

MatriCloud Platform Mobile App

Local Operation Guide

For PV Inverters

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Shanghai Chint Power System Co., Ltd.

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1. About This Manual

1.1. Purpose and Scope

The MatriCloud platform provides comprehensive inverter and energy power station management through web browsers and mobile App (Hereinafter referred to as App), featuring account/site/device management, firmware updates, and maintenance services.

Users may download the MatriCloud App to mobile devices and select either remote or local connection mode based on operational requirements.

This manual is intended for PV inverter distributors and installers, providing detailed guidance on connecting to inverters, configuring the parameters, setting grid codes, monitoring the running status, and so on via the App's local connection mode.

For remote mode operation instructions, see the *MatriCloud Platform Mobile App-Remote Mode Operation Guide*. For web browser operation instructions, see the *MatriCloud Web Operation Guide*.

1.2. Symbol Description

Additional information is included in this manual to highlight and supplement the core content. It may also provide tips or tricks for optimizing product use, helping users solve problems or save time.

1.3. All Rights Reserved

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1.4. Trademark



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1.5. Software Licensing

- It is prohibited to use part or all the data in firmware or software developed by the Company for commercial purposes in any way.
- It is prohibited to perform decompilation, decoding or other operations which will break the original program design.

2. Product Overview

2.1. Mobile App Introduction

The MatriCloud platform lets you monitor and manage inverters and energy power stations through a web browser or a mobile App. The MatriCloud App supports mobile intelligent maintenance (O&M) services, making power station management convenient and efficient.

Users can download the App to a mobile device and choose between two connection modes—remote or local—based on the operation requirements. This manual covers local connection mode only. For remote mode operation instructions, see the *MatriCloud Platform Mobile App-Remote Mode Operation Guide*. For web browser operation instructions, see the *MatriCloud Web User Guide*.



NOTE!

This manual uses the PV inverter SCA100K-T-EU as an example to illustrate how to operate the inverter through a local connection using this App. The screenshots in this manual are for reference only. The parameters displayed on the interface may vary depending on the model of the inverter connected to the App. Always refer to the actual interface for accurate information.

2.2. Network Connection Mode

The MatriCloud App supports two network modes for connecting to inverters: remote mode and local mode. Users can access the App remotely or locally according to actual use case to monitor the information of different devices in the power station.

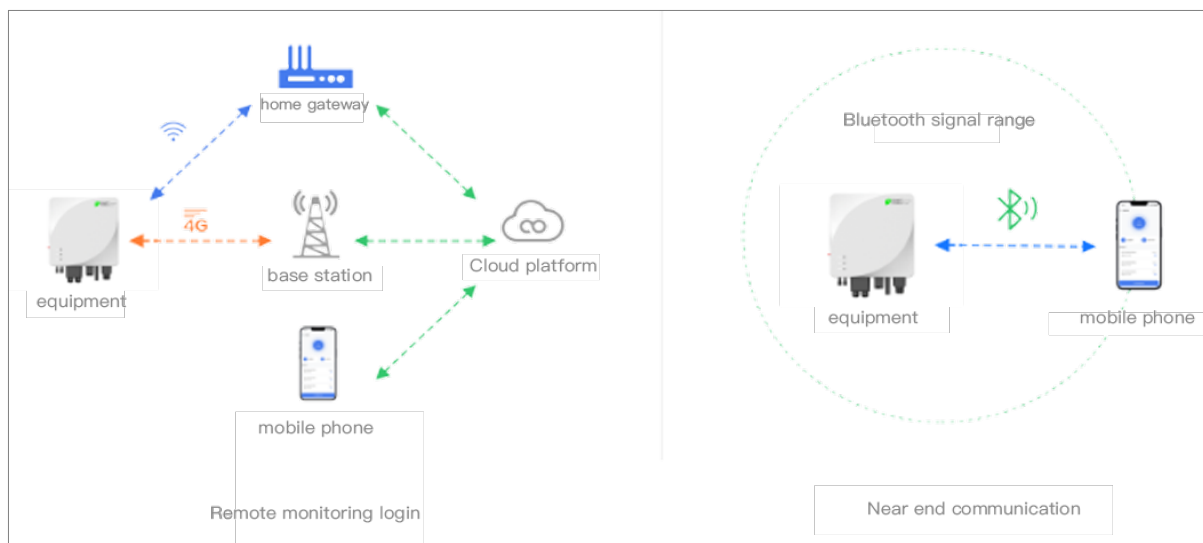


Figure 2-1 Network Connection Mode

- **Remote Mode (Remote monitoring login)**

Remote mode is mainly used for monitoring the whole station sties from any location, which needs you to login with account and passowrd. The communication module establishes a communication connection with the home network or the communication base station, so that the inverter exchanges data with the cloud server. Users can view inverter data or issue instructions to control the inverter through the App.

- **Local Mode (Near-End Communication)**

Local mode is mainly used for local debugging and function testing when standing next to the machine. It uses inverter's built-in Wi-Fi or Bluetooth module to connect directly to your mobile device. Information can be viewed and parameters can be set for the inverter. This mode lets you view inverter information, configure parameters, test functions or debug issues on-site.


NOTE!

The Bluetooth login mode is only applicable to the Chint Power inverter with built-in Bluetooth module. Please consult your distributor or installer whether the inverter has a Bluetooth module.

2.3. Access Tier and Password

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

Tier	Assigned Role	Access Scope	Security Notes
1	Customer	Limited access to basic settings.	4-digit user-defined password
2	Installer/Distributor	Full operational access (advanced configuration, firmware updates)	Fixed password 1111
3	R&D Engineers	Developer-level access (technical and developmental parameters)	Predefined fixed password Not provided in this manual

Table 2-1 Access Tier and Password

3. Get Started

3.1. Download and Install the App

3.1.1. Preconditions

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

- Operating system: iOS 13.0 or later, Android 8.0 or later.
- Network: Connects to Wi-Fi or a 2G/3G/4G/5G mobile network.
- Storage: Has enough storage to install a new Application
- Battery: Is charged to full power.

3.1.2. Operation Steps

1. Open your App store:
 - On Android, use the Google Play Store.
 - On iOS, use the App Store.
2. Search for **MatriCloud** in the store's search bar. Alternatively, scan the QR code provided in the inverter documentation to go directly to the download page.



Figure 3-1 Scan to Download MatriCloud

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

3.2. Connect to Device

3.2.1. 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.

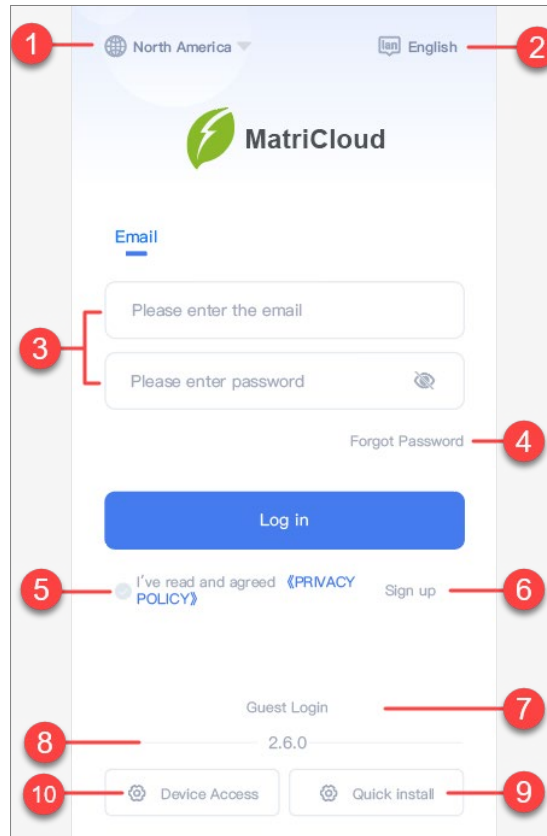


Figure 3-2 The MatriCloud login screen

Table 3-1 Login Interface Elements

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's language to your preference.
3	Email and password Fields	Applicable to remote mode. Enter your MatriCloud account email and password, then tap Login to access the App remotely. For detailed information, refer to <i>MatriCloud Platform Mobile App-Remote Mode Operation Guide</i> .
4	Forgot Password	Applicable to remote mode. Tap to reset your password if forgotten. For detailed information, refer to <i>MatriCloud Platform Mobile App-Remote Mode Operation Guide</i> .
5	Privacy policy	Applicable to remote mode. Review the privacy policy. Agree to it to proceed with login. For detailed information, refer to <i>MatriCloud Platform Mobile App-Remote Mode Operation Guide</i> .
6	Sign up	Applicable to remote mode. Register a new account. See <i>MatriCloud Platform Mobile App-Remote Mode Operation</i>

		<i>Guide.</i>
7	Guest Login	Access limited App features without an account, for visitors.
8	App Version	Display the current App version number (e.g., 2.7.0).
9	Quick Install	Opens a wizard to set up the energy storage inverters product quickly via bluetooth for local mode. See section <i>3.2.2 Quick Install</i>
10	Device Access	Tap to connect via Bluetooth for local mode and enter the home menu. See section <i>3.2.3 Device Access</i> .

3.2.2. Quick Install

The Quick Install is an installation and configuration wizard that provides a step-by-step workflow, enabling rapid and accurate inverter setup while minimizing commissioning time and enhancing user experience.

Note: Quick Install is applicable to SCA(5~ 25, 30, 36, 50, 60, 100, 125)K-T-EU inverters. For all other models, skip this section. Start with Section 3.2.3 Device Access.

