arrangement.
- By connecting to the WLAN hotspot of one inverter in the system wiring, the entire system wiring is created.

Module-level information query in the app

The app allows querying the voltage, current, power, and other information for each module, and enables control of each SigenMicro.

3.2 Product Models

Models that can be connected to a single PV panel:

- SigenMicro 400
- SigenMicro 500
- SigenMicro 384 US
- SigenMicro 480 US

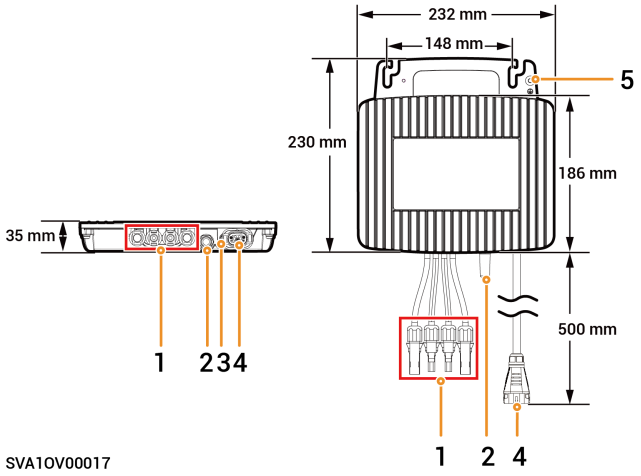
Two PV panels of the same model can be connected:

- SigenMicro 800
- SigenMicro 1000
- SigenMicro 768 US
- SigenMicro 960 US

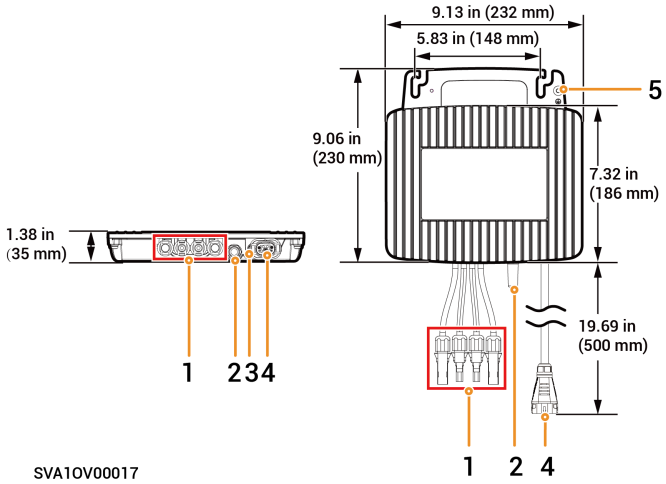
> **Tips**
>
> The PV panels connected to the inverter shall not be paralleled with other PV panels.

3.3 Product Appearance

SigenMicro (400-1000)



SigenMicro (384-960) US



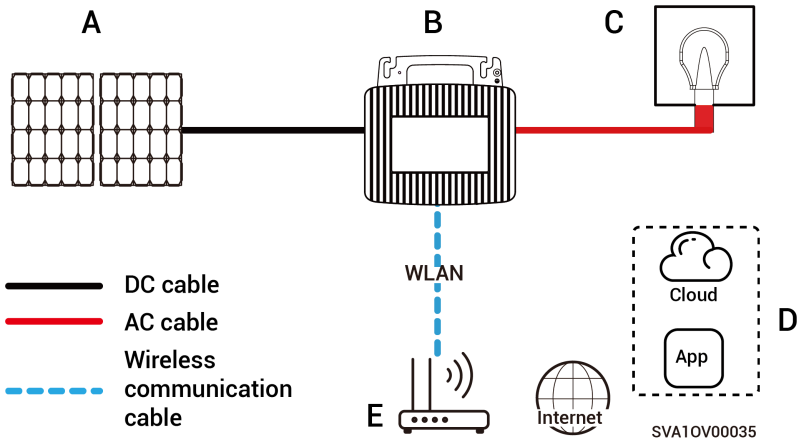
S/N	Description
1	DC terminal block
2	Antenna
3	Indicator
4	AC terminal
5	Grounding screw

3.4 Label Description

Symbol	Definitions
	Danger! High voltage High voltage exists inside the equipment when powered on. Do not open the casing when the equipment is running. Any maintenance or servicing operations must be performed by trained and skilled electrical engineers.
	Warning! Life-threatening Potential risks exist when the equipment is operating. Please take protective measures before operating the equipment.
	After the equipment is powered off, the discharge of internal components is delayed. Wait 5 minutes until the equipment is fully discharged according to the label time.
	Warning! Danger! Hot The surface of the heat dissipation area is hot when the equipment is operating. Do not touch it to avoid burns.
	Operate the equipment by referring to the User Manual.

