MatriCloud App

Local Commissioning Manual

Applicable to MatriCloud App v2.13.2

Shanghai Chint Power Systems Co., Ltd.

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1. About This Manual

1.1. Purpose and Scope

This manual provides step-by-step guidance for commissioning and troubleshooting MatriCloud-compatible inverters and gateway devices on site, using the MatriCloud App in local mode. Local mode connects your mobile device directly to the equipment through a Bluetooth or a Wi-Fi connection, so that you can verify the physical wiring, configure operating parameters, handle alarms, and perform maintenance while standing next to the device.

In-Scope (Local Operations)

This manual covers on-site tasks that are performed through a direct connection, including:

- Establishing a Bluetooth or Wi-Fi connection to a device (Chapter 3 Getting Started).
- Reviewing the real-time device and running state on the Home screen (Chapter 4 Home).
- Reading the real-time operating data and configuring grid, protection, and control parameters (Chapter 5 Settings).
- Handling faults, viewing the running log, upgrading the firmware, checking yield statistics, managing the access password, and using advanced functions such as detachment-board monitoring and PID-SVG (Chapter 6 More).
- Configuring the gateway module, its communication parameters, logging, and reboot (Chapter 7 Terminal Parameter Setting).

Out of Scope

- Remote Monitoring and O&M: For cloud-based monitoring and remote operation of sites and devices, refer to the MatriCloud App Remote O&M Manual.
- Web Management: For browser-based administration of the platform (sites, devices, and users), refer to the MatriCloud Web User Manual.
- Hardware Installation: For hardware installation, wiring, and the electrical safety of the devices, refer to the documentation supplied with the inverter, the gateway, or the electricity meter.

1.2. Target Audience

This manual is primarily intended for:

- Distributors

- Installers
- Owners

Commissioning operations are mainly oriented toward certified electricians, commissioning engineers, and installation personnel.

1.3. Safety and Responsibility

General Compliance and Liability

- **Operational Compliance:** Read this manual carefully before use, follow the instructions strictly, and observe all safety precautions on product labels and within this manual.
- **Applicability of Laws and Standards:** In addition to the safety instructions in this manual, you must comply with relevant international, national, or regional laws, regulations, standards, and industry requirements.
- **Limitation of Liability:** The Company shall not be liable for any personal injury, death, or property loss resulting from improper equipment use or violation of safety requirements.

Local Commissioning Safety Precautions

Commissioning and maintenance operations described in this manual are performed directly on-site using a local Bluetooth or Wi-Fi connection. Improper operations near live equipment may lead to electric shock, personal injury, or equipment damage. All personnel must observe the following safety practices:

- Personnel Qualifications: Only certified electricians or trained commissioning engineers who understand high-voltage electrical systems and local grid codes are authorized to operate the equipment and modify parameters.
- Pre-Operation Safety Checks: Before connecting to an inverter, ensure the physical installation and wiring (AC, DC, PE grounding, and communication cables) comply with local electrical installation codes. Always wear personal protective equipment (PPE), such as insulated gloves and protective eyewear.
- Live Equipment Hazards: High DC and AC voltages are present inside the equipment during operation. Do not touch exposed live terminals or disassemble the chassis while the inverter is energized. After disconnecting both DC and AC power sources, wait the required discharge time specified on the equipment label before touching internal components to ensure internal capacitors are completely discharged.
- Target Device Verification: Before delivering parameter modifications or control commands (such as power on/off or factory reset), verify that the device serial number (SN) connected in the App matches the physical label on the target machine.

- On-Site Coordination: Coordinate with on-site construction and maintenance personnel prior to executing control commands or rebooting the device. Never issue startup, shutdown, or parameter delivery commands while manual wiring, inspection, or mechanical work is actively in progress.
- Local Grid Compliance: Modifying grid connection codes, voltage/frequency trip thresholds, power dispatch limits, or derating curves directly affects the stability of the public electrical grid. Configure parameters strictly in accordance with local grid regulations and site design requirements.
- Command Verification: If a command or parameter modification fails to apply or returns an error, verify the physical operating status and fault indicators on the inverter first. Do not repeatedly send conflicting commands without confirming the device status.



DANGER!

High voltage hazard. Ensure the equipment is properly grounded and de-energized before touching any electrical terminals. Parameter modifications must strictly conform to local utility standards.

1.4. How to Use This Manual

This manual is organized by task, so that you can find an operation by the object that you want to work with.

- **Chapter 4 Home** shows the main dashboard of a connected device — its model and serial number, running state, energy flow, alarms, and shortcuts for basic control such as power on/off.
- **Chapter 5 Settings** describes how to read the real-time parameters of the device and how to configure the operational control, grid-connection, and protection parameters through a local Bluetooth connection.
- **Chapter 6 More** describes the maintenance and advanced functions: basic settings, fault history, running log, firmware upgrade, yield statistics, access password verification, detachment-board monitoring, and PID-SVG.
- **Chapter 7 Terminal Parameter Setting** describes how to configure the gateway module — its network connection, communication parameters, advanced telemetry server, and reboot.
- **Chapter 3 Getting Started** describes how to install the App, connect to a device (Quick Install and Device Access), and what to do while the installation settings wizard runs.

1.5. Symbol Introduction

The symbols in this document are defined as follows:



DANGER!

DANGER indicates a hazardous situation with high level of risk which, if not avoided, will result in death or serious injury.



WARNING!

WARNING indicates a hazardous situation with medium level of risk which, if not avoided, could result in death or serious injury.



CAUTION!

CAUTION indicates a hazardous situation with low level of risk which, if not avoided, could result in minor or moderate injury.



NOTICE!

NOTICE indicates a hazardous situation which, if not avoided, could result in equipment working abnormally or property loss.



IMPORTANT!

IMPORTANT! indicates important supplementary information or provides skills or tips that can be used to help you solve a problem or save your time.

2. System Overview and Architecture

2.1. MatriCloud Platform Overview

MatriCloud is a comprehensive cloud platform designed for the full lifecycle monitoring, operation, and maintenance (O&M) of photovoltaic (PV) and energy storage systems (ESS).

The platform is accessed through two primary client interfaces: the browser-based web application (MatriCloud Web) and the mobile application (MatriCloud App). Both interfaces synchronize with the same cloud backend, ensuring that site telemetry, device states, and operational records remain consistent across platforms.

The MatriCloud App supports two connection modes: remote mode and local mode. Select the connection mode according to your position relative to the device: use remote mode for off-site monitoring and remote O&M, and local mode for on-site commissioning.

NOTICE!

The MatriCloud App is designed as a focused mobile companion, not a complete replacement for MatriCloud Web. Platform-level administration, organization restructuring, and batch report configurations must be performed via the Web portal.

Relationship Between the Access Ends and the Devices

The table below summarizes the purpose of each access end and its relationship to this manual.

Table 2-1 Access Ends and Objects

Access End / Object	Purpose	Covered by This Manual
MatriCloud Web	The complete platform for the management and the configuration of sites, devices, and users, accessed from a browser.	No. Refer to the MatriCloud Web User Manual.
MatriCloud App (remote mode)	The mobile entry point for the remote monitoring and O&M of sites and devices through the cloud service.	No. Refer to the MatriCloud App Remote O&M Manual.
MatriCloud App (local mode)	On-site commissioning and functional testing through a direct Bluetooth or Wi-Fi connection to a device.	Yes. This is the scope of this manual.

2.2. Connection Modes: Remote vs. Local

The MatriCloud App supports two connection modes: remote mode and local mode. Select the connection mode according to your position relative to the device: use remote mode for off-site monitoring and remote O&M, and local mode for on-site commissioning.

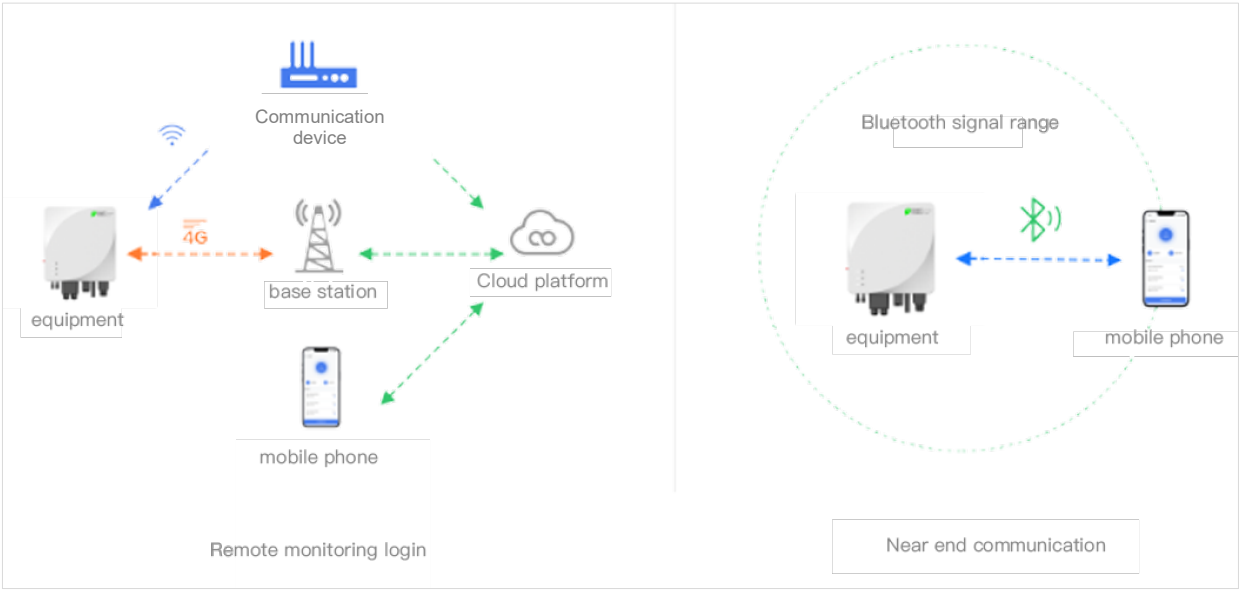


Figure 2-1 Network Connection Mode

Remote Mode (Remote monitoring login)

- Data Flow: On-site communication hardware (such as a 4G/Wi-Fi Gateway or a Local Controller) uploads telemetry data to the regional cloud platform. The mobile app communicates directly with the cloud service over Wi-Fi or mobile cellular data.
- Application Scenarios: Daily performance checks, cross-site alarm tracking, remote power control, operating mode adjustments, and remote firmware upgrades.
- Authentication: Requires logging in with a registered account username/email and password.

Local Mode (Near-End Communication)

Local Mode is dedicated to on-site commissioning and physical maintenance when a technician is standing next to the equipment.

- Data Flow: The mobile device connects point-to-point to the inverter or gateway using built-in Bluetooth or local Wi-Fi. Telemetry and commands are exchanged directly without passing through the cloud server.
- Application Scenarios: Initial grid-connection commissioning, electrical parameter calibration, safety regulation testing, and offline troubleshooting.

Authentication: Direct Bluetooth connection without requiring a cloud account login.

NOTICE!

Direct Bluetooth communication is supported only on Chint Power devices equipped with an integrated Bluetooth module. Consult your distributor or installer to verify whether your specific device model supports Bluetooth connectivity.

2.3. Core Functional Capabilites

In local mode, the MatriCloud App provides direct, near-end engineering capabilities:

- Quick Commissioning Wizard：Step-by-step guidance covering physical wiring inspection, grid standard selection, zero-export power limits, and network connection.
- Direct Point-to-Point Device Access: Real-time monitoring of inverter operating states (Standby, Running, Fault, Warning), DC/AC electrical parameters, and power flows.
- Complete Register Configuration: Full inspection and adjustment of Input and Hold Register groups, including power dispatching, multi-stage grid protection thresholds, derating curves, and AFCI settings.
- Local Maintenance and Diagnostics: Direct reading of active and historic fault codes with troubleshooting suggestions, event running logs, and local firmware upgrades via Bluetooth.
- Terminal Gateway Setup: Comprehensive configuration of external and built-in communication gateways, including protocol selection, Wi-Fi/4G network settings, baud rates, and diagnostic message logging.

2.4. Capability and Access Boundaries

2.4.1. Hierarchical Access Tiers and Passwords

The system uses three-tier passwords to enforce hierarchical access control, with each tier granting distinct functional permissions. This manual uses the "Installer and Distributor" interface as an example; the same interface displays varying parameter ranges based on the user’s role.

Table 2-2 Access Tier and Password

Tier	Assigned Role	Access Scope	Security Notes
1	Owner	Limited access to basic settings.	4-digit user-defined password
2	Installer/Distributor	Full operational access (advanced configuration, firmware updates)	Default password **1111**

3	R&D Engineers	Developer-level access (technical and developmental parameters)	Predefined password. Not provided in this manual.

2.4.2. Model and Firmware Dependencies

- Displayed parameter groups, individual register names, and configurable ranges are dynamically identified and loaded by the App based on the connected inverter model and its firmware version.
- Advanced features (such as Detachment Board Monitoring, PID-SVG, or Dry Contact control) are displayed only when supported by the connected inverter hardware and equipped accessories.