Follow these steps to perform quick install:

1. Turn on Bluetooth on your mobile device.
2. Open MatriCloud App.
3. Tap **Quick Install**.

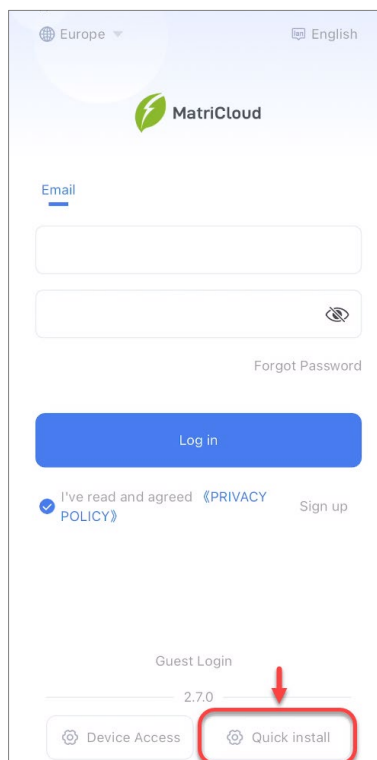


Figure 3-3 Quick Install

4. Tap **Bluetooth Connect**.

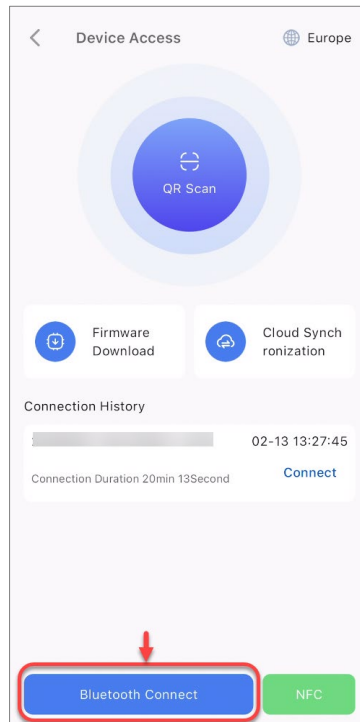


Figure 3-4 Bluetooth Connect

5. Select the communication module installed on the inverter to pair. The device number (e.g., "24160015") corresponds to the last 8 digits of the SN (Serial Number) on the communication module label. Ensure you select the correct device name for a successful connection.

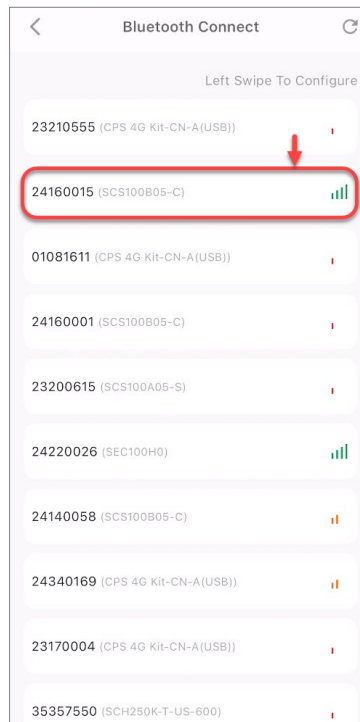


Figure 3-5 Select a gateway to connect

6. Execute the quick installation procedure as follows:
 - a) Check all cables are properly connected.
 - b) Configure parameters (e.g. grid code, rated voltage, rated frequency, etc.).

- c) Set up network connection.
- d) When all steps are completed correctly, tap **Complete and Reboot** to finish the quick installation.

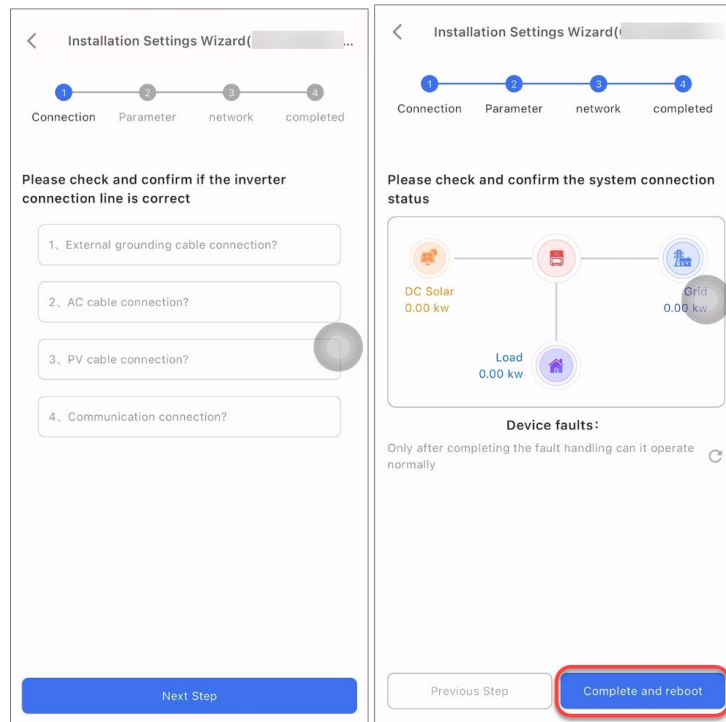


Figure 3-6 Excute the quick installation procedure

3.2.3. 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. Go to login interface.
2. Tap **Device Access**.

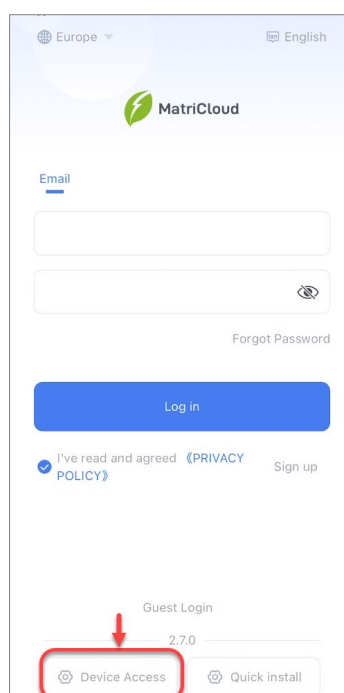


Figure 3-7 Device Access

3. Tap **Bluetooth Connect**.
4. Select the correct device number to connect.



Figure 3-8 Select gateway to connect

4. Home

4.1. Home Inverface Overview

The home page is the main dashboard of the MatriCloud App, providing a quick view of your device. It displays the interver 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.

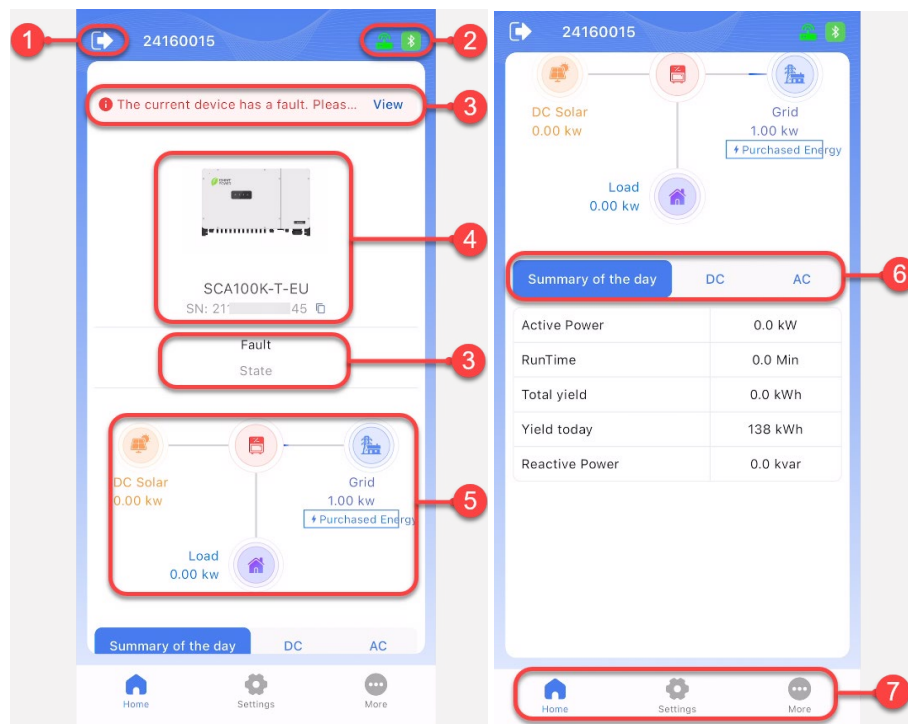






Figure 4-1 Home

No.	Name	Description
1	Exit	Tap the exit icon to disconnect the device.
2	Bluetooth and gateway connection status	<p>Bluetooth connection status: Displays the mobile device's Bluetooth connection state:</p> <ul style="list-style-type: none"> : Bluetooth connected : Bluetooth disconnected. <p>Gateway connection status: Displays the gateway's network connection state:</p> <ul style="list-style-type: none"> : Network connected : Network disconnected <p>Tap the icon to configure the gateway, or go to More->Gateway Configuration. For details, refer to section 6.6</p>

		<i>Gateway Configuration.</i>
3	Inverter running states	The device has four states: Standby, Running, Fault, and Warning. For state description, refer to <i>4.1 Running State</i> . If the device state is Fault , red text appears at the top of the screen as an error alert. Tap it to view details. Refer to <i>6.2 Fault History</i> .
4	Inverter information	Display the device picture, model, serial number (SN)
5	Energy Flow Chart	Visualizes real-time energy flow.
6	General information of the inverter	Display the information of summary of the day, DC, AC, version and other information. For details, refer to <i>4.2 General Information Tabs</i> .
7	Navigation Bar	Icons to navigate the App: <ul style="list-style-type: none"> ● <i>Home</i>: Current page ● <i>Setting</i>: Configure parameters ● <i>More</i>: Provide additional options and configurations.

Table 4-1 Home interface description

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.

4.3. General Inforamtion

The Home interface includes five general information tabs: Summary of the day, DC, AC, Version and Other. Below is a detailed description of each tab: Actual specifications may vary between machine models.

- **Summary of the day**: Display the information of active power, run time, total yield, yield today, and reactive power.

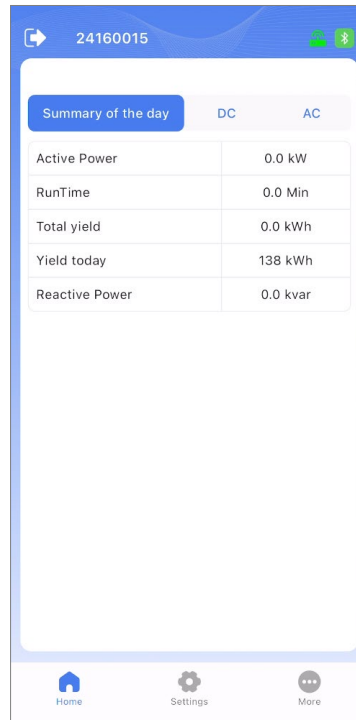


Figure 4-2 Summary of the day tab

Parameter Name	Description
Active Power	Current power output of the inverter.
Run Time	Total operating time of the inverter.
Total Yield	Cumulative energy generated by the inverter.
Yield Today	Energy generated on the current day.
Reactive Power	Reactive power output of the inverter.