3.5 Typical System Wiring

Balcony Scenario (SigenMicro (400-1000) models can be used in this scenario)

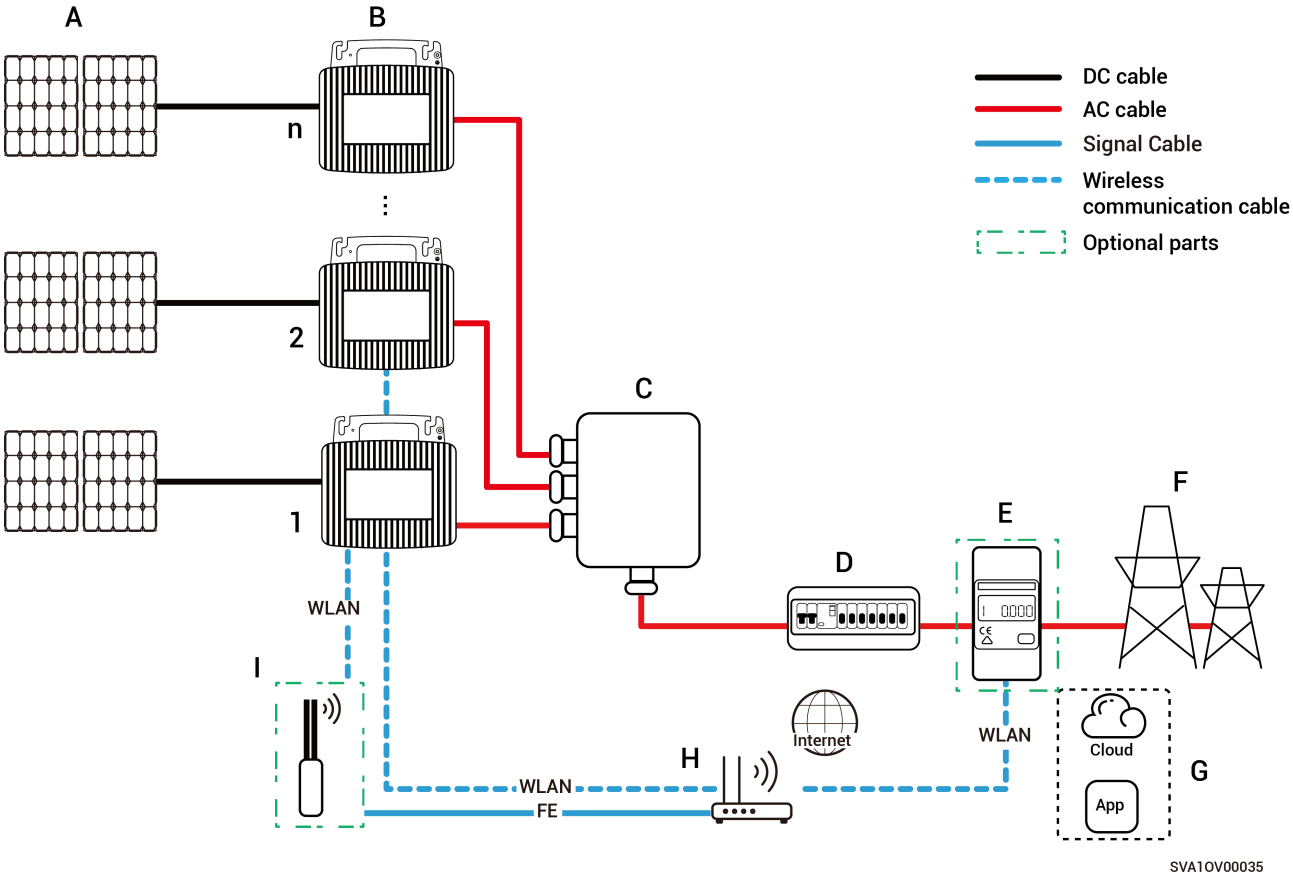


No.	Description	No.	Description	No.	Description
A	PV panel	B	SigenMicro	C	Socket
D	mySigen App	E	Router		

Tips

Please select the socket matching the SigenMicro model in accordance with local regulations.