2.5. App Interface Overview

When connected in local mode, the MatriCloud App interface provides dedicated workspaces accessible from the bottom navigation bar:



Figure 2-2 Local Mode App UI Structure and Bottom Navigation Bar

Table 2-3 Local Navigation Entries

Entry	Main Functions	Refer to
Home	Displays the connected device profile (model, SN), real-time running state, power on/off shortcut, active fault notifications, energy flow chart, and real-time AC/DC metrics.	Chapter 4 Home

Settings	Provides structured access to Input Register Maps (read-only operating data) and Hold Register Maps (grid protection, power dispatch, and derating parameters).	Chapter 5 Settings
More	Offers advanced configuration and local maintenance: Basic Settings, Fault History, Running Log, local Bluetooth Upgrade, Yield Statistics, Access Password Verify, Detachment Board Monitoring, and PID-SVG.	Chapter 6 More
Terminal / Gateway	Direct shortcut from the top bar or device list to configure the gateway communication parameters, network connection, logging, and reboot.	Chapter 7 Terminal Parameter Setting

2.6. Local Auxiliary Tools and Support

In addition to direct inverter commissioning, the App provides auxiliary tools to facilitate on-site work:

- **Quick Install Wizard:** Accessible directly from the login page or Device Access screen, providing a streamlined commissioning flow for rapid initial grid tie-in.
- **Offline Firmware Package Management:** Technicians can download firmware upgrade packages to mobile storage in advance (via Remote Mode / Device Access) to execute offline local flashing when no internet is available on site.
- **Terminal Parameter Configuration:** Provides direct communication module configuration (Wi-Fi SSID, APN, baud rate, MQTT server, diagnostic logging) via local Bluetooth swipe gestures or Home screen shortcuts.

3. Getting Started

3.1. Prerequisites and App Installation

3.1.1. Preconditions

Before installing the App, ensure your device meets these requirements:

- Operating system: iOS 13.0 or later, Android 7.0 or later.
- Network: Connects to Wi-Fi or a 3G/4G/5G mobile network.
- Storage: Has enough storage to install a new Application.
- Battery: Ensure sufficient battery level (above 20%).

3.1.2. Download and Install the App

Method 1: Search in Store

1. Open your app store.
2. Search for MatriCloud.

Method 2: Scan QR Code

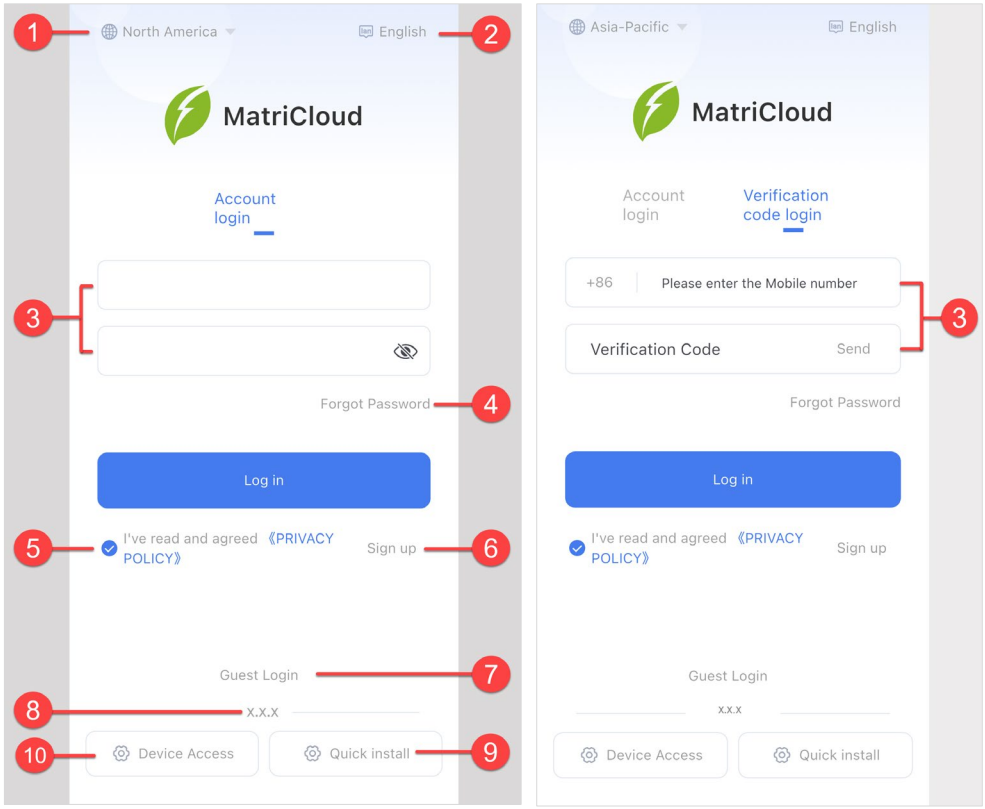
Scan the QR code to access the download page.

Figure 3-1 Scan to Download MatriCloud

1. Follow the on-screen prompts to download the App.
2. After installation, the MatriCloud icon appears on your home screen.

3.2. Login Interface Overview

The login interface is the first screen you see when opening the MatriCloud App. It lets you access the App remotely or locally. This section describes the interface's key elements, shown in the screenshot below.



(A) Europe / North America Server (B) Asia-Pacific (with Mobile Login)

Figure 3-2 The MatriCloud login screen

Table 3-1 Login Items

No.	Name	Description
1	Server Region	Select the server for your location (e.g., EU or North America) to connect.
2	Language	Switch the App language to your preference.
3	Login Fields	Applicable to remote mode. Enter your credentials based on the selected region: • All Regions: Email and Password. • Asia-Pacific Only: Mobile Number and SMS Verification Code. See *MatriCloud App Remote O&M Manual*.
4	Forgot Password	Applicable to remote mode. Tap to reset your password if forgotten. See *MatriCloud App Remote O&M Manual*.
5	Privacy policy	Applicable to remote mode. See *MatriCloud App Remote O&M Manual*.
6	Sign up	Applicable to remote mode. Register a new account. See *MatriCloud App Remote O&M Manual*.
7	Guest Login	Access limited App features without an account, for visitors.
8	App Version	Displays the current App version number (e.g., 2.13.2).
9	Quick Install	Opens a wizard to set up the inverter quickly via Bluetooth for local mode. See Section *3.4 Quick Install*.

10	Device Access	Tap to connect via Bluetooth for local mode and enter the home menu. See Section *3.5 Device Access*.

3.3. Server and Language Selection

Before connection, select the server for your region and set the App's language. These options ensure the MatriCloud App connects to the correct service area and displays in your preferred language.

Operation Steps:

1. On the login screen, tap the server icon in the top-left corner.
2. Select the server region that corresponds to your location (e.g., EU for Europe, or North America) from the list.
3. On the Login screen, tap the language icon at the top right.
4. Choose your preferred language (e.g., English) from the list.

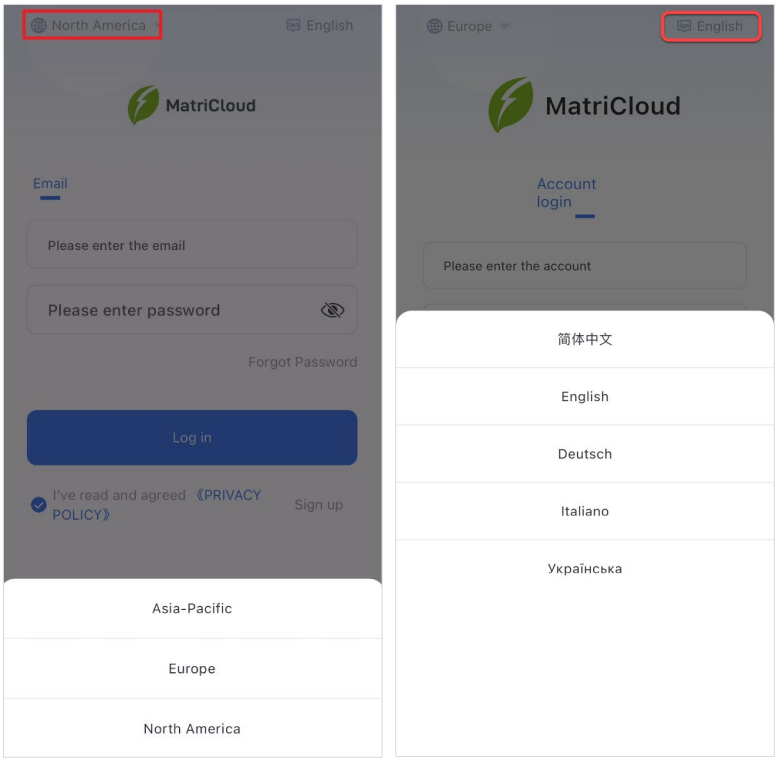


Figure 3-3 Server and Language Selection

3.4. Quick Install

Quick Install is an on-site commissioning wizard that guides users through a structured four-stage workflow to verify physical connections, configure essential operating parameters, set up cloud networking, and complete initialization.

3.4.1. Connect to Inverter

Before starting the wizard, ensure Bluetooth is enabled on your mobile device.

1. Open the MatriCloud App and tap **Quick Install**.

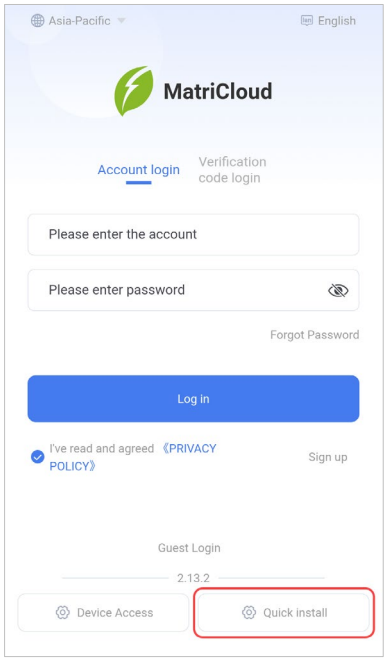


Figure 3-4 Quick install on the login page

2. On the **Device Access** page, tap **Bluetooth Connect**.

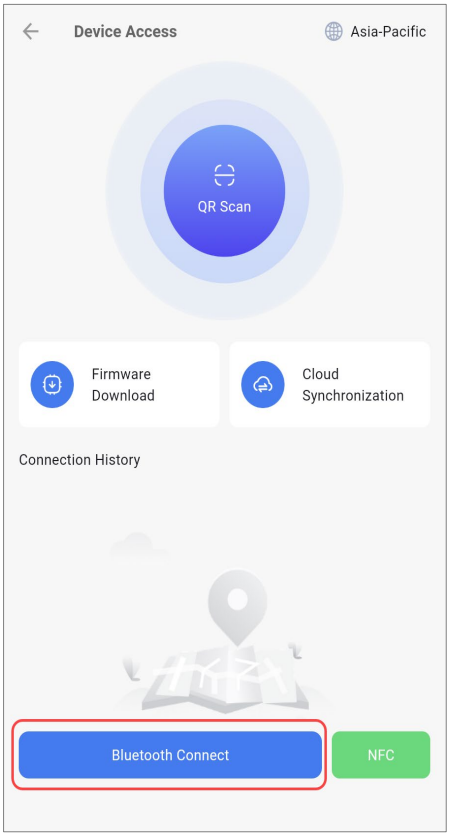


Figure 3-5 Bluetooth Connect on the Device Access page

3. Select the target device from the device list.

   Note: The displayed number corresponds to the last 8 digits of the serial number (SN) on the device label.

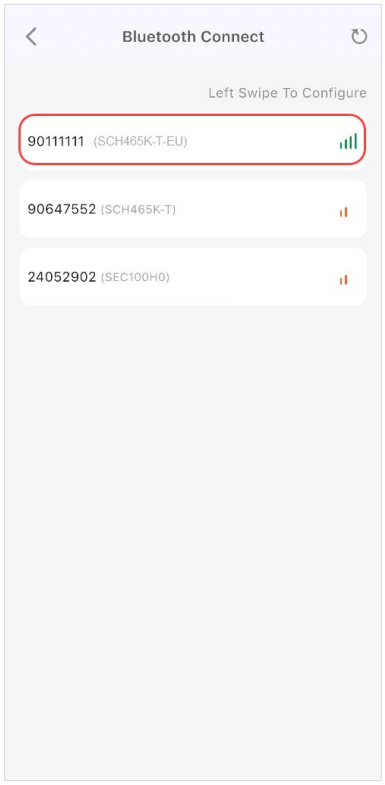


Figure 3-6 Select the communication module

4. Wait for the App to establish communication. Once connected, the Installation Settings Wizard opens automatically.

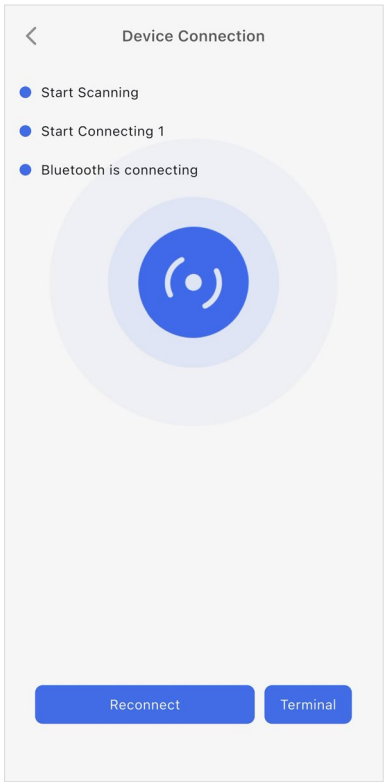


Figure 3-7 Connect to the device

3.4.2. Run the Installation Settings Wizard

NOTICE!