Table 4-2 Description of "Summary of the day" tab

- DC:** Display the detailed information about the inverter's DC side, including PV input mode, Pdc (Power of DC), voltage and current of MPPT, Ipv (PV Input Current) (1~24), and so on. This tab provides essential data for monitoring the performance and efficiency of the PV system connected to the inverter.



Figure 4-3 DC tab

Parameter	Description
PV Input Mode:	Mode of photovoltaic (PV) input.
Pdc (Power of DC)	DC power generated by the PV panels.
Umppt (1-12)	Voltage data for each Maximum Power Point Tracking (MPPT) channel.
Imppt (1-12)	Current data for each Maximum Power Point Tracking (MPPT) channel.
Ipv (1-24)	The current generated by each PV panel.

Table 4-3 Parameter description of DC tab

- **AC:** Display the detailed information about the inverter's AC side, including current, voltage, frequency, harmonics data, and reference values, enabling users to comprehensively monitor the performance of the AC output.



Figure 4-4 AC tab

Parameter	Description
U (a, b, c)	Voltage value for each phase of AC output.
I (a, b, c)	Current value for each phase of AC output.
Freq (A, B, C)	Frequency value for each phase of AC output.
Voltage Harmonics (L1, L2, L3)	Voltage harmonic data for each phase (L1, L2, L3).
Current Harmonics (L1, L2, L3)	Current harmonic data for each phase (L1, L2, L3).
P Ref	Active power reference value.
PF Ref	Power factor reference value.

Table 4-4 Parameter description of AC tab

- **Version:** Display detailed information about the inverter's configuration, firmware versions, and communication settings, enabling users to monitor and manage the system's software and hardware components effectively.

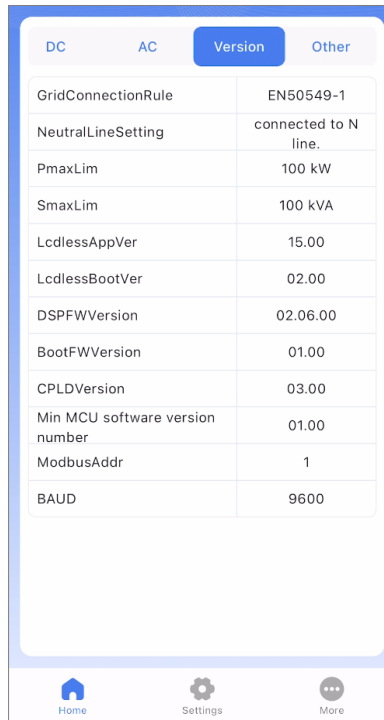


Figure 4-5 Version tab

Parameter	Description
Grid Connection Rule	Rule selected for grid connection.
Neutral Line Setting	Configuration of the neutral line.
PmaxLim	Maximum active power limit.
SmaxLim	Maximum apparent power limit.
Lcdless App Version	Version of the LCDless application.
Lcdless Boot Version	Version of the LCDless bootloader.
DSP Firmware Version	Version of the DSP (Digital Signal Processor) firmware.
Boot Firmware Version	Version of the boot firmware.
CPLD Version	Version of the Complex Programmable Logic Device (CPLD).
Min MCU Software Version	Minimum Microcontroller Unit (MCU) software version number.
Modbus Address	Address for Modbus communication.
BAUD	Baud rate for communication.

Table 4-5 Parameter description of Version tab

- **Other:** Display critical temperature-related information, including the module temperature, boost module temperature, and internal temperature, helping users monitor the thermal performance and health of the inverter.

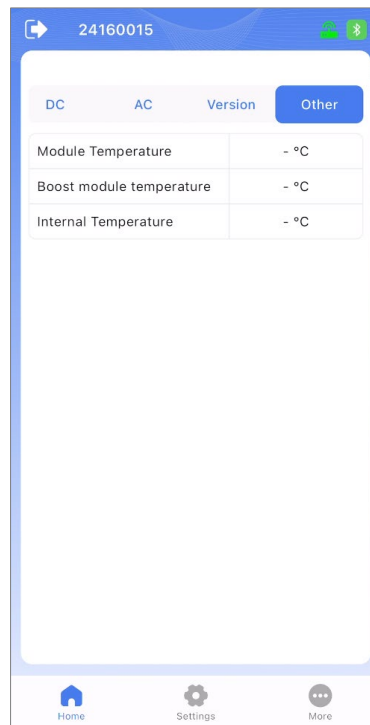


Figure 4-6 Other tab

Parameter	Description
Module Temperature	Temperature of the inverter module.
Boost Module Temperature	Temperature of the boost module.
Internal Temperature	Internal temperature of the inverter.

Table 4-6 Parameter description of Other tab

5. Settings

Tap the **Settings** icon to enter the setting interface (If password needed, enter "1111"). Then it's possible to access the following sub-menus on the setting interface.

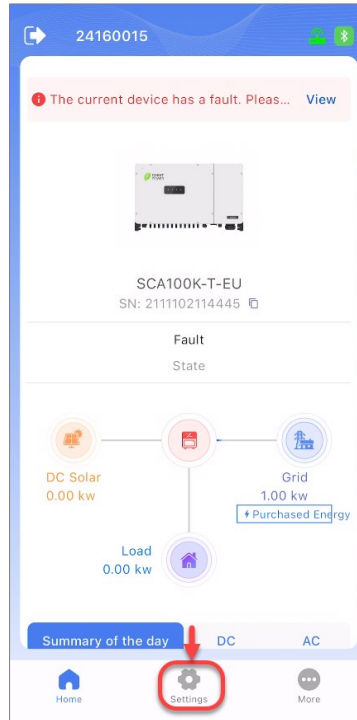


Figure 5-1 Settings

"Settings" page includes two parts: "Input Register Map" parameters and "Hold Register Map" parameters. **Input Register Map** parameters can only be viewed. Modifications are not allowed. **Hold Register Map** parameters can be read and modified as needed.

- **Input Register Map (Read-Only Access)**

- Input Registers Data Mapping
- Grid Status Information
- Inverter Output Status Information
- Inverter PV Input Status Information
- Inverter Internal Status Information
- Inverter Fault Status Information
- Additional Debugging Display
- Lcdless Information

- **Hold Register Map (Read-Write Access)**

- Power Dispatching
- Grid Protection Parameters
- Active Power Derating Parameters
- Reactive Power Derating Parameters

- ARC Parameters
- LVRT/HVRT
- Others Parameters
- Enable/Disable Control Parameters
- Control Commands
- Inverter Basic Information
- Factory Automatic Test Command
- Lcdless Basic Parameters

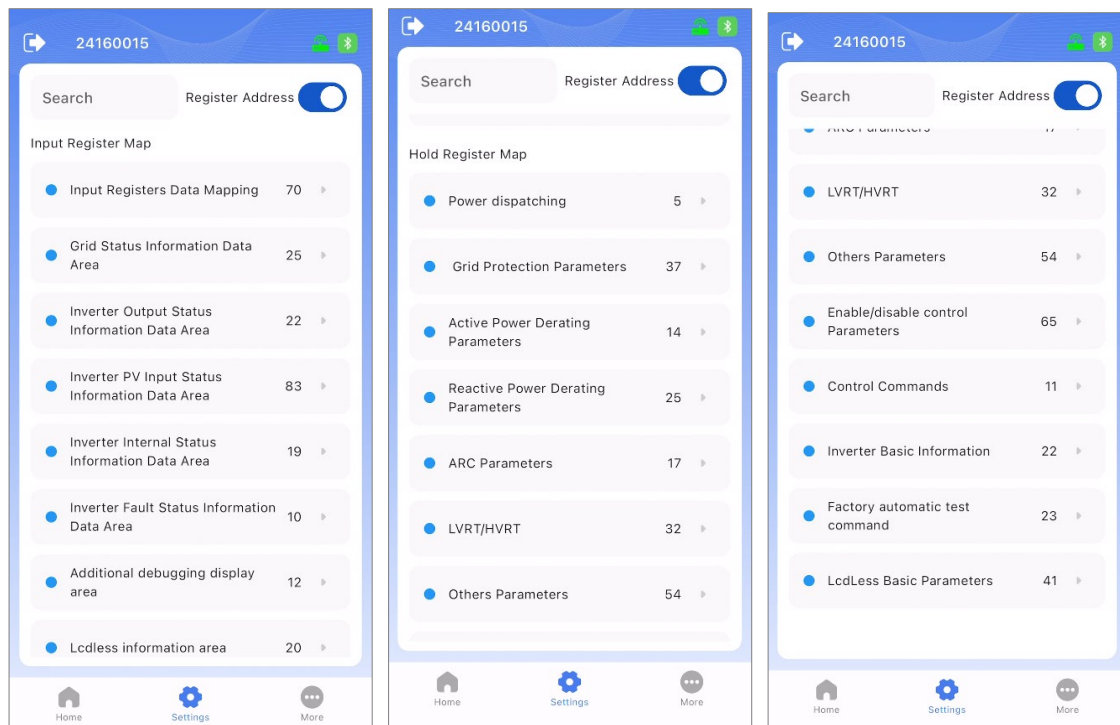


Figure 5-2 Register parameters

5.1. Input Register Map Parameter

5.1.1. Input Registers Data Mapping

Input Registers data Mapping displays the information of device, number of input registers, version, SN, RW Reg Sum (Read/Write Register Sum), Model, today yield, total yield, efficiency, and so on.