Rooftop Scenario (SigenMicro (400-1000) and SigenMicro (384-960) US models can be used in this scenario)



No.	Description	Description	Description	Description	Description
A	PV panel	B	SigenMicro	C	Junction box
D	Distribution panel	E	WLAN meter	F	Power grid
G	mySigen App	H	Router	I	Wi-Fi AP

Tips

- SigenMicro supports parallel connection of up to n ⩽ 50 units.
- If you require data acquisition at the grid connection point to enable zero-power grid connection functionality, please configure E.
- Ensure the router's WLAN signal covers all inverters on the rooftop. If this requirement cannot be met, install an outdoor wireless AP. Wireless APs are available for purchase from our company.
- The rated current of the distribution panel (D)'s AC switch should be no less than: SigenMicro maximum output current × number of units in parallel × 1.25. Refer to Technical Parameters for the SigenMicro maximum output current.

Tips

- For the maximum number of SigenMicro units that can be connected to AC buses of different specifications, see Technical Parameters. This limit shall be subject to local regulations and standards.

Chapter 4 Location Requirements

Tips

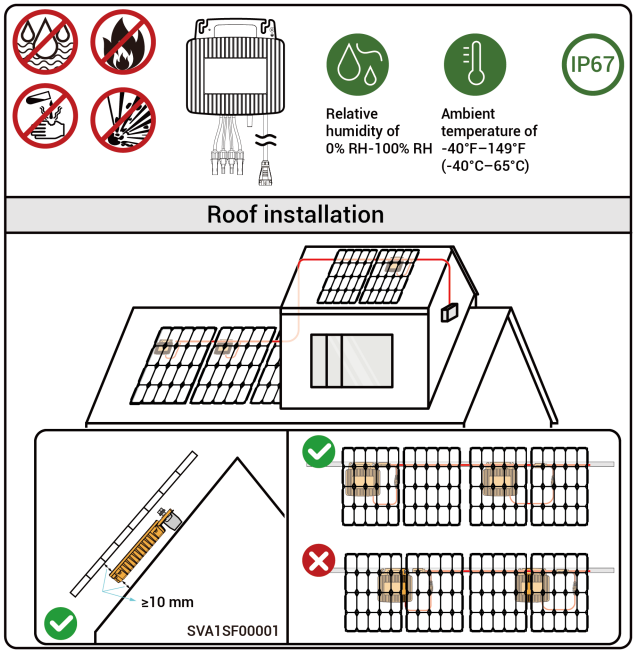
- Before installing the equipment, be sure to carefully read the following installation requirements. The Company will not bear any responsibility if the equipment malfunctions, is damaged, or even causes a personal safety accident during operation due to failure to operate as required.
- During actual 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.

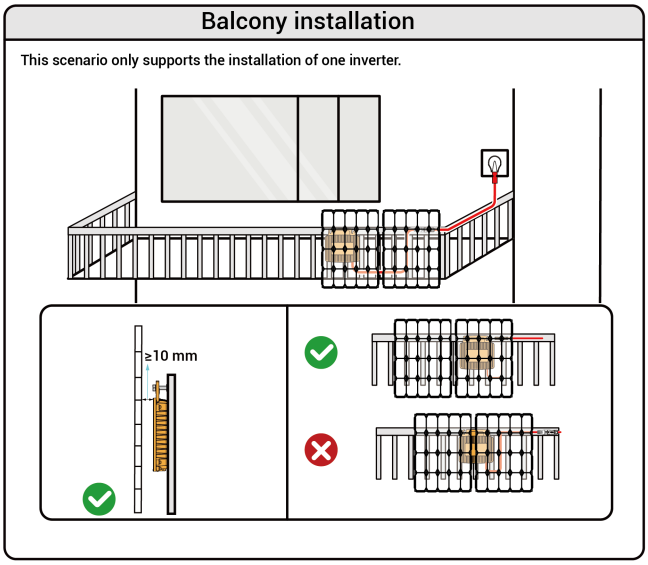
- Do not install the equipment in a smoky, flammable, explosive, or corrosive environment.
- Do not install the equipment on a flammable base.
- Avoid exposing the equipment and AC bus connectors to direct sunlight, rain, standing water, snow, or dust. It is suggested to install the equipment in a sheltered place.