The configuration items, parameter, and energy flow diagrams displayed in the wizard vary depending on the connected inverter model, system configuration, and firmware version. The screenshots and parameters described in this section are for reference only; always refer to the actual on-site display on your mobile device.

Follow the four-step wizard to complete inverter commissioning:

Step 1. Connection (Verify Physical Wiring)

1. Verify that the on-site physical wiring matches the checklist on screen.
2. Confirm all connections are secure, then tap **Next Step**.

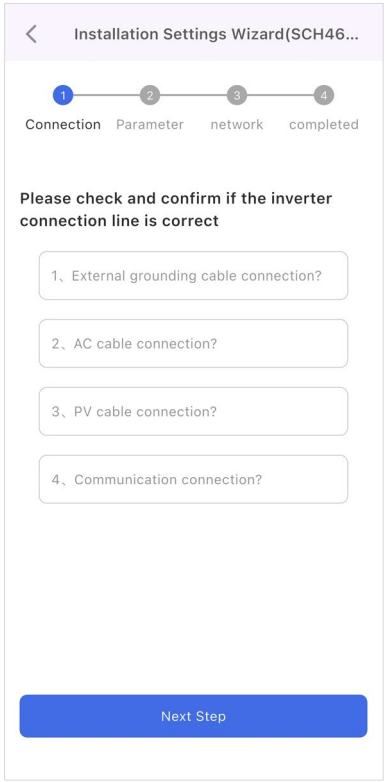


Figure 3-8 Connection step

Step 2. Parameter (Configure Essential Parameters). On the Parameter screen, tap each category to configure parameters as required.

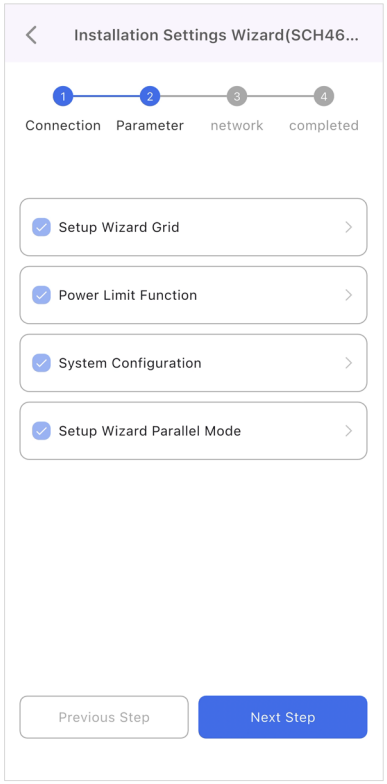


Figure 3-9 Parameter step

3. **Setup Wizard Grid:** Set GridConnectionRule, RatedFreq, RatedVolt, and RatedPow according to local regulations.

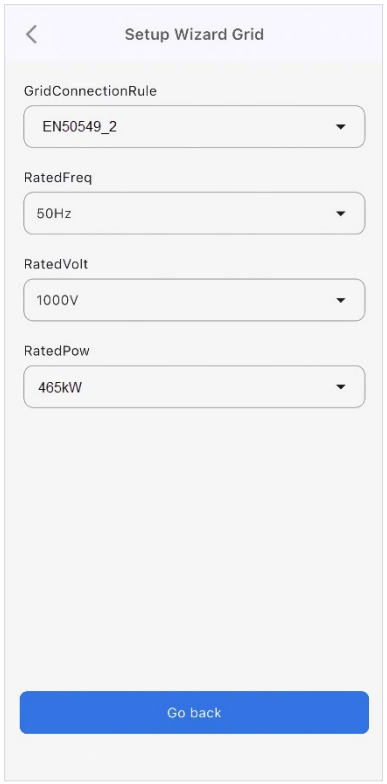


Figure 3-10 Setup Wizard Grid

4. **Power Limit Function**: Set DspAntiRefluxEnable (Zero-export control) to Enable or Disable as required.

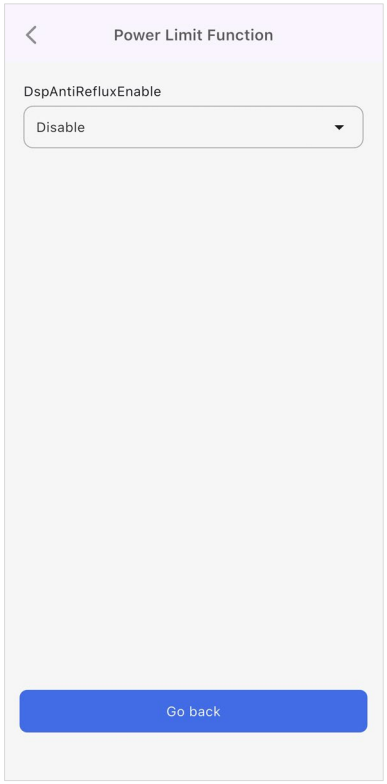


Figure 3-11 Power Limit Function

5. **System Configuration:** Verify the device SN (SN20~1), synchronize the system time (TimeSet), and set the RS485SlaveModbusAddr.

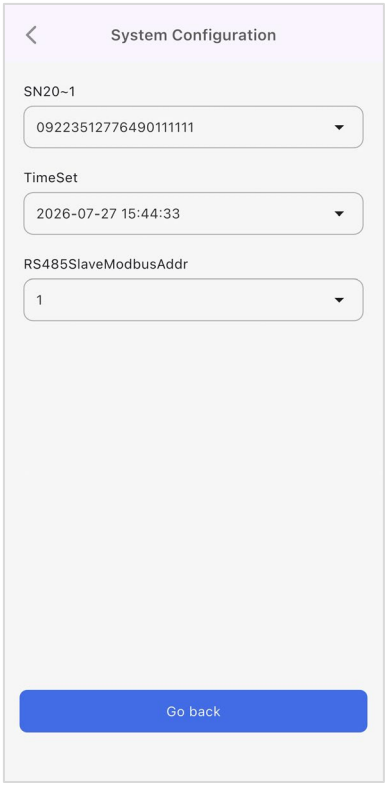


Figure 3-12 System Configuration

6. **Setup Wizard Parallel Mode**: Confirm that PVInputMode (e.g., Parallel connection or Independent) matches the PV string configuration.

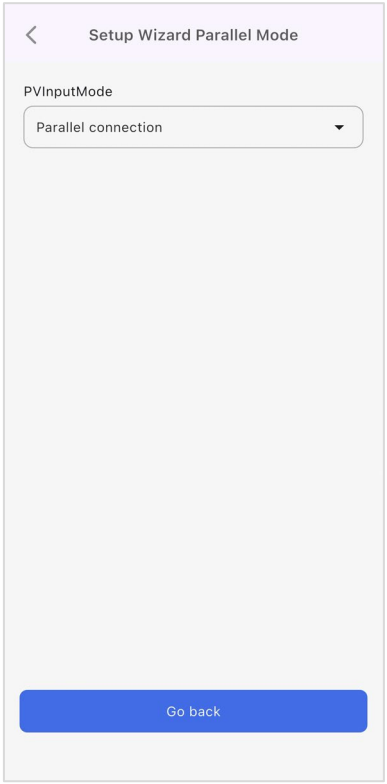


Figure 3-13 Setup Wizard Parallel Mode

7. After all parameter groups are configured, tap **Next Step**.

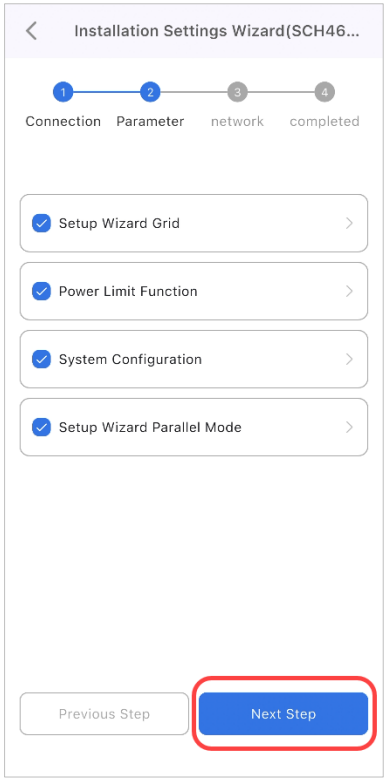


Figure 3-14 Complete Parameter Configuration

Step 3. Network (Configure Communication)

1. On the Network Connection Configuration screen, select the network connection method:

- 4G: Select 4G if the inverter is equipped with a 4G communication module.
- Wi-Fi: If using a standard Wi-Fi module, select Wi-Fi and verify that the STA indicator LED on the stick is flashing.

2. Tap **Next Step**.

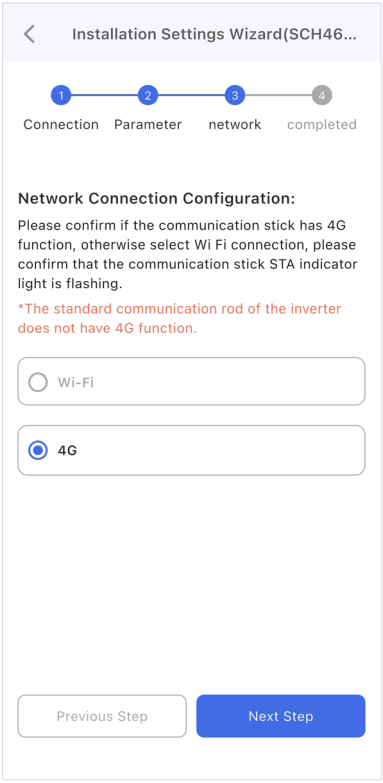


Figure 3-15 Network Connection Configuration

Step 4. Completed (Verify Status and Reboot)

On the Completed screen, review the real-time energy flow diagram and check the energy flow diagram operating values. Depending on the inverter operational state, proceed with one of the following scenarios:

Scenario A: Commissioning Succeeded (Normal Flow)

1. Verify that the system displays a green checkmark along with the message **Initialize settings completed**.
2. Tap **Complete and reboot.**
   - Expected Result: The inverter applies the settings and restarts. Once confirmed, the wizard closes and automatically returns to the **Device Access** screen.

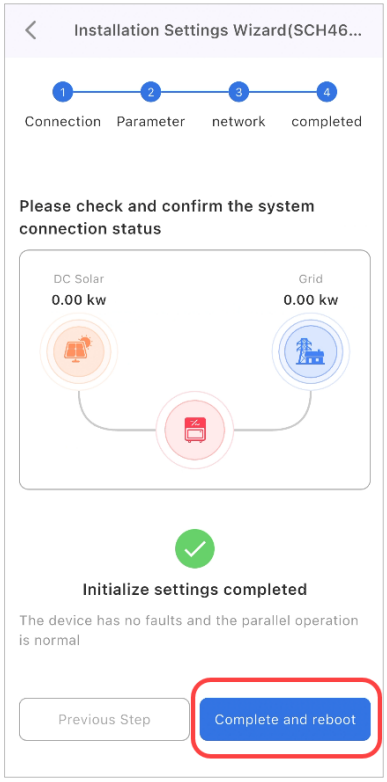


Figure 3-16 Completed step

Scenario B: Fault Detected

If the system detects electrical wiring, communication, or hardware errors, the screen displays Device faults and lists the active fault items (e.g., Meter Comm Fault).

To handle the fault, choose either of the following methods:

Option 1: Troubleshoot and Re-run Quick Install (Recommended)

1. Tap the fault item card (e.g., Meter Comm Fault) to open the Fault solution screen.
2. Review the Fault Description, Fault Code, and follow the on-site Handling suggestions.
3. Once the physical fault is rectified on-site, return to the Quick Install entry on the Device Access screen and run the wizard again to verify the system status.