<div>Input Registers Data Mapping</div> <div>Device 136kW_12Boost_1100V(100kW_980ost_1100V)inverter</div> <div>RegNum 0x0003 - 3 100</div> <div>ProVer 0x0004 - 4 2.56</div> <div>MinorVer 0x0005 - 5 15.00</div> <div>MinorVer 0x0005 - 5 15.00</div> <div>SN 0x0006 - 6 2111102114445</div> <div>Model 0x000A - 10 SCA100K-T-EU</div> <div>RWRegSum 0x0014 - 20 92</div> <div>RWRegAdd 0x0015 - 21 4096</div> <div>Yield today kWh 0x0016 - 22 138</div>	<div>Input Registers Data Mapping</div> <div>0x0015 - 21 4096</div> <div>Yield today kWh 0x0016 - 22 138</div> <div>Total yield kWh 0x0018 - 24 0.0</div> <div>Efficiency % 0x0019 - 25 0.0</div> <div>Power Factor 0x001A - 26 0.000</div> <div>Daily max power kW 0x001B - 27 0.0</div> <div>RunTime Min 0x001C - 28 0.0</div> <div>Active Power kW 0x001D - 29 0.0</div> <div>Apparent Power kVA 0x001E - 30 0.0</div> <div>Uab V 0x001F - 31 0.0</div> <div>Ubc V 0x0020 - 32 0.0</div>	<div>Input Registers Data Mapping</div> <div>Ubc V 0x0020 - 32 0.0</div> <div>Uca V 0x0021 - 33 0.0</div> <div>Ia A 0x0022 - 34 0.0</div> <div>Ib A 0x0023 - 35 0.0</div> <div>Ic A 0x0024 - 36 0.0</div> <div>Umppt1 V 0x0025 - 37 497.0</div> <div>Imppt1 A 0x0026 - 38 0.0</div> <div>Umppt2 V 0x0027 - 39 498.0</div> <div>Imppt2 A 0x0028 - 40 0.0</div> <div>Umppt3 V 0x0029 - 41 498.5</div> <div>Imppt3 A 0x002A - 42 0.0</div>	<div>Input Registers Data Mapping</div> <div>0x0028 - 40 0.0</div> <div>Umppt3 V 0x0029 - 41 498.5</div> <div>Imppt3 A 0x002A - 42 0.0</div> <div>Freq Hz 0x002B - 43 0.0</div> <div>Module Temperature °C 0x002C - 44 24.1</div> <div>Internal Temperature °C 0x002D - 45 30.8</div> <div>State 0x002F - 47 Fault</div> <div>Time 0x0030 - 48 2025-04-14 15:25:54</div> <div>Permanent Fault 0x0034 - 52</div> <div>Warn 0x0035 - 53</div> <div>Fault0 0x0036 - 54</div>
<div>Input Registers Data Mapping</div> <div>Fault0 0x0036 - 54</div> <div>Fault1 0x0037 - 55</div> <div>Fault2 0x0038 - 56</div> <div>Fault3 0x0039 - 57</div> <div>Fault4 0x003A - 58</div> <div>Reactive Power kvar 0x003B - 59 0.0</div> <div>MajorVer 0x0041 - 65 02.06.00</div> <div>MajorVer 0x0041 - 65 02.06.00</div> <div>BusCapacitance uF 0x0043 - 67 2680</div> <div>AcCapacitance uF 0x0044 - 68 46</div>	<div>Input Registers Data Mapping</div> <div>AcCapacitance uF 0x0044 - 68 46</div> <div>Pdc kW 0x0045 - 69 0.0</div> <div>PmaxLim kW 0x0046 - 70 100</div> <div>SmaxLim kVA 0x0047 - 71 100</div> <div>DspSafetyVer 0x0048 - 72 00.02</div> <div>runState 0x0049 - 73 Fault</div> <div>Inverter status information 0x004A - 74 128</div> <div>Remote PF setting value % 0x004B - 75 0.000</div> <div>Remote active power setting value % 0x004C - 76 0.000</div> <div>Remote reactive power setting value % 0x004D - 77 0.000</div>	<div>Input Registers Data Mapping</div> <div>Remote reactive power setting value % 0x004D - 77 0.000</div> <div>Umppt4 V 0x0053 - 83 499.6</div> <div>Imppt4 A 0x0054 - 84 0.0</div> <div>Umppt5 V 0x0055 - 85 501.5</div> <div>Imppt5 A 0x0056 - 86 0.0</div> <div>Umppt6 V 0x0057 - 87 499.4</div> <div>Imppt6 A 0x0058 - 88 0.0</div> <div>Umppt7 V 0x0059 - 89 497.8</div> <div>Imppt7 A 0x005A - 90 0.0</div> <div>Umppt8 V 0x005B - 91 498.6</div> <div>Imppt8 A 0x005C - 92 0.0</div>	<div>Input Registers Data Mapping</div> <div>Umppt7 V 0x0059 - 89 497.8</div> <div>Imppt7 A 0x005A - 90 0.0</div> <div>Umppt8 V 0x005B - 91 498.6</div> <div>Imppt8 A 0x005C - 92 0.0</div> <div>Umppt9 V 0x005D - 93 497.5</div> <div>Imppt9 A 0x005E - 94 0.0</div> <div>Fault5 0x0065 - 101</div> <div>Fault6 0x0066 - 102</div> <div>warn1 0x0067 - 103</div>

Figure 5-3 Input Registers Data Mapping Parameters

5.1.2. Grid Status Information Data Area

Grid Status Information Data Area displays the information of grid status, such as frequency, grid phase sequence, grid voltage unbalance, voltage harmonics, current harmonics, and so on.

Inverter Output Status Informa...	Inverter Output Status Informa...	Inverter Output Status Informa...
la A 0x8100 - 33024	QacT kvar 0x810A - 33034	PFb 0x810C - 33036
lb A 0x8101 - 33025	PFa 0x810B - 33035	PFc 0x810D - 33037
lc A 0x8102 - 33026	PFb 0x810C - 33036	PFT 0x810E - 33038
PacA kW 0x8103 - 33027	PFc 0x810D - 33037	UinvA V 0x810F - 33039
PacB kW 0x8104 - 33028	PFT 0x810E - 33038	UinvB V 0x8110 - 33040
PacC kW 0x8105 - 33029	UinvA V 0x810F - 33039	UinvC V 0x8111 - 33041
PacT kW 0x8106 - 33030	UinvB V 0x8110 - 33040	P Ref % 0x8112 - 33042
QacA kvar 0x8107 - 33031	UinvC V 0x8111 - 33041	Q Ref % 0x8113 - 33043
QacB kvar 0x8108 - 33032	P Ref % 0x8112 - 33042	PF Ref 0x8114 - 33044
QacC kvar 0x8109 - 33033	Q Ref % 0x8113 - 33043	Pn Kw 0x8115 - 33045

Figure 5-4 Grid Status Information Parameters

5.1.3. Inverter Output Status Information Data Area

Inverter Output Status Information Data Area displays the information of inverter output status, such as phase current (Ia, Ib, Ic), phase active power (Pac A, Pac B, Pac C), 3-Phase total active power (Pac T), phase reactive power (Qac A, Qac B, Qac C), 3-Phase total reactive power (Qac T), and so on.

Inverter Output Status Informa...	Inverter Output Status Informa...	Inverter Output Status Informa...
la A 0x8100 - 33024	QacT kvar 0x810A - 33034	PFb 0x810C - 33036
lb A 0x8101 - 33025	PFa 0x810B - 33035	PFc 0x810D - 33037
lc A 0x8102 - 33026	PFb 0x810C - 33036	PFT 0x810E - 33038
PacA kW 0x8103 - 33027	PFc 0x810D - 33037	UinvA V 0x810F - 33039
PacB kW 0x8104 - 33028	PFT 0x810E - 33038	UinvB V 0x8110 - 33040
PacC kW 0x8105 - 33029	UinvA V 0x810F - 33039	UinvC V 0x8111 - 33041
PacT kW 0x8106 - 33030	UinvB V 0x8110 - 33040	P Ref % 0x8112 - 33042
QacA kvar 0x8107 - 33031	UinvC V 0x8111 - 33041	Q Ref % 0x8113 - 33043
QacB kvar 0x8108 - 33032	P Ref % 0x8112 - 33042	PF Ref 0x8114 - 33044
QacC kvar 0x8109 - 33033	Q Ref % 0x8113 - 33043	Pn Kw 0x8115 - 33045

Figure 5-5 Inverter Output Status Information

5.1.4. Inverter PV Input Status Information Data Area

Inverter PV Input Status Information Data Area displays the information of inverter PV input status, such as PV input mode, UMPPT, IMPPT, PV voltage curve of each line, PV current curve of each line, etc.