Caution

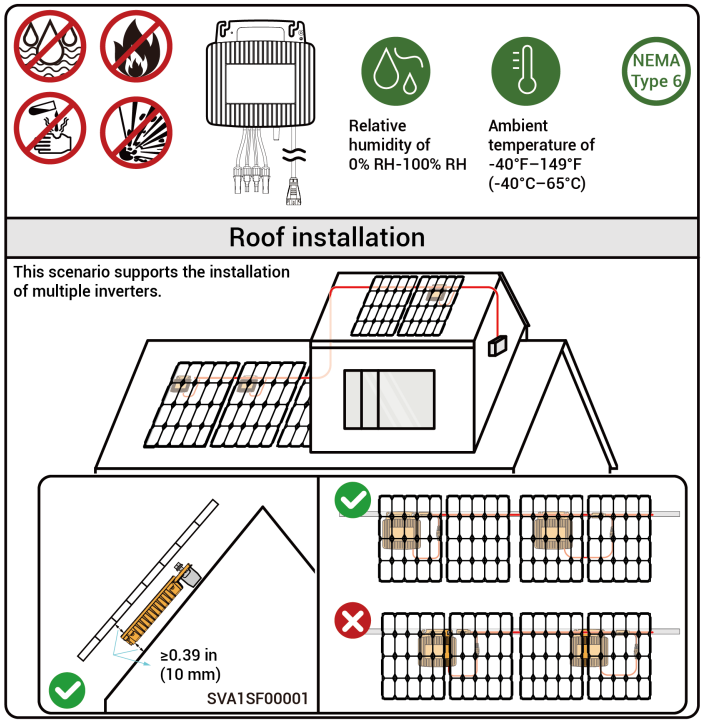
Please ensure that the router’ s WLAN signal can establish a stable connection with at least one inverter and that there are no obstructions between inverters. If this cannot be met (including but not limited to long distances between devices or between the device and the router, or the presence of obstructions such as color steel tiles or metal sheets that shield WLAN signals), please install an outdoor wireless AP. You can purchase the wireless AP from our Company.

SigenMicro (400-1000)





SigenMicro (384-960) US

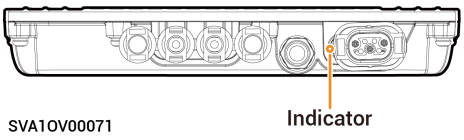


Chapter 5 Equipment Installation and Connection

- Equipment installation and connection must only be completed by the installer certified by the Company. For specific procedures, see the installation guide for the respective model.
- Parts and accessories supplied with the packing box are personal assets of the owner and must be kept safe.

Chapter 6 Use of Equipment

6.1 LED Indicator Status



SVA1OV00071

Color	Status	Description
	Blink	The system generates electricity normally, the equipment is successfully connected to the grid, and the communication is normal.
	Blink	The system generates electricity normally, the equipment is successfully connected to the grid, but the communication is abnormal.
	Steady on	The equipment is in standby mode, waiting for the app to issue the startup command.
	Blink	The equipment is not connected to the grid, or a grid anomaly is detected.
	Steady on	Hardware protection, such as DC-side abnormal ground impedance protection, over-temperature protection, and relay fault.

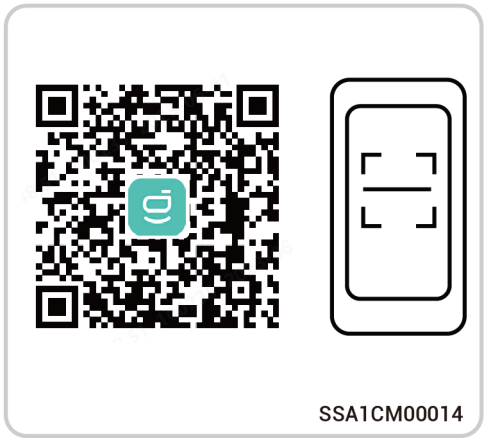
Tips

- After factory shipment, the SigenMicro defaults to standby mode. When DC power is applied, the green LED flashes for about 6 seconds before turning solid green, indicating that the SigenMicro is in standby mode.
- If the SigenMicro has been configured to start up, after the DC power is applied, the green LED flashes for about 6 seconds, then stays solid green for about 3 seconds, followed by flashing green, indicating that the SigenMicro is starting up.

6.2 mySigen App Download and Login

Download the app





Register an account via the installer

1. Provide your email account to the installer for signing up.
2. After signing up your account, the installer will ask you to activate your account.
3. Please check the email sent from the "sigencloud" account in your inbox, set your initial password, and activate your account.
4. Log in to the app.