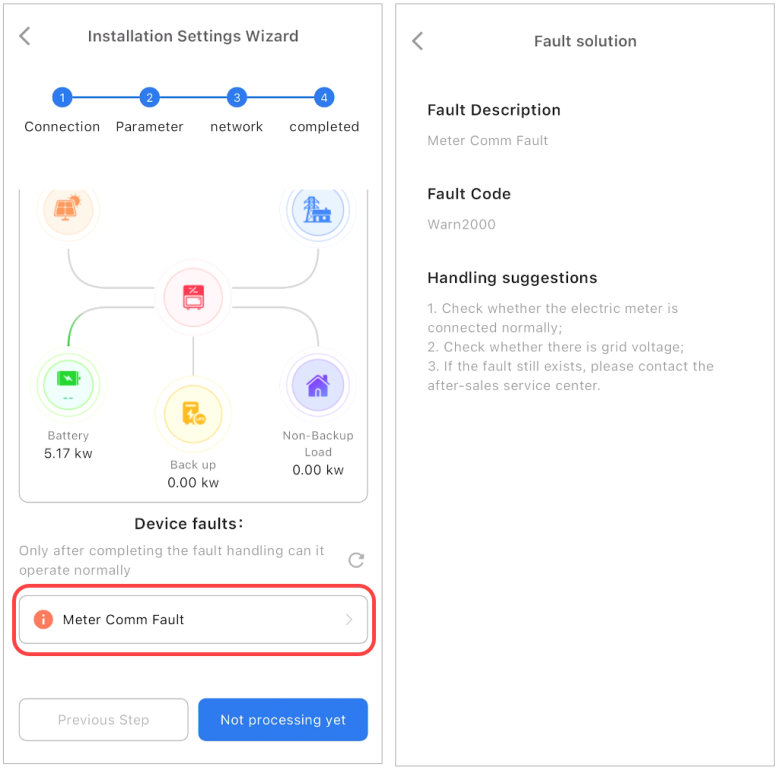


Figure 3-17 Example of Fault solution details

Option 2: Defer Processing (Not Processing Yet)

If on-site conditions do not allow immediate troubleshooting, tap Not processing yet at the bottom of the screen.

Expected Result: The wizard closes immediately and automatically redirects back to the Device Access screen without forcing a fault-clearing action. You can continue troubleshooting or re-commission the inverter later from the local debugging workbench.

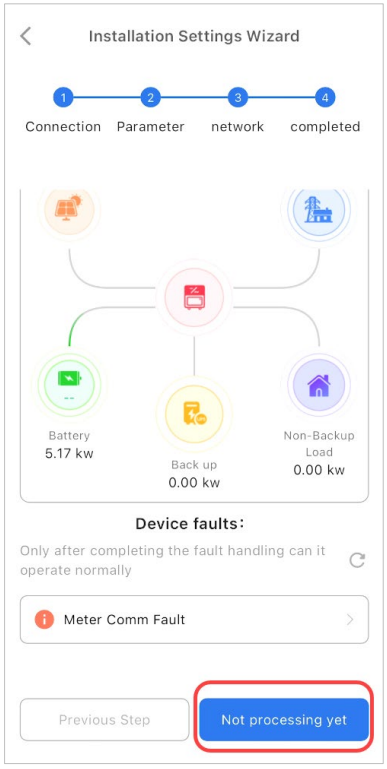


Figure 3-18 Not Processing Yet

3.5. Device Access

Once Quick Install finishes, the system will automatically switch to the Device Access screen. Connect to device to access the main interfaces:

1. Open the MatriCloud App and tap **Device Access**.

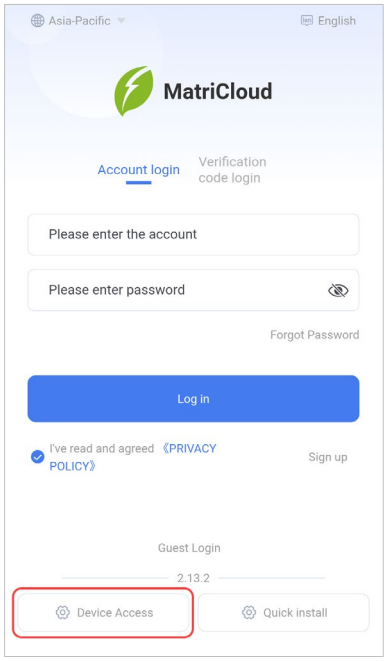


Figure 3-19 Tap Device Access

2. On the Device Access page, tap Bluetooth Connect.

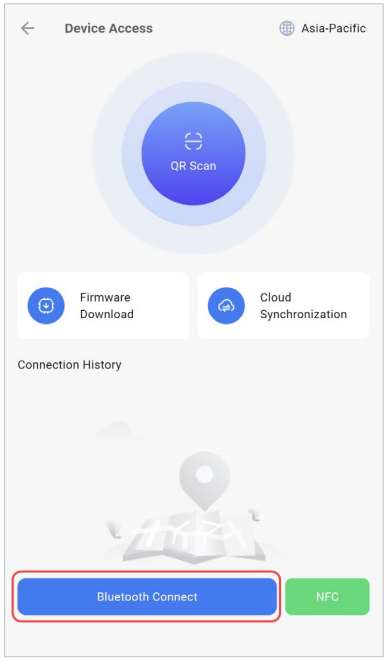


Figure 3-20 Device Access

3. Select the target device from the device list.

   Note: The displayed number corresponds to the last 8 digits of the serial number (SN) on the device label.

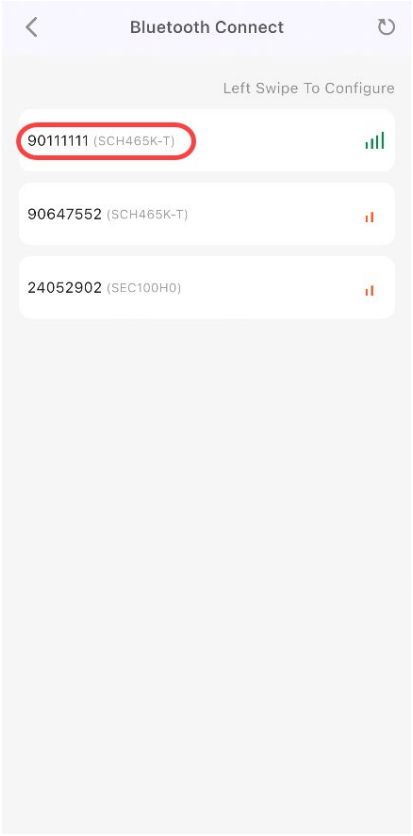


Figure 3-21 Select the communication module

4. Wait for the App to establish communication. Once connected, **Home** screen opens automatically.

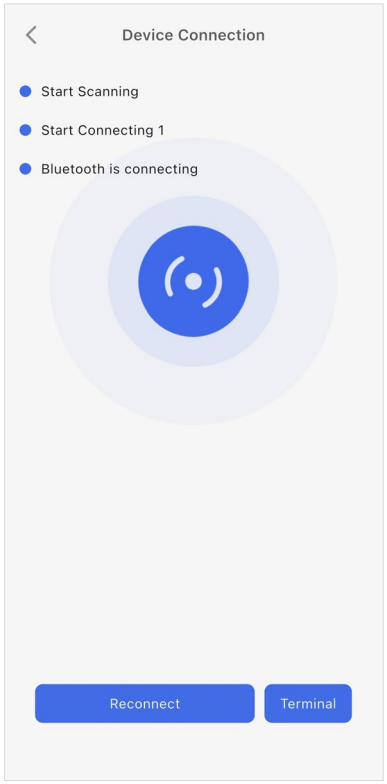


Figure 3-22 Connecting to the device

4. Home

NOTICE!

The features available under the **Settings** and **More** menus vary depending on the connected machine model, installed accessories (such as gateways or batteries), and user role permissions. Unaccentuated or absent menus indicate that the feature is unsupported by the currently connected device.

4.1. Home Screen Overview

The home screen is the main dashboard of the MatriCloud App, providing a quick view of your device. It displays the inverter information, inverter state, energy flow chart, and the real-time information of AC, DC, etc. This section describes the home page's layout and features, as shown in the screenshot below.

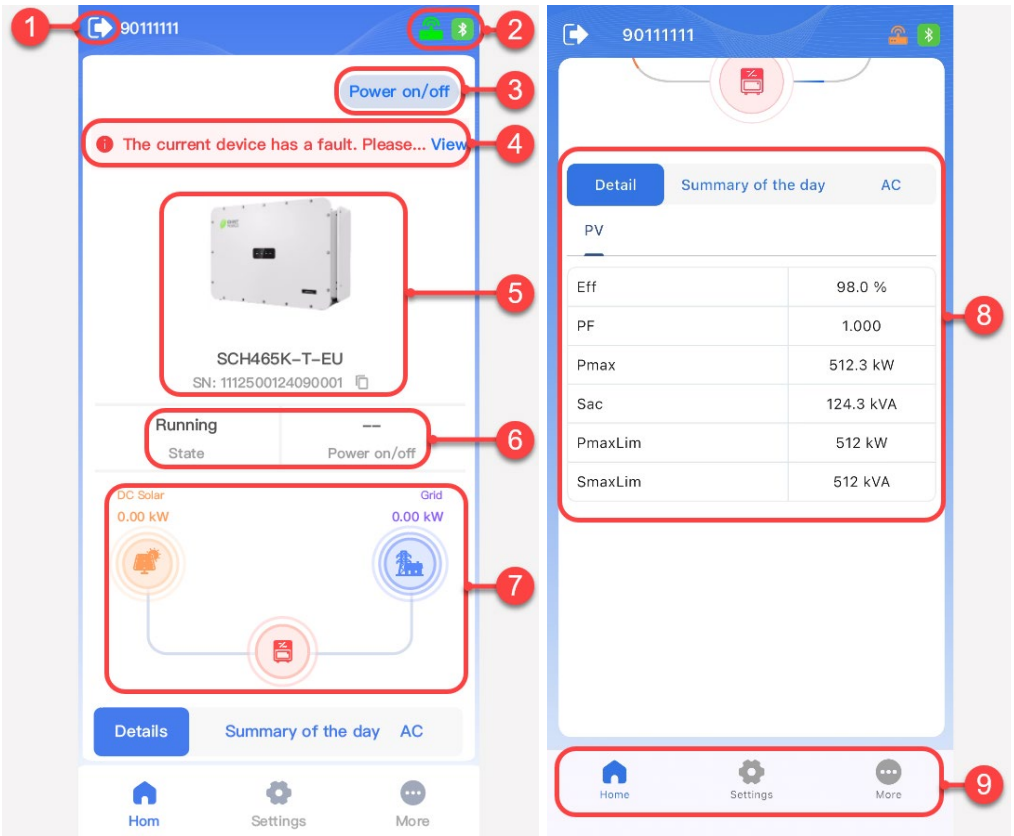


Figure 4-1 Home Screen

No.	Component name	Description
1	Exit	Tap the exit icon to disconnect the device.
2	Bluetooth and Gateway Status	Bluetooth connection status:

		• : Bluetooth connected • : Bluetooth disconnected Gateway connection status: • : Network connected • : Network disconnected Tap the icon to configure the gateway.For details, see Chapter 7 *Terminal Parameter Setting*.
3	Power on/off	Power on/off command. The 'Power on/off' shortcut on the Home screen varies by device model.
4	Fault Notification	If the device is in fault status, the fault notification appears, tap the notification to view the fault description. For details, see Section *6.2 Fault History*.
5	Inverter Information	Display the device picture, model, serial number (SN)
6	Inverter Running States	The device has four states: Standby, Running, Fault, and Warning. For details, see Section *4.2 Running State*.
7	Energy Flow Chart	Visualizes real-time energy flow.
8	General Information	Display the information of summary of the day, DC, AC, version and other information.
9	Navigation Bar	Icons to navigate the App: • Home: Current page • Setting: Configure parameters • More: Provide additional options and configurations.

4.2. Running State

The inverter has four running states: Standby, Running, Fault, and Warning. Below is the detailed explanation of each state:

- Standby: The device performs self-check before starting. When all conditions are met, it switches from standby to running mode.
- Running: The system is running smoothly, converting solar DC power into usable AC electricity.
- Fault: When an error occurs, a notification displays at the top of the screen. Tap **View** to troubleshoot; see Section *6.2 Fault History* for diagnostic codes and resolution.
- Warning: The system enters a warning state upon detecting internal communication faults.

5. Settings

IMPORTANT!

Master Parameter Matrix & Modbus Protocol Reference:

Because available registers, address offsets, and parameter thresholds vary dynamically by inverter model and firmware version, this manual provides generalized operational procedures only.

For the complete register-by-register mapping table (including hex addresses, data types, and model-specific ranges), you MUST refer to the corresponding Model-Specific Modbus Register Map (Excel/Document). Obtain the matching matrix from your technical support or distributor prior to on-site commissioning.

The Settings menu enables reading real-time device status and configuring operational control, grid connection, and protection parameters via a local Bluetooth connection.