<div> <div>Inverter PV Input Status Infor...</div> <div> <div>PVInputMode</div> <div>0x8200 - 33280</div> <div>Parallel.</div> </div> </div> <div> <div>Pdc kW</div> <div>0x8201 - 33281</div> <div>5.9</div> </div> <div> <div>Umppt1 V</div> <div>0x8202 - 33282</div> <div>592.5</div> </div> <div> <div>Imppt1 A</div> <div>0x8203 - 33283</div> <div>0.8</div> </div> <div> <div>Umppt2 V</div> <div>0x8204 - 33284</div> <div>593.7</div> </div> <div> <div>Imppt2 A</div> <div>0x8205 - 33285</div> <div>0.8</div> </div> <div> <div>Umppt3 V</div> <div>0x8206 - 33286</div> <div>593.8</div> </div> <div> <div>Imppt3 A</div> <div>0x8207 - 33287</div> <div>0.8</div> </div> <div> <div>First line PV voltage curve</div> <div>1-25 data V</div> <div>0x8211 - 33297</div> <div>0</div> </div> <div> <div>First line PV voltage curve</div> <div>26-50 data V</div> <div>0x8212 - 33298</div> <div>0</div> </div>	<div> <div>Inverter PV Input Status Infor...</div> <div> <div>51-75 data V</div> <div>0x8213 - 33299</div> <div>0</div> </div> </div> <div> <div>First line PV voltage curve</div> <div>76-100 data V</div> <div>0x8214 - 33300</div> <div>0</div> </div> <div> <div>First line PV current curve</div> <div>1-25 data A</div> <div>0x8215 - 33301</div> <div>0.0</div> </div> <div> <div>First line PV current curve</div> <div>26-50 data A</div> <div>0x8216 - 33302</div> <div>0.0</div> </div> <div> <div>First line PV current curve</div> <div>51-75 data A</div> <div>0x8217 - 33303</div> <div>0.0</div> </div> <div> <div>First line PV current curve</div> <div>76-100 data A</div> <div>0x8218 - 33304</div> <div>0.0</div> </div> <div> <div>Second line PV voltage</div> <div>curve 1-25 data V</div> <div>0x8219 - 33305</div> <div>0</div> </div> <div> <div>Second line PV voltage</div> <div>curve 26-50 data V</div> <div>0x821A - 33306</div> <div>0</div> </div> <div> <div>Second line PV voltage</div> <div>curve 51-75 data V</div> <div>0x821B - 33307</div> <div>0</div> </div> <div> <div>Second line PV voltage</div> <div>curve 76-100 data V</div> <div>0x821C - 33308</div> <div>0</div> </div>	<div> <div>Inverter PV Input Status Infor...</div> <div> <div>curve 1-25 data A</div> <div>0x821D - 33309</div> <div>0.0</div> </div> </div> <div> <div>Second line PV current</div> <div>curve 26-50 data A</div> <div>0x821E - 33310</div> <div>0.0</div> </div> <div> <div>Second line PV current</div> <div>curve 51-75 data A</div> <div>0x821F - 33311</div> <div>0.0</div> </div> <div> <div>Second line PV current</div> <div>curve 76-100 data A</div> <div>0x8220 - 33312</div> <div>0.0</div> </div> <div> <div>Third line PV voltage</div> <div>curve 1-25 data V</div> <div>0x8221 - 33313</div> <div>0</div> </div> <div> <div>Third line PV voltage</div> <div>curve 26-50 data V</div> <div>0x8222 - 33314</div> <div>0</div> </div> <div> <div>Third line PV voltage</div> <div>curve 51-75 data V</div> <div>0x8223 - 33315</div> <div>0</div> </div> <div> <div>Third line PV voltage</div> <div>curve 76-100 data V</div> <div>0x8224 - 33316</div> <div>0</div> </div> <div> <div>Third line PV current</div> <div>curve 1-25 data A</div> <div>0x8225 - 33317</div> <div>0.0</div> </div> <div> <div>Third line PV current</div> <div>curve 26-50 data A</div> <div>0x8226 - 33318</div> <div>0.0</div> </div>
<div> <div>Inverter PV Input Status Infor...</div> <div> <div>Third line PV current</div> <div>curve 51-75 data A</div> <div>0x8227 - 33319</div> <div>0.0</div> </div> </div> <div> <div>Third line PV current</div> <div>curve 76-100 data A</div> <div>0x8228 - 33320</div> <div>0.0</div> </div> <div> <div>The first PV IV curve</div> <div>reads the data and</div> <div>completes the sign</div> <div>0x8229 - 33321</div> <div>0</div> </div> <div> <div>The second PV IV curve</div> <div>reads the data and</div> <div>completes the sign</div> <div>0x822A - 33322</div> <div>0</div> </div> <div> <div>The third PV IV curve</div> <div>reads the data and</div> <div>completes the sign</div> <div>0x822B - 33323</div> <div>0</div> </div> <div> <div>The first road mppt scans</div> <div>the maximum power point</div> <div>power kW</div> <div>0x822C - 33324</div> <div>0.0</div> </div> <div> <div>The first road mppt scans</div> <div>the maximum power point</div> <div>voltage V</div> <div>0x822D - 33325</div> <div>0</div> </div> <div> <div>The second road mppt</div> <div>scans the maximum power</div> <div>point power kW</div> <div>0x822E - 33326</div> <div>0.0</div> </div>	<div> <div>Inverter PV Input Status Infor...</div> <div> <div>The second road mppt</div> <div>scans the maximum power</div> <div>point voltage V</div> <div>0x822F - 33327</div> <div>0</div> </div> </div> <div> <div>The third road mppt scans</div> <div>the maximum power point</div> <div>power kW</div> <div>0x8230 - 33328</div> <div>0.0</div> </div> <div> <div>The third road mppt scans</div> <div>the maximum power point</div> <div>voltage V</div> <div>0x8231 - 33329</div> <div>0</div> </div> <div> <div>Umppt4 V</div> <div>0x8232 - 33330</div> <div>594.9</div> </div> <div> <div>Imppt4 A</div> <div>0x8233 - 33331</div> <div>0.8</div> </div> <div> <div>Umppt5 V</div> <div>0x8234 - 33332</div> <div>597.3</div> </div> <div> <div>Imppt5 A</div> <div>0x8235 - 33333</div> <div>0.8</div> </div> <div> <div>Umppt6 V</div> <div>0x8236 - 33334</div> <div>595.3</div> </div> <div> <div>Imppt6 A</div> <div>0x8237 - 33335</div> <div>0.8</div> </div>	<div> <div>Inverter PV Input Status Infor...</div> <div> <div>Umppt7 V</div> <div>0x8238 - 33336</div> <div>593.6</div> </div> </div> <div> <div>Imppt7 A</div> <div>0x8239 - 33337</div> <div>0.8</div> </div> <div> <div>Umppt8 V</div> <div>0x823A - 33338</div> <div>594.4</div> </div> <div> <div>Imppt8 A</div> <div>0x823B - 33339</div> <div>0.8</div> </div> <div> <div>Umppt9 V</div> <div>0x823C - 33340</div> <div>593.2</div> </div> <div> <div>Imppt9 A</div> <div>0x823D - 33341</div> <div>0.8</div> </div> <div> <div>Umppt10 V</div> <div>0x823E - 33342</div> <div>596.5</div> </div> <div> <div>Imppt10 A</div> <div>0x823F - 33343</div> <div>0.8</div> </div> <div> <div>Umppt11 V</div> <div>0x8240 - 33344</div> <div>595.8</div> </div> <div> <div>Imppt11 A</div> <div>0x8241 - 33345</div> <div>0.8</div> </div>































Inverter PV Input Status Infor...			Inverter PV Input Status Infor...			Inverter PV Input Status Infor...		
	Umppt12 V 0x8242 - 33346	596.0		Ipv9 A 0x824C - 33356	0.9		Ipv15 A 0x8252 - 33362	0.8
	Imppt12 A 0x8243 - 33347	0.8		Ipv10 A 0x824D - 33357	0.0		Ipv16 A 0x8253 - 33363	0.1
	Ipv1 A 0x8244 - 33348	1.0		Ipv11 A 0x824E - 33358	0.7		Ipv17 A 0x8254 - 33364	0.6
	Ipv2 A 0x8245 - 33349	0.0		Ipv12 A 0x824F - 33359	0.1		Ipv18 A 0x8255 - 33365	0.2
	Ipv3 A 0x8246 - 33350	0.8		Ipv13 A 0x8250 - 33360	0.7		Ipv19 A 0x8256 - 33366	0.8
	Ipv4 A 0x8247 - 33351	0.0		Ipv14 A 0x8251 - 33361	0.1		Ipv20 A 0x8257 - 33367	0.1
	Ipv5 A 0x8248 - 33352	1.0		Ipv15 A 0x8252 - 33362	0.8		Ipv21 A 0x8258 - 33368	0.7
	Ipv6 A 0x8249 - 33353	0.0		Ipv16 A 0x8253 - 33363	0.1		Ipv22 A 0x8259 - 33369	0.1
	Ipv7 A 0x824A - 33354	0.7		Ipv17 A 0x8254 - 33364	0.6		Ipv23 A 0x825A - 33370	0.8
	Ipv8 A 0x824B - 33355	0.1		Ipv18 A 0x8255 - 33365	0.2		Ipv24 A 0x825B - 33371	0.0

Figure 5-6 Inverter PV Input Status Information Data Area

5.1.5. Inverter Internal Status Information Data Area

Inverter Internal Status Information Data Area displays the information of inverter internal status, such as running mode, LCD Power Command Execution Status Feedback(PowerOnOffStatus), the temperature of module, internal, and boost module, insulation resistance detection value (ISO), Leakage Current Detection Value (GFCI), Phase A/B/C DC component (DCI), bus capacitance, AC capacitance, derating status, and so on.

Inverter Internal Status Infor...	Inverter Internal Status Infor...
Mode 0x8300 - 33536	Poweron InverterRun GridOk Running
PowerOnOffSta 0x8301 - 33537	65535
Tmod °C 0x8302 - 33538	31.5
Tinter °C 0x8303 - 33539	26.7
ISO kΩ 0x8304 - 33540	5000
GFCI mA 0x8305 - 33541	10
DCIA mA 0x8306 - 33542	-38
DCIB mA 0x8307 - 33543	21
DCIC mA 0x8308 - 33544	29
UbusPst V 0x8309 - 33545	309
UbusPst V 0x8309 - 33545	309
UbusNgt V 0x830A - 33546	309
UbusPstNgt V 0x830B - 33547	617
CntDwPwrOn S 0x830C - 33548	0
UsampIso V 0x830D - 33549	303
BusCapacitance uF 0x830E - 33550	2934
AcCapacitance uF 0x830F - 33551	46
Boost module temperature °C 0x8313 - 33555	33.7
Derating status 0x8314 - 33556	No Derating
Rated AC voltage G702VNomRtg v 0x831D - 33565	

Figure 5-7 Inverter Internal Status Information

5.1.6. Inverter Fault Status Information Data Area

Inverter Fault Status Information Data Area displays the fault name and description.

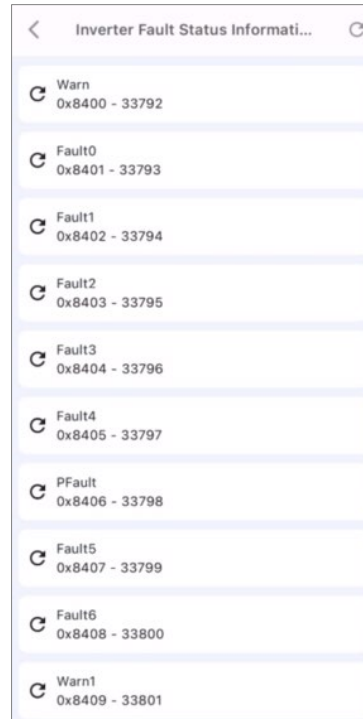


Figure 5-8 Inverter Fault Status Information Parameters

5.1.7. Additional Debugging Display Area

Additional Debugging Display Area shows the information of debugging parameter.