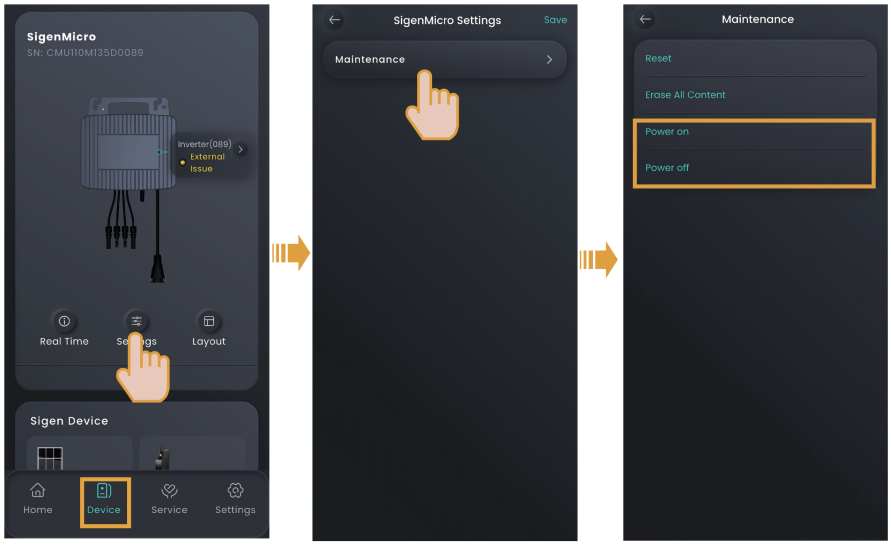
Owner Account Registration

If an inverter is installed on a balcony and no inverter installer is available, the owner can complete the new system creation operation on their own.
Open the App, tap the "Sign Up" button at the bottom, and complete the account registration according to your actual situation.
For detailed system creation operations, please refer to the "SigenMicro Series PV Microinverters" section in the "mySigen App Creating New Systems Guide".

6.3 Power on/off

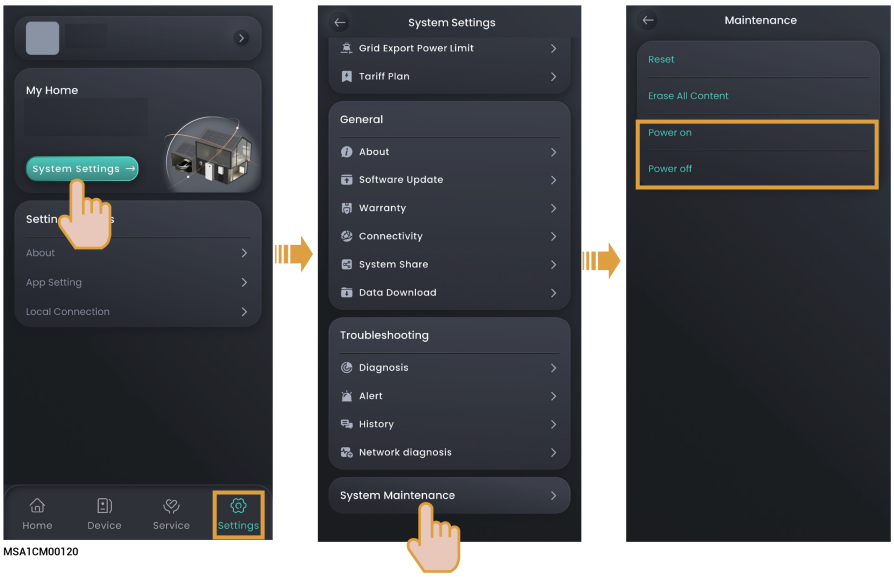
Log in to the App and refer to the illustration for power on/off operations.

Fig 6-1 Power-on/off of a single device



MSA1CM00109

Fig 6-2 Batch power on/off



MSA1CM00120

6.4 Other Settings of mySigen App

For more information about the app settings, see mySigen App User Manual.

Chapter 7 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 or sales representative.

Flood Emergency Measures

Danger

- Shut down the equipment or cut off the mains switch if it is safe to do so.
- Do not touch the battery pack if it is submerged to avoid electric shock.
- Do not use the equipment after the floodwaters recede. Please contact your installer or sales representative.

Chapter 8 Technical Parameters

For more information on the parameters of this equipment, see the respective Datasheet.

- SigenMicro (400-1000):
  Datasheet - SigenMicro Inverter
- SigenMicro (384-960) US:
  Datasheet - SigenMicro Inverter US