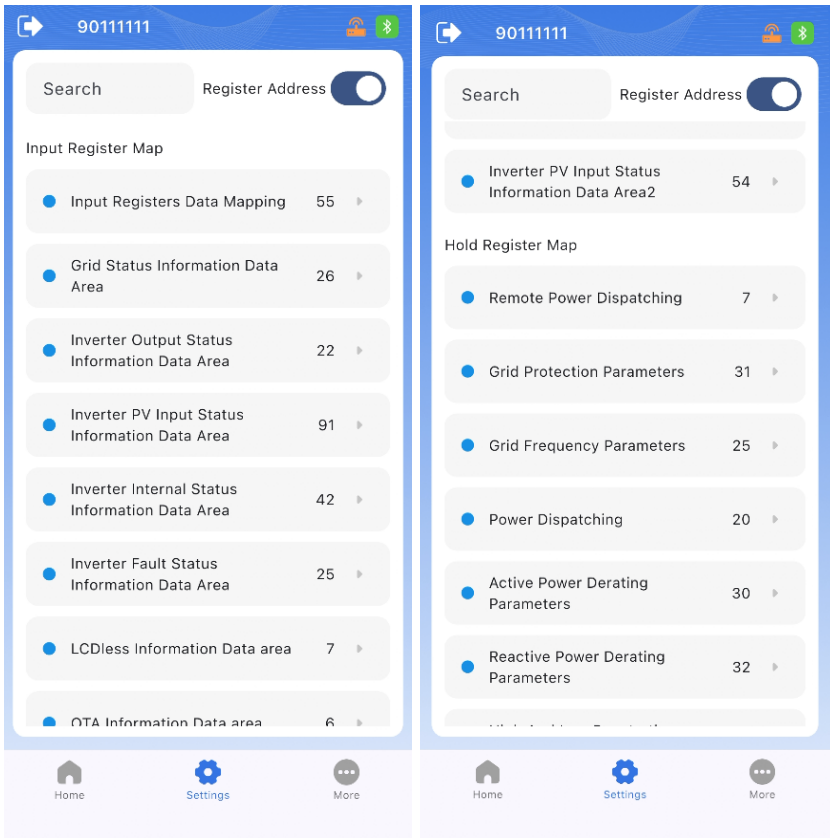


Figure 5-1 Settings Screen Overview

NOTICE!

- Model & Firmware Dependency: Displayed parameter groups, individual register names, and configurable ranges are dynamically identified and loaded by the App based on the connected inverter model and its firmware version. The parameters and register addresses described in this chapter use the SCH465K-T-EU as a typical reference. Always refer to the actual on-site display on your mobile device.
- Grid Compliance & Safety: Altering protection, derating, or dispatch thresholds directly impacts equipment safety and local grid compliance. Parameters must only be modified by qualified electrical engineers or authorized commissioning personnel in accordance with local grid codes.

5.1. Parameter Categories

Parameters on the Settings screen are organized into two primary data areas:

- Read-Only Data (Input Register Map): Displays real-time operating metrics that cannot be modified, such as grid status, PV input voltage/current, inverter temperature, and fault states.
- Configurable Parameters (Hold Register Map): Allows adjusting functional parameters, including:
  - Power Dispatching: Set inverter on/off, active/reactive power dispatch limits, and time synchronization.
  - Grid Protection: Set overvoltage, undervoltage, overfrequency, and underfrequency thresholds and trip times according to local grid codes.
  - Power Derating: Configure active power reduction curves and reactive power control modes (e.g., PF(P), Q(U)).
  - Advanced Features: Enable or configure ARC detection, LVRT/HVRT, and dry contact terminals.

5.2. Operating Procedures for Commissioning

5.2.1. Accessing the Setting Menu

1. Establish a stable Bluetooth connection with the target inverter (refer to Section *3.5 Device Access*).
2. Tap **Settings** on the bottom navigation bar.
3. If prompted, enter the Level-2 Installer/Distributor password (1111) and confirm. The App reads and populates the available parameter groups.

5.2.2. Locating Parameters

To quickly locate a target parameter among extensive registers:

- Group Browsing: Tap the corresponding parameter group card (e.g., Grid Protection Parameters) to open its list.
- Keyword Search: Tap the Search box at the top, enter the parameter name or functional keyword (e.g., VoltMax or Power), and inspect the filtered results.
- Register Address Display: Toggle the Register Address switch at the top right:

- ON: Displays the Modbus hex address and decimal register offset below each parameter name (recommended for protocol troubleshooting).
- OFF: Displays clean parameter names for standard commissioning.

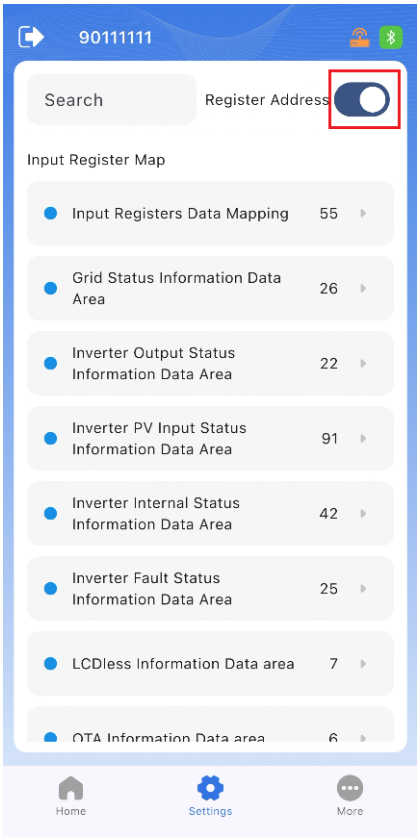


Figure 5-2 Locating Parameters and Register Address Toggle

5.2.3. Modifying and Delivering Parameters

1. Navigate to the target parameter group under Hold Register Map.
2. Tap the parameter row to modify. A numeric keypad or drop-down selection dialog appears:
   - Numeric Values: Enter the target value within the allowable range indicated on the screen.
   - Dropdown Selection / Switch: Select the required operating mode or toggle the enable status.

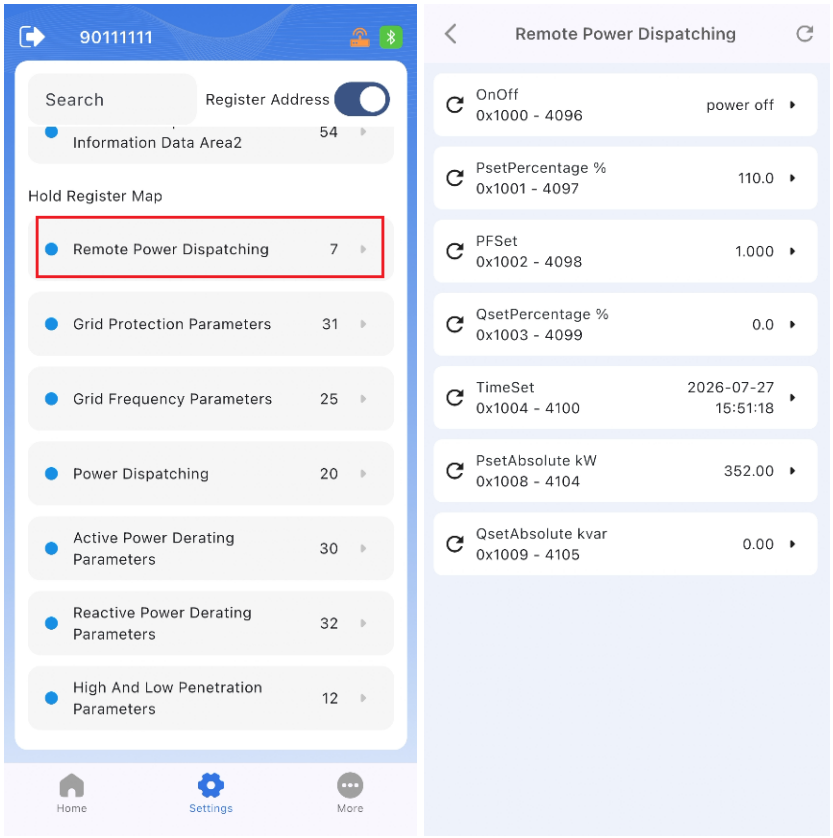


Figure 5-3 Tap the parameter row to modify

3. Tap **Confirm** or the **Save**.

5.3. High-Frequency Commissioning Controls and Commands

During on-site commissioning, field service engineers frequently interact with the following operations under **Hold Register Map > Control Commands**:

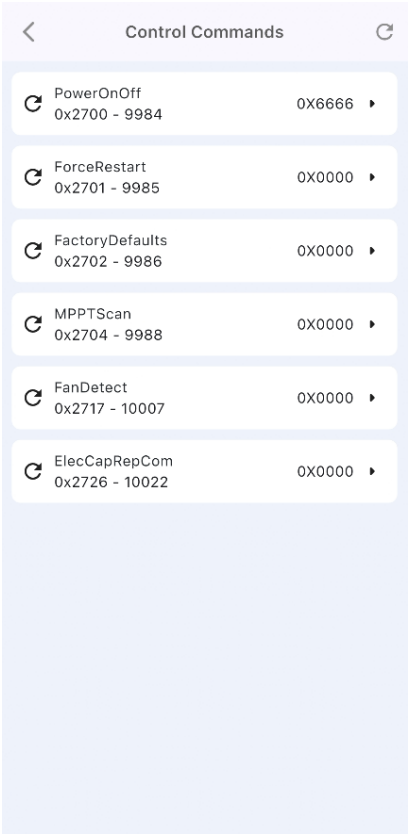


Figure 5-4 Control Commands Screen

Table 5-1 Essential Control Commands

Command Name	Description
Power OnOff	Manual start/stop control.
Force Restart	Reboots the inverter system.
Factory Defaults	Restores manufacturer settings.
MPPT Scan	Initiates multi-point IV scan.
FanDetect	Execute fan self-test/check
ElecCapRepCom	Executes electrolytic capacitor conditioning / reforming.

5.4. Parameter Matrix Reference

For a complete, register-by-register mapping table (including Modbus hex definitions, data types, read/write permissions, and model-specific parameter ranges), refer to the corresponding Model-Specific *Modbus Register Map* provided separately for each model series.

6. More

The More menu provides advanced configuration, basic settings, fault history, running log, upgrade, Yield Statistics, etc.

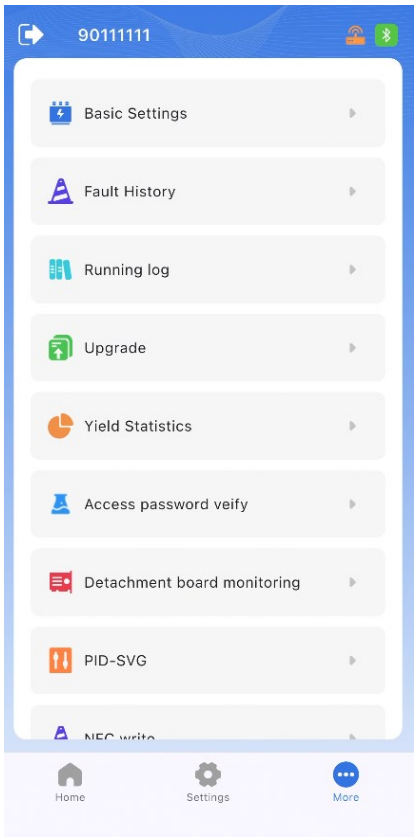


Figure 6-1 More Menu Overview

NOTICE!

- Model & Configuration Dependency: The entries available under the More menu depend on the connected inverter model, system architecture, and installed accessories (such as external gateways or communication sticks). If an option is hidden or unavailable, it indicates that the currently connected device does not support this feature.
- User Role Restrictions: Certain advanced settings (e.g., Basic Settings) require Tier-2 installer privileges (default password: 1111).

Table 6-1 More Menu Features and Availability

Menu Item	Description	Applicability / Scope

Basic Settings	Configures core grid connection, neutral line, and communication address parameters.	All supported inverters
Fault History	Displays active and historical alarms with diagnostic codes and handling suggestions.	All supported inverters
Running Log	Displays chronological operating events and state transition records.	All supported inverters
Upgrade	Performs local firmware upgrades via Bluetooth.	All supported inverters
Yield Statistics	Visualizes historical energy generation across hourly, daily, and monthly views.	All supported inverters
Access Password Verify	Modifies the 4-digit installer/user access verification password.	All supported inverters
Detachment Board Monitoring (Trip Monitoring)	Monitors tripping board status and configures tripping parameters.	Inverters equipped with a tripping board
PID-SVG	Configures anti-PID (Potential Induced Degradation) recovery and night-time SVG (Static Var Generator) reactive power compensation parameters.	Inverters supporting PID recovery and night-SVG functions
NFC Write	(Reserved) Intended for reading Bluetooth pairing credentials via NFC tags.	Reserved with NFC hardware

6.1. Basic Settings

The Basic Settings screen enables configuring essential electrical and communication parameters required for initial commissioning.

Operating Steps:

1. Tap **More** on the bottom navigation bar.
2. Tap **Basic Settings**.
3. If prompted, enter the installer password (1111) and confirm.
4. Configure the parameters as required.
5. Tap **Save** to apply the configuration.

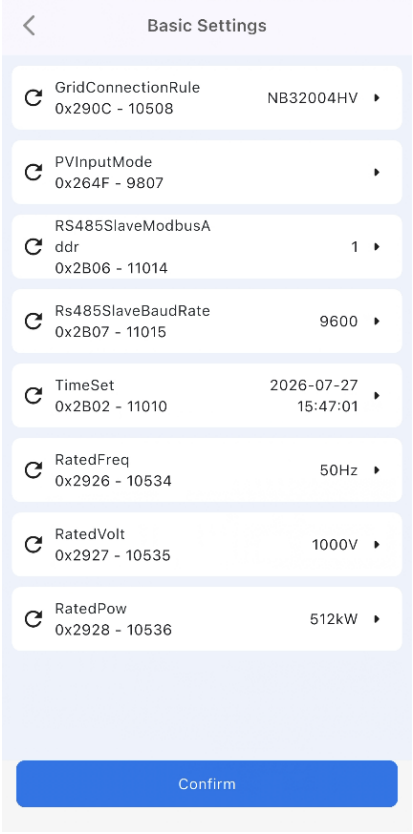


Figure 6-2 Basic Settings Screen

6.2. Fault History

The Fault History screen provides a diagnostic record of all active and resolved system errors. When a fault occurs, an error notification also banner displays at the top of the Home screen.