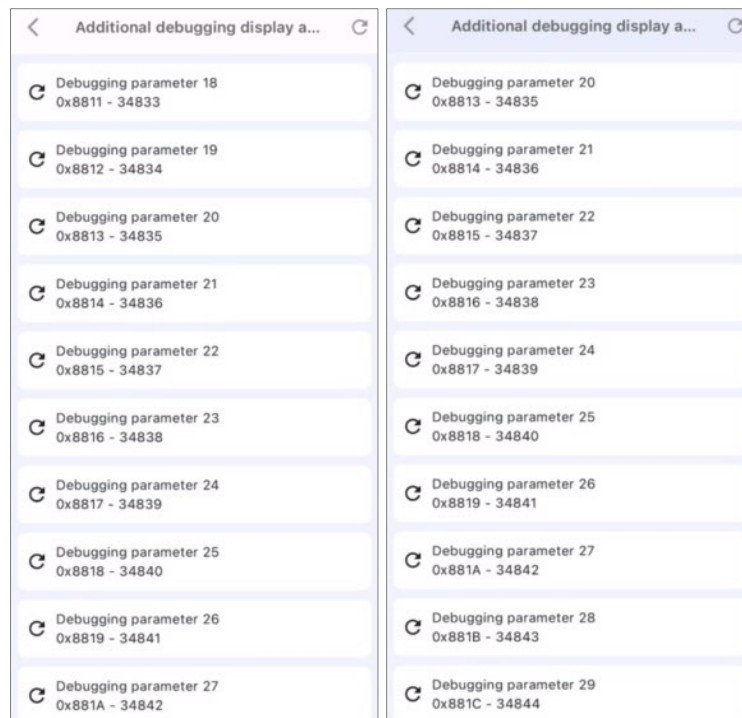


Figure 5-9 Additional Debugging Display Parameters

5.1.8. Lcdless Information Area

Lcdless Information Area displays the energy flow data between the inverter, grid and load when anti-back flow (ABF) is enabled.

Lcdless information area		Lcdless information area	
ABF_Grid_TotalBuyEnergy kWh 0x7F19 - 32537	0	ABF_GridPb kw 0x7F2D - 32557	0.0000
ABF_Grid_TotalSellEnergy kWh 0x7F1B - 32539	0	ABF_GridPc kw 0x7F2F - 32559	0.0000
ABF_GridUa V 0x7F1D - 32541	0.0	ABF_Grid_TodayBuyEnergy y kWh 0x7F31 - 32561	0
ABF_GridUb V 0x7F1F - 32543	0.0	ABF_Grid_TodaySellEnergy y kWh 0x7F33 - 32563	0
ABF_GridUc V 0x7F21 - 32545	0.0	ABF_LoadPa kw 0x7F35 - 32565	0.0000
ABF_GridIa A 0x7F23 - 32547	0.000	ABF_LoadPb kw 0x7F37 - 32567	0.0000
ABF_GridIb A 0x7F25 - 32549	0.000	ABF_LoadPc kw 0x7F39 - 32569	0.0000
ABF_GridIc A 0x7F27 - 32551	0.000	ABF_Load_TodayEnergy kWh 0x7F3B - 32571	0
ABF_GridPt kw 0x7F29 - 32553	0.0000	ABF_Load_TotalEnergy kWh 0x7F3D - 32573	0
ABF_GridPa kw 0x7F2B - 32555	0.0000	Multi Anti-reflux detection enable 0x7F42 - 32578	NULL

Figure 5-10 Lcdless Information Parameters

5.2. Hold Register Map Parameter

5.2.1. Power Dispatching

Power dispatching is used for the configuration of power dispatching. Users can power on/off the inverter, configure PSet (remote electric dispatch active power setting value), PFSet (remote electric dispatch power factor setting), QSet (remote electric dispatch reactive power setting value) and time setting.

Power dispatching	
OnOff 0x1000 - 4096	0 *
PSet 0x1001 - 4097	0.0 *
PFSet 0x1002 - 4098	0.000 *
QSet 0x1003 - 4099	0.0 *
TimeSet 0x1004 - 4100	2024-12-09 10:07:47 *

Figure 5-11 Power Dispatching Parameters

5.2.2. Grid Protection Parameters

Grid Protection Parameters are used for the configuration of grid protection parameters, such as GridVoltMax1 (the first maximum operational grid voltage), VoltMaxTripT1 (The first maximum grid voltage trip time) VoltMaxRecovery (the upper limit grid voltage recovery), VoltRecoveryT (the time of grid voltage recovery) etc.

Grid Protection Parameters			Grid Protection Parameters		
GridVoltMax1 % 0x2000 - 8192	115.00	▶	GridVoltMin3 % 0x200A - 8202	85.00	▶
VoltMaxTripT1 s 0x2001 - 8193	0.20	▶	VoltMinTripT3 s 0x200B - 8203	1.30	▶
GridVoltMax2 % 0x2002 - 8194	115.00	▶	VoltMaxRecovery % 0x200C - 8204	110.00	▶
VoltMaxTripT2 s 0x2003 - 8195	0.15	▶	VoltMinRecovery % 0x200D - 8205	85.00	▶
GridVoltMax3 % 0x2004 - 8196	115.00	▶	VoltRecoveryT s 0x200E - 8206	100.00	▶
VoltMaxTripT3 s 0x2005 - 8197	0.15	▶	GridFrqMax1 Hz 0x200F - 8207	52.00	▶
GridVoltMin1 % 0x2006 - 8198	85.00	▶	FrqMaxTripT1 s 0x2010 - 8208	0.25	▶
VoltMinTripT1 s 0x2007 - 8199	1.20	▶	GridFrqMax2 Hz 0x2011 - 8209	52.00	▶
GridVoltMin2 % 0x2008 - 8200	85.00	▶	FrqMaxTripT2 s 0x2012 - 8210	0.25	▶
VoltMinTripT2 s 0x2009 - 8201	1.30	▶	GridFrqMax3 Hz 0x2013 - 8211	52.00	▶
FrqMaxTripT3 s 0x2014 - 8212	0.25	▶	FrqRecoveryT s 0x201D - 8221	100.00	▶
GridFrqMin1 Hz 0x2015 - 8213	47.50	▶	Sliding average voltage upper limit protection % 0x201E - 8222	110.00	▶
FrqMinTripT1 s 0x2016 - 8214	0.25	▶	Sliding average voltage upper limit protection time s 0x201F - 8223	600.00	▶
GridFrqMin2 Hz 0x2017 - 8215	47.50	▶	Sliding average voltage lower limit protection value % 0x2020 - 8224	85.00	▶
FrqMinTripT2 s 0x2018 - 8216	0.25	▶	Sliding average voltage lower limit protection time s 0x2021 - 8225	600.00	▶
GridFrqMin3 Hz 0x2019 - 8217	47.50	▶	Unbalanced mains voltage % 0x2023 - 8227	2.60	▶
FrqMinTripT3 s 0x201A - 8218	0.25	▶	Relative to ground trigger voltage percentage ratio % 0x2024 - 8228	45.00	▶
FrqMaxRecovery Hz 0x201B - 8219	50.05	▶	Relative restoration of power grid percentage value % 0x2025 - 8229	35.00	▶
FrqMinRecovery Hz 0x201C - 8220	49.00	▶			
FrqRecoveryT s 0x201D - 8221	100.00	▶			

Figure 5-12 Grid Protection Parameters

5.2.3. Active Power Derating Parameters

This page is used for the configuration of active power derating parameters, such as starting/end point of over frequency and load reduction protection, over frequency and load reduction rate, over frequency and load reduction recovery frequency value, over frequency and load reduction recovery time, etc.

Active Power Derating Parameters	
Starting point of over frequency and load reduction protection Hz 0x2104 - 8452	50.20
End point of over frequency and load reduction protection Hz 0x2105 - 8453	52.00
Overfrequency and load reduction rate % 0x2106 - 8454	5.00
Overfrequency and load reduction recovery frequency value Hz 0x2107 - 8455	50.10
Overfrequency and load reduction recovery time s 0x2108 - 8456	60
Operating overvoltage protection value % 0x210E - 8462	120.00
Starting voltage V1 for grid overvoltage reduction % 0x2111 - 8465	106.00
protection value % 0x210E - 8462	120.00
Starting voltage V1 for grid overvoltage reduction % 0x2111 - 8465	106.00
Starting power of overvoltage reduction in the power grid P1 % 0x2112 - 8466	100.0
End voltage of overvoltage and derating in the power grid V2 % 0x2113 - 8467	110.00
End power of overvoltage reduction in the power grid P2 % 0x2114 - 8468	0.0
Open loop response time S 0x2115 - 8469	10.0
Overfrequency Derating Start Delay S 0x2116 - 8470	0.00
Underfrequency load start point Hz 0x211C - 8476	49.80
Underfrequency ramp up slope % 0x211E - 8478	5.00

Figure 5-13 Active Power Derating Parameters

5.2.4. Reactive Power Derating Parameters

Reactive Power Derating Parameters are used for the configuration of reactive power derating parameters, such as PFSetValue (local power factor setting), PfpcurveP1 (Power of PF(P)Curve point 1), PfpcurveTriVolt (the trigger voltage of PF(P)Curve), etc.

Reactive Power Derating Parameters	
PFSetValue 0x2200 - 8704	1.000
PfpCurveP1 % 0x2201 - 8705	50.0
PfpCurvePF1 0x2202 - 8706	1.000
PfpCurveP2 % 0x2203 - 8707	100.0
PfpCurvePF2 0x2204 - 8708	-0.900
PfpCurveTriVolt % 0x2205 - 8709	100.00
PfpCurveUndoVolt % 0x2206 - 8710	95.00
QuCurveU1 % 0x2207 - 8711	106.00
QuCurveQ1 % 0x2208 - 8712	0.0
QuCurveU2 % 0x2209 - 8713	108.00
QuCurveQ2 % 0x220A - 8714	-48.4
QuCurveU1 % 0x220B - 8715	94.00
QuCurveQ1 % 0x220C - 8716	0.0
QuCurveU2 % 0x220D - 8717	92.00
QuCurveQ2 % 0x220E - 8718	48.4
QuCurveTriPower % 0x220F - 8719	20.0
QuCurveUndoPower % 0x2210 - 8720	5.0
QpCurveP1 % 0x2211 - 8721	20.0
QpCurveQ1 % 0x2212 - 8722	0.0
QpCurveP2 % 0x2213 - 8723	50.0
QpCurveQ2 % 0x2214 - 8724	0.0
QpCurveP3 % 0x2215 - 8725	100.0
QpCurveQ3 % 0x2216 - 8726	-44.0
QpCurveOpenLoopRes pTime s 0x2217 - 8727	10.0
Reactive open-loop response time s 0x2227 - 8743	2.0

Reactive Power Derating Para...	Reactive Power Derating Para...	Reactive Power Derating Para...
PFSetValue 0x2200 - 8704	QuCurveQ2 % 0x220A - 8714	QuCurveTriPower % 0x220F - 8719
PFpCurveP1 % 0x2201 - 8705	QuCurveU1 % 0x220B - 8715	QuCurveUndoPower % 0x2210 - 8720
PFpCurvePF1 0x2202 - 8706	QuCurveQ1 % 0x220C - 8716	QpCurveP1 % 0x2211 - 8721
PFpCurveP2 % 0x2203 - 8707	QuCurveU2 % 0x220D - 8717	QpCurveQ1 % 0x2212 - 8722
PFpCurvePF2 0x2204 - 8708	QuCurveQ2 % 0x220E - 8718	QpCurveP2 % 0x2213 - 8723
PFpCurveTriVolt % 0x2205 - 8709	QuCurveTriPower % 0x220F - 8719	QpCurveQ2 % 0x2214 - 8724
PFpCurveUndoVolt % 0x2206 - 8710	QuCurveUndoPower % 0x2210 - 8720	QpCurveP3 % 0x2215 - 8725
QuCurveU1 % 0x2207 - 8711	QpCurveP1 % 0x2211 - 8721	QpCurveQ3 % 0x2216 - 8726
QuCurveQ1 % 0x2208 - 8712	QpCurveQ1 % 0x2212 - 8722	QpCurveOpenLoopRes pTime s 0x2217 - 8727
QuCurveU2 % 0x2209 - 8713	QpCurveP2 % 0x2213 - 8723	Reactive open-loop response time s 0x2227 - 8743

Figure 5-14 Reactive Power Derating Parameters

5.2.5. ARC Parameters

Acr parameters area displays the parameter about total number of ARC boards, current ARC serial number, ARC upgrade status, ARC protocol version, score judgment threshold, detection time, and arc detection time of different channels.

ARC Parameters	ARC Parameters
ARC parameter bandwidth 1 kHz 0x2300 - 8960	ARC parameter weight 2 0x2308 - 8968
ARC parameter starting frequency 1 kHz 0x2301 - 8961	ARC parameter filtering parameter 2 % 0x2309 - 8969
ARC parameter weight 1 0x2302 - 8962	ARC parameter threshold 2 dB 0x230A - 8970
ARC parameter filtering parameter 1 % 0x2303 - 8963	ARC parameter single cycle limit amplitude 2 dB 0x230B - 8971
ARC parameter threshold 1 dB 0x2304 - 8964	Basic amplitude of frequency band 1 kHz 0x230C - 8972
ARC parameter single cycle limit amplitude 1 dB 0x2305 - 8965	Basic amplitude of frequency band 2 kHz 0x230D - 8973
ARC parameter bandwidth 2 kHz 0x2306 - 8966	Frequency band 1 difference threshold kHz 0x230E - 8974
ARC parameter starting frequency 2 kHz 0x2307 - 8967	Frequency band 2 difference threshold kHz 0x230F - 8975
ARC parameter weight 2 0x2308 - 8968	ARC fault recovery time min 0x2314 - 8980

Figure 5-15 ARC Parameters

5.2.6. LVRT/HVRT

This page is used for the configuration of LVRT (Low voltage ride through) /HVRT (High voltage ride through) voltage parameter, LVRT/HVRT time parameter, etc.

<div> <div><</div> <div>LVRT/HVRT</div> <div>></div> </div> <div> <div> <div>LVRT voltage</div> <div>parameter 1 %</div> <div>0x2400 - 9216</div> <div>0.00</div> <div>></div> </div> <div> <div>LVRT time parameter 1</div> <div>S</div> <div>0x2401 - 9217</div> <div>1.00</div> <div>></div> </div> <div> <div>LVRT voltage</div> <div>parameter 2 %</div> <div>0x2402 - 9218</div> <div>2.50</div> <div>></div> </div> <div> <div>LVRT time parameter 2</div> <div>S</div> <div>0x2403 - 9219</div> <div>1.20</div> <div>></div> </div> <div> <div>LVRT voltage</div> <div>parameter 3 %</div> <div>0x2404 - 9220</div> <div>25.00</div> <div>></div> </div> <div> <div>LVRT time parameter 3</div> <div>S</div> <div>0x2405 - 9221</div> <div>1.50</div> <div>></div> </div> <div> <div>LVRT voltage</div> <div>parameter 4 %</div> <div>0x2406 - 9222</div> <div>80.00</div> <div>></div> </div> <div> <div>LVRT time parameter 4</div> <div>S</div> <div>0x2407 - 9223</div> <div>3.50</div> <div>></div> </div> <div> <div>LVRT voltage</div> <div>parameter 5 %</div> <div>0x2408 - 9224</div> <div>80.00</div> <div>></div> </div> <div> <div>LVRT time parameter 5</div> <div>S</div> <div>0x2409 - 9225</div> <div>3.50</div> <div>></div> </div> </div>	<div> <div><</div> <div>LVRT/HVRT</div> <div>></div> </div> <div> <div> <div>LVRT voltage</div> <div>parameter 6 %</div> <div>0x240A - 9226</div> <div>80.00</div> <div>></div> </div> <div> <div>LVRT time parameter 6</div> <div>S</div> <div>0x240B - 9227</div> <div>3.50</div> <div>></div> </div> <div> <div>LVRT voltage</div> <div>parameter 7 %</div> <div>0x240C - 9228</div> <div>80.00</div> <div>></div> </div> <div> <div>LVRT time parameter 7</div> <div>S</div> <div>0x240D - 9229</div> <div>3.50</div> <div>></div> </div> <div> <div>LVRT voltage</div> <div>parameter 8 %</div> <div>0x240E - 9230</div> <div>80.00</div> <div>></div> </div> <div> <div>LVRT time parameter 8</div> <div>S</div> <div>0x240F - 9231</div> <div>3.50</div> <div>></div> </div> <div> <div>HVRT voltage</div> <div>parameter 1 %</div> <div>0x2410 - 9232</div> <div>130.00</div> <div>></div> </div> <div> <div>HVRT time parameter 1</div> <div>S</div> <div>0x2411 - 9233</div> <div>0.15</div> <div>></div> </div> <div> <div>HVRT voltage</div> <div>parameter 2 %</div> <div>0x2412 - 9234</div> <div>125.00</div> <div>></div> </div> <div> <div>HVRT time parameter</div> <div>2 S</div> <div>0x2413 - 9235</div> <div>5.20</div> <div>></div> </div> </div>
<div> <div><</div> <div>LVRT/HVRT</div> <div>></div> </div> <div> <div> <div>HVRT voltage</div> <div>parameter 3 %</div> <div>0x2414 - 9236</div> <div>120.00</div> <div>></div> </div> <div> <div>HVRT time parameter</div> <div>3 S</div> <div>0x2415 - 9237</div> <div>60.50</div> <div>></div> </div> <div> <div>HVRT voltage</div> <div>parameter 4 %</div> <div>0x2416 - 9238</div> <div>120.00</div> <div>></div> </div> <div> <div>HVRT time parameter</div> <div>4 S</div> <div>0x2417 - 9239</div> <div>60.50</div> <div>></div> </div> <div> <div>HVRT voltage</div> <div>parameter 5 %</div> <div>0x2418 - 9240</div> <div>120.00</div> <div>></div> </div> <div> <div>HVRT time parameter</div> <div>5 S</div> <div>0x2419 - 9241</div> <div>60.50</div> <div>></div> </div> <div> <div>HVRT voltage</div> <div>parameter 6 %</div> <div>0x241A - 9242</div> <div>120.00</div> <div>></div> </div> <div> <div>HVRT time parameter</div> <div>6 S</div> <div>0x241B - 9243</div> <div>60.50</div> <div>></div> </div> <div> <div>HVRT voltage</div> <div>parameter 7 %</div> <div>0x241C - 9244</div> <div>120.00</div> <div>></div> </div> <div> <div>HVRT time parameter</div> <div>7 S</div> <div>0x241D - 9245</div> <div>60.50</div> <div>></div> </div> </div>	<div> <div><</div> <div>LVRT/HVRT</div> <div>></div> </div> <div> <div> <div>HVRT voltage</div> <div>parameter 4 %</div> <div>0x2416 - 9238</div> <div>120.00</div> <div>></div> </div> <div> <div>HVRT time parameter</div> <div>4 S</div> <div>0x2417 - 9239</div> <div>60.50</div> <div>></div> </div> <div> <div>HVRT voltage</div> <div>parameter 5 %</div> <div>0x2418 - 9240</div> <div>120.00</div> <div>></div> </div> <div> <div>HVRT time parameter</div> <div>5 S</div> <div>0x2419 - 9241</div> <div>60.50</div> <div>></div> </div> <div> <div>HVRT voltage</div> <div>parameter 6 %</div> <div>0x241A - 9242</div> <div>120.00</div> <div>></div> </div> <div> <div>HVRT time parameter</div> <div>6 S</div> <div>0x241B - 9243</div> <div>60.50</div> <div>></div> </div> <div> <div>HVRT voltage</div> <div>parameter 7 %</div> <div>0x241C - 9244</div> <div>120.00</div> <div>></div> </div> <div> <div>HVRT time parameter</div> <div>7 S</div> <div>0x241D - 9245</div> <div>60.50</div> <div>></div> </div> <div> <div>HVRT voltage</div> <div>parameter 8 %</div> <div>0x241E - 9246</div> <div>120.00</div> <div>></div> </div> <div> <div>HVRT time parameter</div> <div>8 S</div> <div>0x241F - 9247</div> <div>60.50</div> <div>></div> </div> </div>

Figure 5-16 LVRT / HVRT Parameters

5.2.7. Other Parameters

Others parameters area displays all parameters not categorized into dedicated groups.