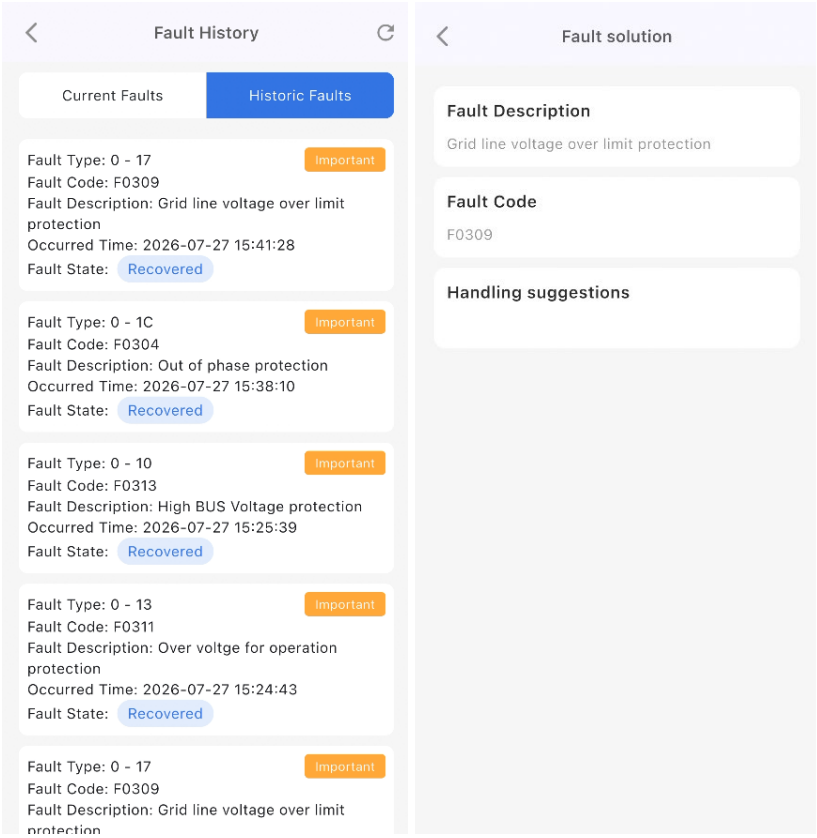


Figure 6-3 Fault History List & Fault Solution Screen

Operating Steps:

1. Tap **More > Fault History** (or tap View on the red fault banner on the Home screen).
2. Review the list of fault items, each displaying the fault name, code, and timestamp.
3. Tap a specific fault entry to view the **Fault Solution** screen:
   - Fault Code & Name: Formal diagnostic identifier.
   - Fault Description: Explanation of the triggering condition.
   - Handling Suggestions: Recommended on-site troubleshooting actions (e.g., cable inspection, voltage verification).

6.3. Running Log

The **Running Log** screen displays a chronological log tracking system operational milestones, state changes (e.g., Standby to Running), and automated diagnostic events.

- Drag down on the screen to refresh the log records.
- Use the timestamp displayed for each entry to verify equipment operating sequences during on-site inspections.

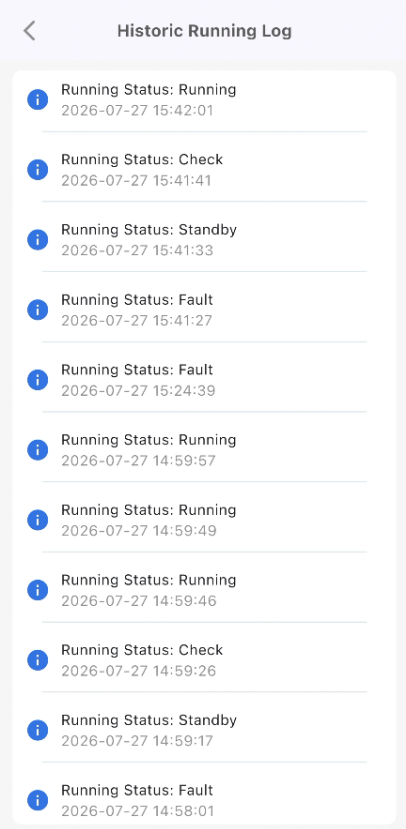


Figure 6-4 Running Log Screen

6.4. Upgrade

The Upgrade function allows updating the inverter control firmware (such as DSP or LCD firmware) locally via Bluetooth.

NOTICE!

- Prerequisite: Before initiating a local upgrade via Bluetooth, connect your mobile device to the Internet in Remote Mode to download the required firmware package to local storage.
- Power Stability: Do not power off the inverter or disconnect Bluetooth during the transmission process.

Operating Steps:

1. Connect to the inverter via Bluetooth and navigate to **More > Upgrade**.
2. Select the target firmware package from the list of downloaded local packages.

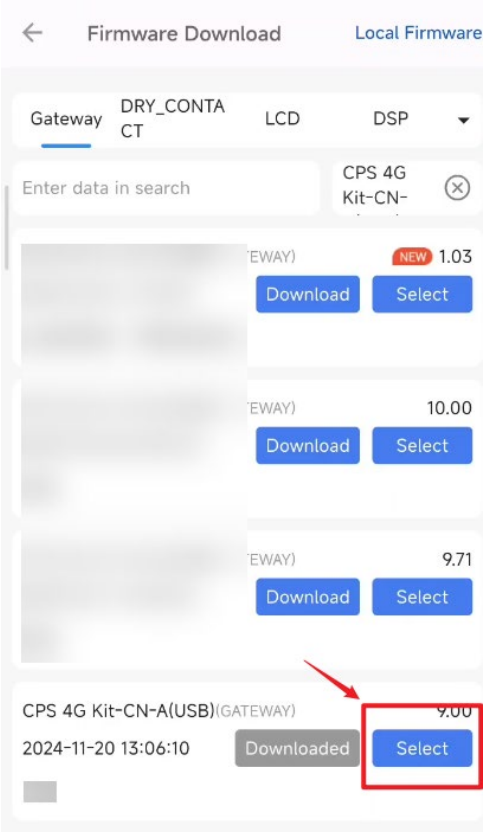


Figure 6-5 Select firmware to upgrade

3. Review the current firmware version and the target version on screen.
4. Tap **Confirm** to start the upgrade task.
5. Wait for the transfer to complete (progress indicator reaches 100%). Once finished, the inverter will reboot automatically with the new firmware.

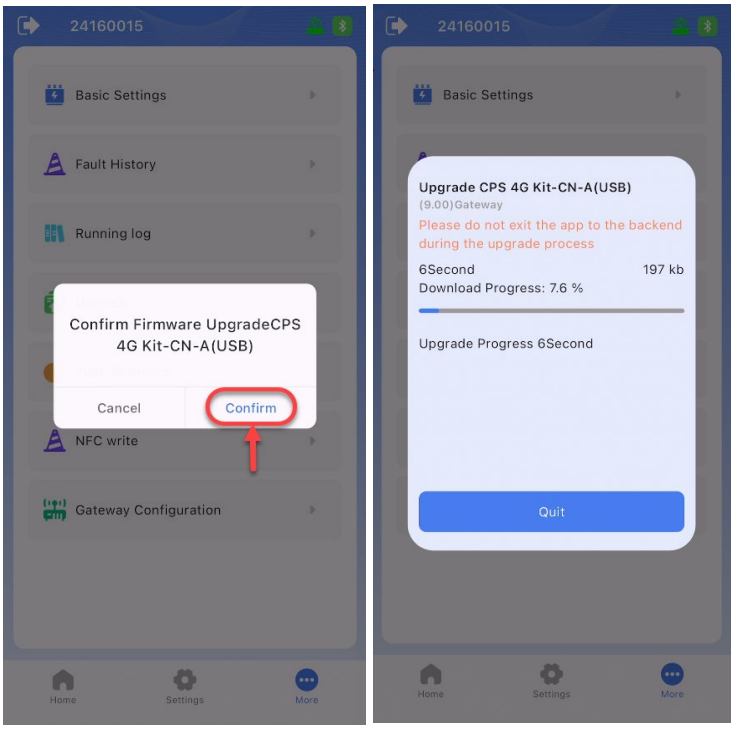


Figure 6-6 Create Upgrade Task

6.5. Yield Statistics

The Yield Statistics screen visualizes historical solar production data generated by the inverter.

- Hourly View: Displays hourly output curves for the current day.
- Daily View: Displays daily production totals for the current month.
- Monthly View: Displays monthly aggregated energy yield for the current year.

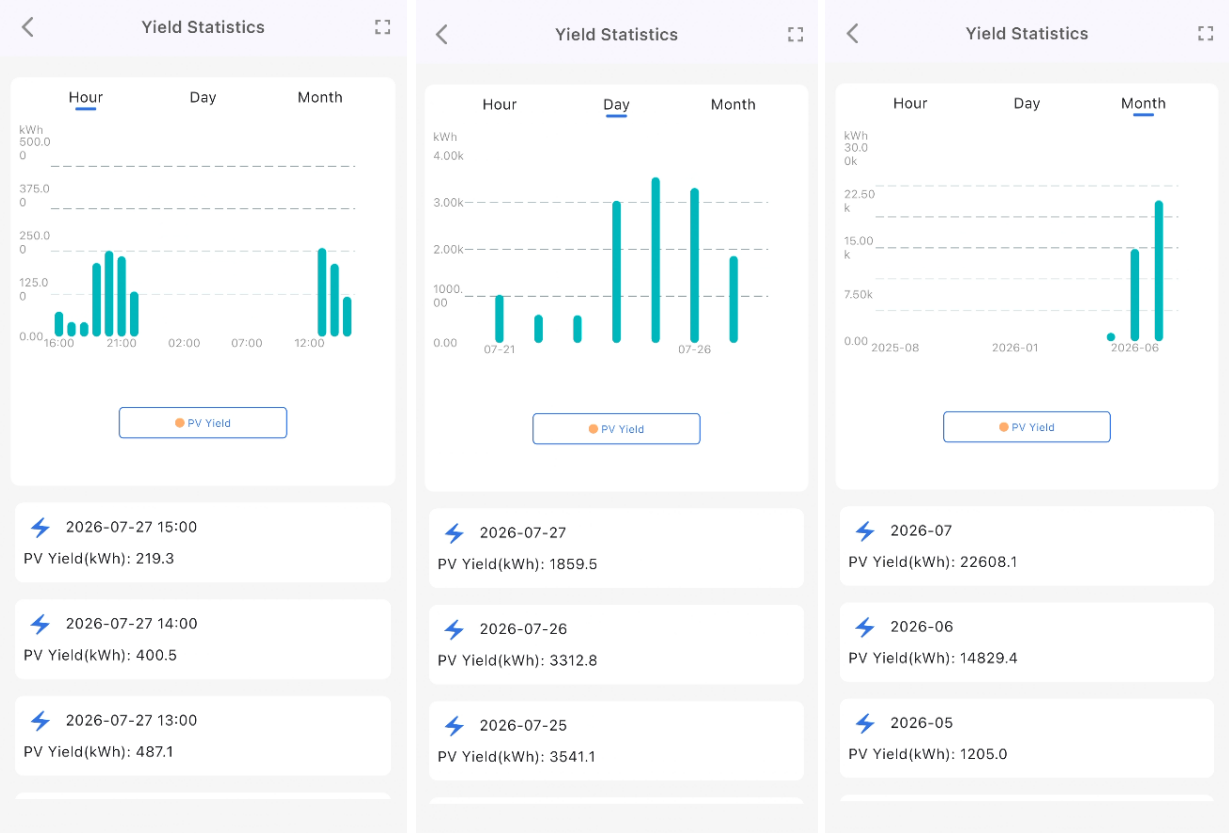


Figure 6-7 Yield Statistics

6.6. Access Password Verify

Use this feature to enable, disable, or modify the device access password required for advanced configuration and maintenance.

6.6.1. Enable or Disable Access Password Verification

On the **More > Access password verify** screen, toggle the **Access password function** switch:

- Enabled: Requires the 4-digit access password before configuring advanced settings or control parameters.
- Disabled: Bypasses password verification when accessing configuration settings.

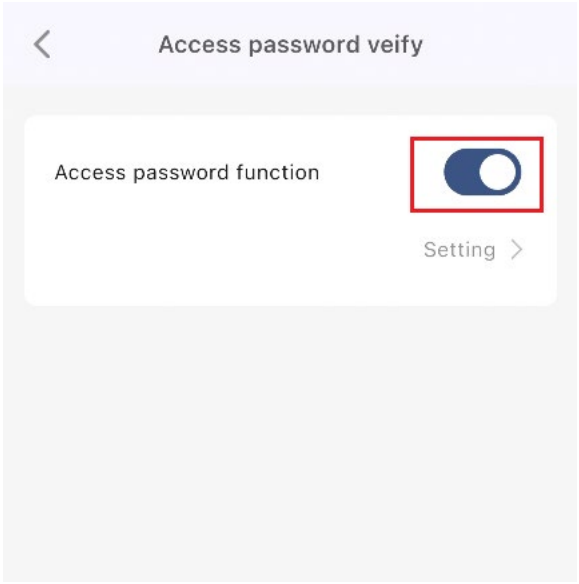


Figure 6-8 Enable or Disable Access Password Function

6.6.2. Modify the Access Password

Follow the steps below to change the default password (1111) or set a new one:

1. On the **Access password verify** screen, tap **Setting >** to open the change password dialog.

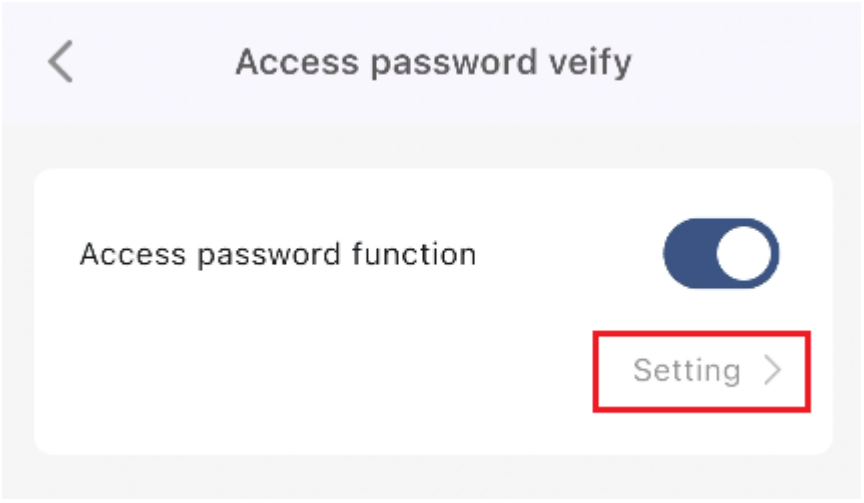


Figure 6-9 Tap Setting

2. In the **Old access password** fields, enter your current 4-digit password (enter the default password *1111* for initial setup).
3. In the **New access password** fields, enter your new 4-digit password.
4. Tap **Confirm** to save the changes.

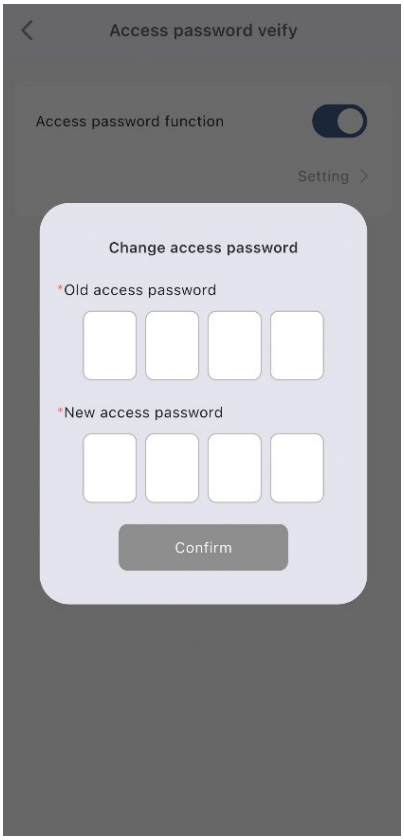


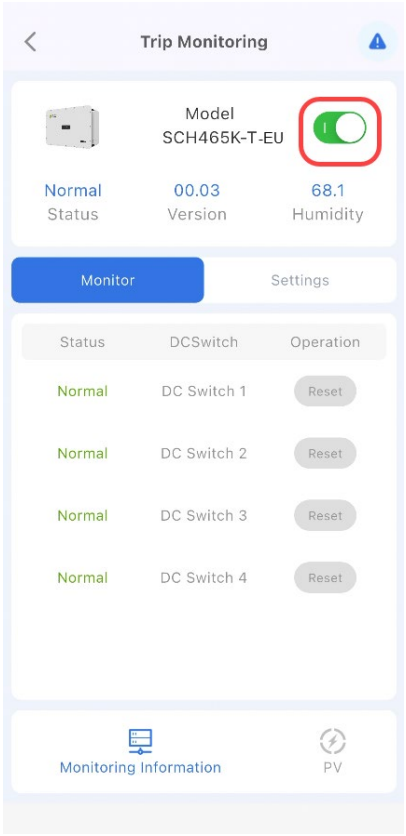
Figure 6-10 Change Access Password

6.7. Detachment Board Monitoring

NOTICE!

In this manual, **Detachment** refers to the circuit breaker tripping function. The Detachment Board Monitoring menu is available only on inverter models equipped with a tripping board.

Users can enable the trip monitoring function using the button in the top right corner. After completing the pre-operation checks and ensuring everything is correct, the tripping module can operate normally when AC or DC power is supplied to the inverter.



6.7.1. Monitoring Information

This interface displays the software version, current communication status, enclosure humidity, wire temperature inside the enclosure, and the current switch status.

6.7.1.1. Trip Monitor

If the status bar shows **Trip**, it indicates that the DC switch has been disconnected. Tap the **Reset** button, then manually close the DC switch.

WARNING!

Do not perform reclosing until you have contacted Chint Power after-savle service hotlines and confirmed that the fault status of the inverter has been fully cleared. Reclose the equipment only after the fault is verified to be cleared.

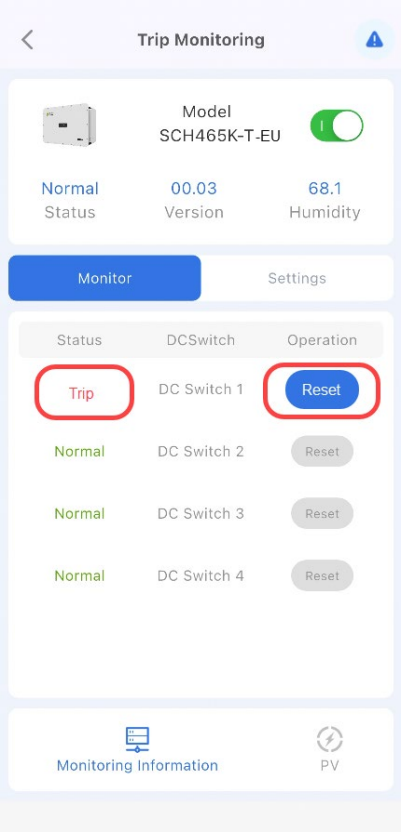


Figure 6-11 Reset Trip

6.7.1.2. Trip Monitoring Settings

When the trip protection function is enabled, users can configure the protection thresholds by selecting the category of the threshold and adjusting the values within the allowable range.

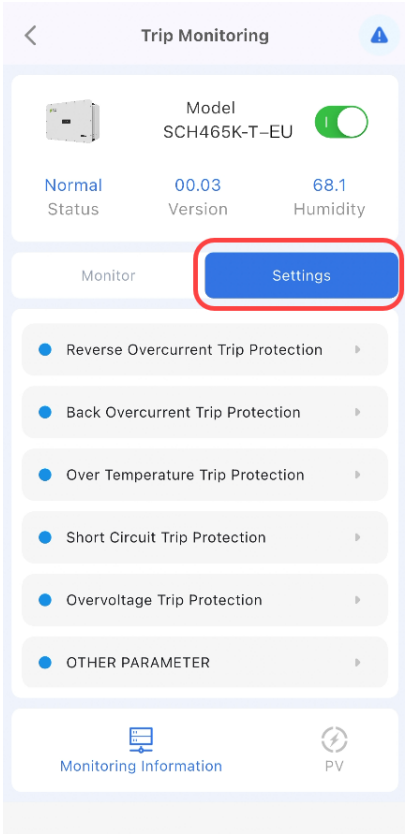


Figure 6-12 Trip Monitoring Settings

6.7.2. PV Information

The **PV** tab displays the current and voltage values of the PV strings connected to the inverter DC terminals. Note: The DC voltage and current values correspond to every two DC string inputs (e.g. PV1 corresponds with Strings 1 & 2, PV2 corresponds with Strings 3 & 4, etc.).

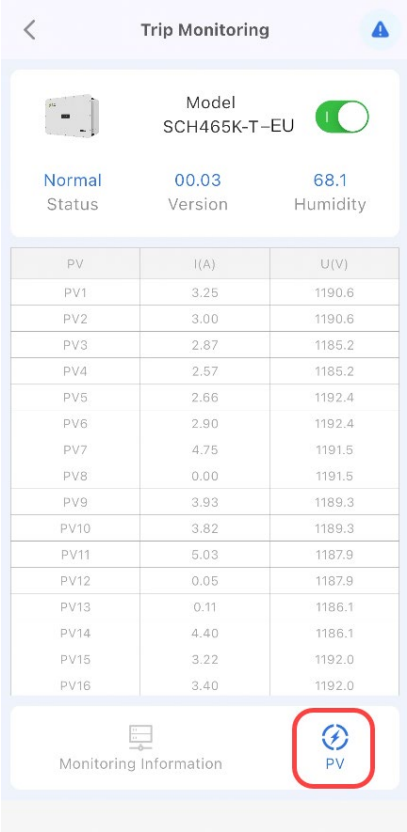


Figure 6-13 Trip Monitoring PV Information

6.8. PID-SVG

Go to **More** > **PID-SVG** to enable/disable the PID and SVG functions, and set parameters such as the PID system type and SVG reactive power value. Other related parameters (such as PID module type and preset voltage values) can be deeply configured under the **Settings** > **PID Parameters**.

NOTICE!

PID must not be enabled when the transformer neutral point is earthed.

WARNING!

PV panel side (inverter DC input side) is energized when PidNight repair function is enabled. Therefore, before performing any maintenance or overhaul, disable the PidNight repair function and then wait at least 5 minutes to ensure the system is completely de-energized and to avoid electric shock.

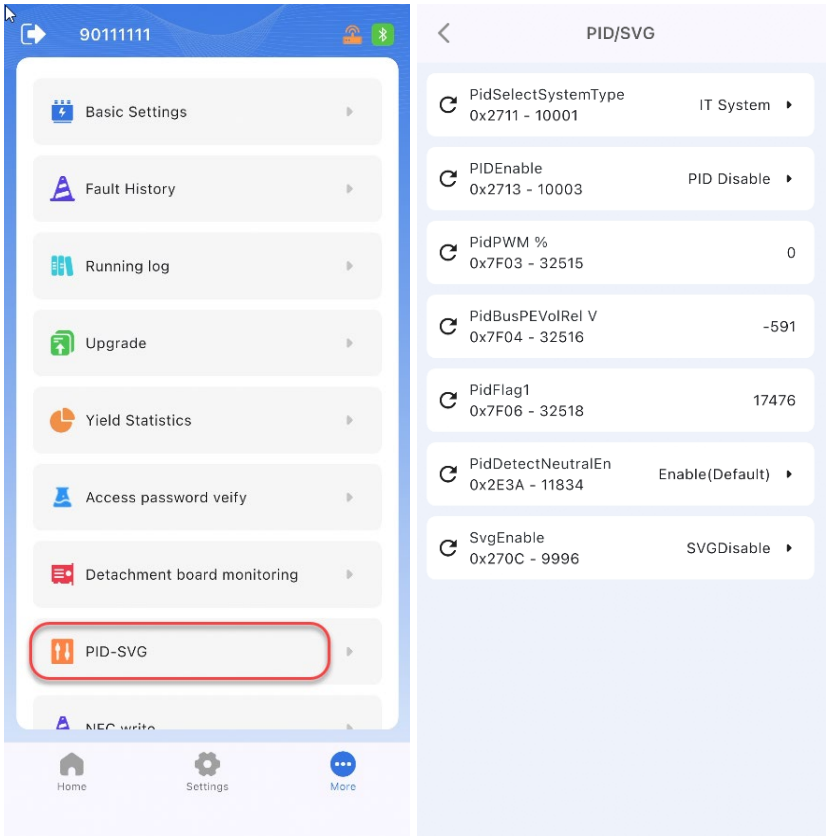


Figure 6-14 PID-SVG

7. Terminal Parameter Setting

(Optional: Available only when an external or built-in communication gateway/logger is connected)

The Terminal Parameter Setting allows managing network connectivity, communication parameters, and diagnostic logging for the gateway module.

7.1. Accessing Gateway Configuration

You can access this interface through any of the following paths:

- Via Bluetooth Connect: On the device list screen, swipe left on the target gateway card and tap the settings icon.

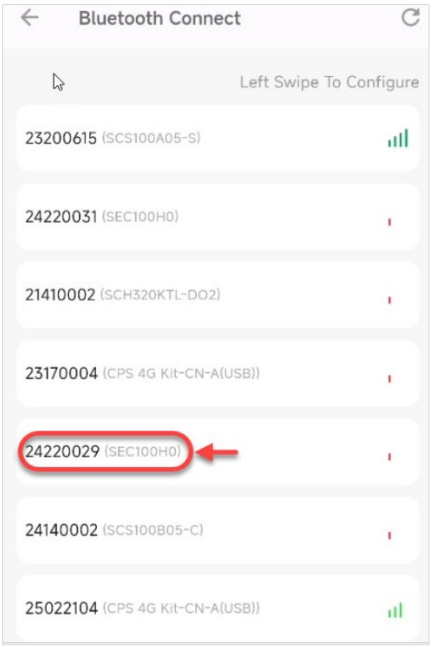


Figure 7-1 Gateway Configuration Entry – Bluetooth Connect

- Via Home Screen: Tap the Gateway connection status icon in the upper-right corner of the Home dashboard.

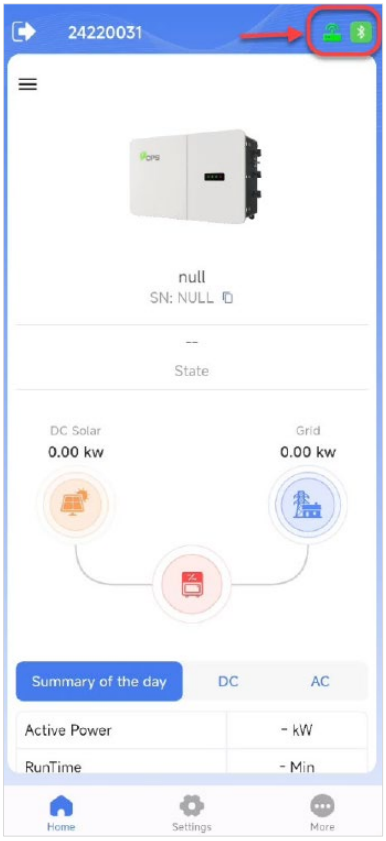


Figure 7-2 Gateway Configuration Entry – Home Screen

7.2. Basic Configuration

Configures essential network connection settings:

- Protocol: Displays the current communication protocol. Tap Modify to update the data transfer protocol.
- WiFi SSID & PWD: Tap Modify to select the target Wi-Fi network and enter the wireless password.
- Net: Shows the network interface type (e.g., WIFI or 4G). Tap Modify to switch network modes.
- UART0: Serial communication port baud rate (default: 115200). Tap Modify to adjust if required.
- Period (min): Data reporting interval to the cloud platform (default: 1 min).

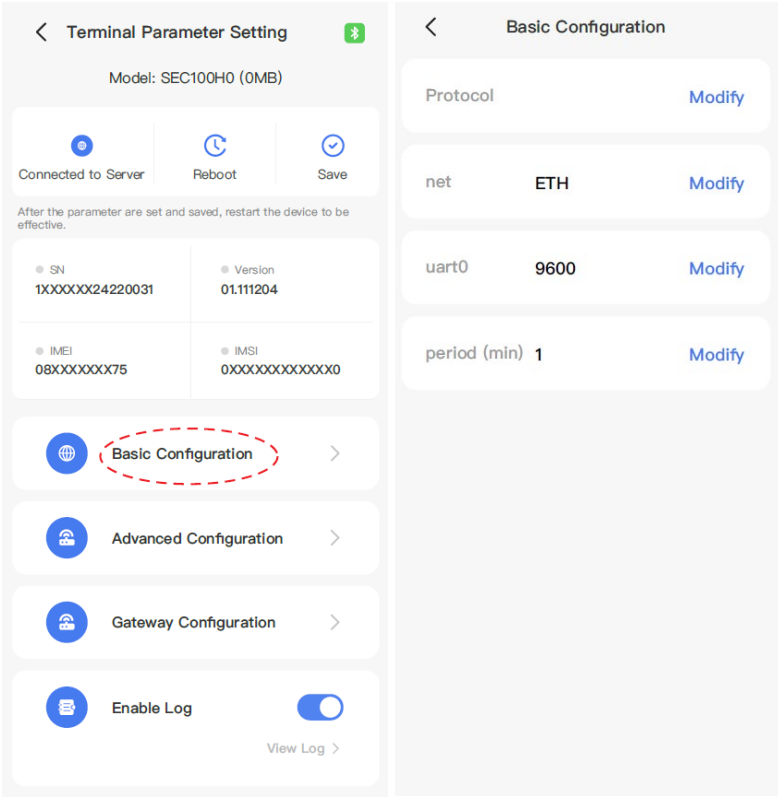


Figure 7-3 Basic Configuration

7.3. Advanced Configuration

Configures specialized telemetry server endpoints:

- MQTT Host & Port: Tap Modify to configure the target MQTT broker IP/domain and port number (default: 1883).
- Upgrade: Initiates a dedicated firmware upgrade for the communication gateway module.

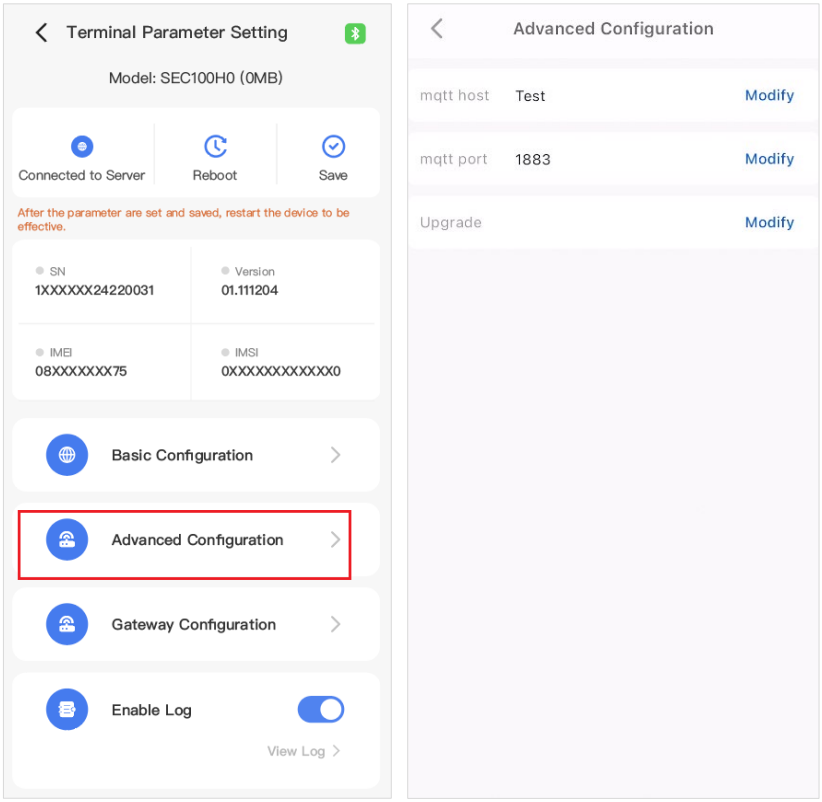


Figure 7-4 Advanced Configuration

7.4. Gateway Configuration

Gateway Configuration allows users to configure gateway communication and operating parameters, including serial port forwarding, anti-reflux power flow, IP address, APN, TCP forwarding, COM baud rate, and dry contact settings.

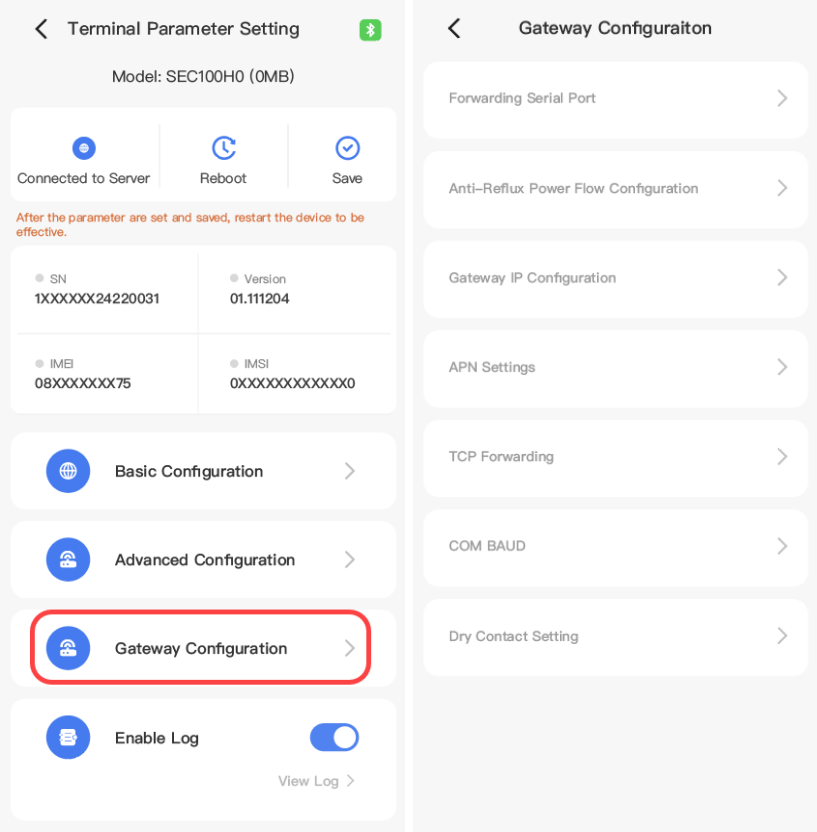


Figure 7-5 Gateway Configuration

7.5. Enable Log

The Enable Log switch enables diagnostic logging on the communication module, helping troubleshoot communication issues between the App, gateway, and connected devices.

Operating Steps:

1. On the **Terminal Parameter Setting** screen, toggle the **Enable Log** switch to turn it on.
2. Tap **View Log >** below the switch to open the log list.
3. Check the chronological communication logs, including timestamps and command execution results.

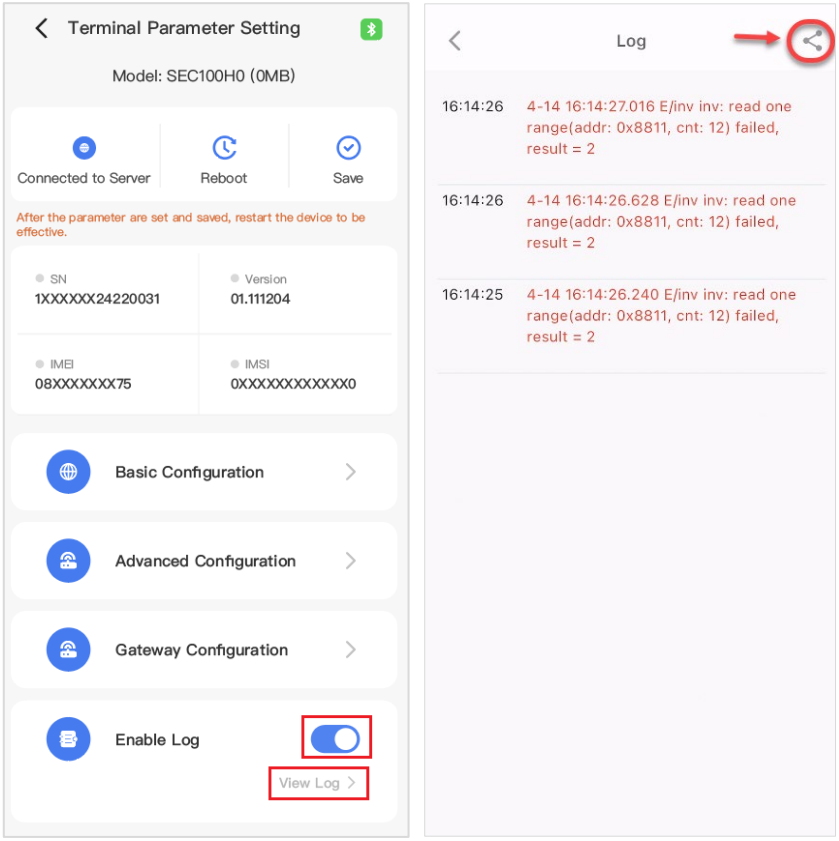


Figure 7-6 Enable Log

7.6. Reboot

After modifying settings in either the **Basic Configuration**, **Advanced Configuration,** or **Gateway Configuration** interface, users must save the changes and reboot the device to apply the new settings. Tap the **Save** button (checkmark icon), then tap the **Reboot** button (circular arrow icon) to restart the device and ensure the updated configurations take effect.

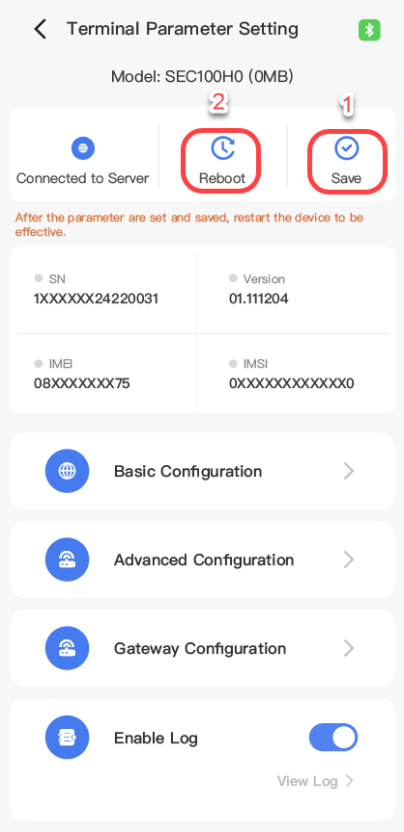


Figure 7-7 Reboot

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