<div>Others Parameters</div> <div> <div>PowerOnDelay s 0x2500 - 9472</div> <div>5</div> </div> <div> <div>PVStartupVolt V 0x2501 - 9473</div> <div>285</div> </div> <div> <div>PV power sudden change slow start power limit increment % 0x2502 - 9474</div> <div>5.00</div> </div> <div> <div>ErrSoftStartP % 0x2503 - 9475</div> <div>0.16</div> </div> <div> <div>NormSoftStopP % 0x2504 - 9476</div> <div>30.00</div> </div> <div> <div>NormSoftStartP % 0x2505 - 9477</div> <div>4.00</div> </div> <div> <div>Normal soft start power step size % 0x2506 - 9478</div> <div>6.00</div> </div> <div> <div>StartUpMinTemp °C 0x2507 - 9479</div> <div>-30.0</div> </div> <div> <div>FaultPowerT °C 0x2508 - 9480</div> <div>94.0</div> </div>	<div>Others Parameters</div> <div> <div>FaultEnvT °C 0x2509 - 9481</div> <div>89.0</div> </div> <div> <div>HVRTTripVolt % 0x250A - 9482</div> <div>114.0</div> </div> <div> <div>LVRTTripVolt % 0x250B - 9483</div> <div>85.0</div> </div> <div> <div>LVRTPstReactiveI % 0x250C - 9484</div> <div>200.0</div> </div> <div> <div>LVRTNegReactiveI % 0x250D - 9485</div> <div>200.0</div> </div> <div> <div>Local active load reduction percentage setting value % 0x250E - 9486</div> <div>110.0</div> </div> <div> <div>Local reactive power percentage setting value % 0x250F - 9487</div> <div>0.0</div> </div> <div> <div>ISOPProtection kΩ 0x2510 - 9488</div> <div>36</div> </div> <div> <div>GFCIStaticValue A 0x2511 - 9489</div> <div>1.125</div> </div> <div> <div>GFCIStaticT s 0x2512 - 9490</div> <div>0.20</div> </div>	<div>Others Parameters</div> <div> <div>GFCIDynProFactor % 0x2513 - 9491</div> <div>100.0</div> </div> <div> <div>DCIProtection1 % 0x2514 - 9492</div> <div>0.50</div> </div> <div> <div>DCIProtectionT1 s 0x2515 - 9493</div> <div>10.00</div> </div> <div> <div>DCIProtection2 mA 0x2516 - 9494</div> <div>950</div> </div> <div> <div>DCIProtectionT2 s 0x2517 - 9495</div> <div>1.00</div> </div> <div> <div>DuplicationControl % 0x2518 - 9496</div> <div>10</div> </div> <div> <div>MPPTScanPeriod s 0x2519 - 9497</div> <div>3600</div> </div> <div> <div>Protect parameter area CheckSum 0x251A - 9498</div> <div>00c8</div> </div> <div> <div>PhaseLoseRcvCoeff % 0x251C - 9500</div> <div>2.0</div> </div> <div> <div>PhaseLoseVUnbalance % 0x251D - 9501</div> <div>10.00</div> </div>
<div>Others Parameters</div> <div> <div>Reactive step size % 0x251E - 9502</div> <div>50.00</div> </div> <div> <div>PVSlowStartStep % 0x251F - 9503</div> <div>10.00</div> </div> <div> <div>Mppt1 optimizer voltage lower limit V 0x2520 - 9504</div> <div>200.0</div> </div> <div> <div>Mppt1 optimizer voltage upper limit V 0x2521 - 9505</div> <div>1100.0</div> </div> <div> <div>Mppt2 optimizer voltage lower limit V 0x2522 - 9506</div> <div>200.0</div> </div> <div> <div>Mppt2 optimizer voltage upper limit V 0x2523 - 9507</div> <div>1100.0</div> </div> <div> <div>Mppt3 optimizer voltage lower limit V 0x2524 - 9508</div> <div>200.0</div> </div> <div> <div>Mppt3 optimizer voltage upper limit V 0x2525 - 9509</div> <div>1100.0</div> </div> <div> <div>Mppt4 optimizer voltage lower limit V 0x2526 - 9510</div> <div>200.0</div> </div> <div> <div>Mppt4 optimizer voltage upper limit V 0x2527 - 9511</div> <div>1100.0</div> </div>	<div>Others Parameters</div> <div> <div>Mppt5 optimizer voltage lower limit V 0x2528 - 9512</div> <div>200.0</div> </div> <div> <div>Mppt5 optimizer voltage upper limit V 0x2529 - 9513</div> <div>1100.0</div> </div> <div> <div>Mppt6 optimizer voltage lower limit V 0x252A - 9514</div> <div>200.0</div> </div> <div> <div>Mppt6 optimizer voltage upper limit V 0x252B - 9515</div> <div>1100.0</div> </div> <div> <div>Mppt7 optimizer voltage lower limit V 0x252C - 9516</div> <div>200.0</div> </div> <div> <div>Mppt7 optimizer voltage upper limit V 0x252D - 9517</div> <div>1100.0</div> </div> <div> <div>Mppt8 optimizer voltage lower limit V 0x252E - 9518</div> <div>200.0</div> </div> <div> <div>Mppt8 optimizer voltage upper limit V 0x252F - 9519</div> <div>1100.0</div> </div> <div> <div>Mppt9 optimizer voltage lower limit V 0x2530 - 9520</div> <div>200.0</div> </div> <div> <div>Mppt9 optimizer voltage upper limit V 0x2531 - 9521</div> <div>1100.0</div> </div>	<div>Others Parameters</div> <div> <div>Mppt7 optimizer voltage upper limit V 0x252D - 9517</div> <div>1100.0</div> </div> <div> <div>Mppt8 optimizer voltage lower limit V 0x252E - 9518</div> <div>200.0</div> </div> <div> <div>Mppt8 optimizer voltage upper limit V 0x252F - 9519</div> <div>1100.0</div> </div> <div> <div>Mppt9 optimizer voltage lower limit V 0x2530 - 9520</div> <div>200.0</div> </div> <div> <div>Mppt9 optimizer voltage upper limit V 0x2531 - 9521</div> <div>1100.0</div> </div> <div> <div>PhaseLoseCoeff % 0x2538 - 9528</div> <div>3.0</div> </div> <div> <div>HVRT reactive current coefficient % 0x253E - 9534</div> <div>200.0</div> </div> <div> <div>Islanding frequency disturbance triggering 0x2577 - 9591</div> <div></div> </div> <div> <div>GridVoltThdLmt % 0x257E - 9598</div> <div></div> </div> <div> <div>ResProtectCapCurr A 0x2587 - 9607</div> <div></div> </div>

Figure 5-17 Others Parameters

5.2.8. Enable/disable Control Parameters

To enable or disable the functions of the inverter, such as MPPT scan, ARC, Island protection, PID check, and so on.

<div> <div>Enable/disable control Parame...</div> <div> <div> <div>GridParaGroup</div> <div>0x2600 - 9728</div> <div>Article 4 groups, control parameter setting of inverter loop.</div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>CtrlModeReactivePw</div> <div>0x2601 - 9729</div> <div>Disable dispatch mode.</div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>CtrlModeActivePw</div> <div>0x2602 - 9730</div> <div>Disable dispatch mode.</div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>MPPTScanEn</div> <div>0x2603 - 9731</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>ARC enable settings</div> <div>0x2604 - 9732</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>Island Protect</div> <div>0x2607 - 9735</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>LVRTModeSetting</div> <div>0x2608 - 9736</div> <div>Enable, no reactive power output.</div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>HVRTModeSetting</div> <div>0x2609 - 9737</div> <div>Enable, no reactive power output.</div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>NormSoftStopPw</div> <div>0x260A - 9738</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>PID Check Settings</div> <div>0x260B - 9739</div> <div>No external connection PID-Box.</div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> </div>	<div> <div>Enable/disable control Parame...</div> <div> <div> <div>GridVoltMax1En</div> <div>0x260C - 9740</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>GridVoltMax2En</div> <div>0x260D - 9741</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>GridVoltMax3En</div> <div>0x260E - 9742</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>GridVoltMin1En</div> <div>0x260F - 9743</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>GridVoltMin2En</div> <div>0x2610 - 9744</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>GridVoltMin3En</div> <div>0x2611 - 9745</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>GridFrqMax1En</div> <div>0x2612 - 9746</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>GridFrqMax2En</div> <div>0x2613 - 9747</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>GridFrqMax3En</div> <div>0x2614 - 9748</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>GridFrqMin1En</div> <div>0x2615 - 9749</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> </div>	<div> <div>Enable/disable control Parame...</div> <div> <div> <div>GridFrqMin2En</div> <div>0x2616 - 9750</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>GridFrqMin3En</div> <div>0x2617 - 9751</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>VoltMaxMovAvgEn</div> <div>0x2618 - 9752</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>VoltMinMovAvgEn</div> <div>0x2619 - 9753</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>GFCIStaticEn</div> <div>0x261A - 9754</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>GFCIDynProEn</div> <div>0x261B - 9755</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>Overfrequency and load reduction protection enable setting</div> <div>0x261C - 9756</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>DCIProtection1En</div> <div>0x261D - 9757</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>DCIProtection2En</div> <div>0x261E - 9758</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> </div>
<div> <div>Enable/disable control Parame...</div> <div> <div> <div>GridVoltUnbalanceEn</div> <div>0x261F - 9759</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>UFDerEn</div> <div>0x2620 - 9760</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>OvrVoltDerEn</div> <div>0x2621 - 9761</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>PVSlowStartSEn</div> <div>0x2622 - 9762</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>ISOProtectionEn</div> <div>0x2623 - 9763</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>FANDetect</div> <div>0x2624 - 9764</div> <div></div> </div> <div> <div>Enable.</div> <div>▶</div> </div> </div> <div> <div> <div>ACSPDDetectEnSet</div> <div>0x2625 - 9765</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>OperationOverVolEn</div> <div>0x2626 - 9766</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>ActivePowerOver</div> <div>0x2627 - 9767</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>ReactivePowerOver</div> <div>0x2628 - 9768</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> </div>	<div> <div>Enable/disable control Parame...</div> <div> <div> <div>PhaseLoseCoeffEnable</div> <div>0x2629 - 9769</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>Phase-PEEnable</div> <div>0x262A - 9770</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>MPPTRangEnable</div> <div>0x262B - 9771</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>RapidShutdownEnabBl</div> <div>0x262C - 9772</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>PV1 fuse detection enable</div> <div>0x262F - 9775</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>PV2 fuse detection enable</div> <div>0x2630 - 9776</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>PV3 fuse detection enable</div> <div>0x2631 - 9777</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>PV4 fuse detection enable</div> <div>0x2632 - 9778</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>PV5 fuse detection enable</div> <div>0x2633 - 9779</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>PV6 fuse detection enable</div> <div>0x2634 - 9780</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> </div>	<div> <div>Enable/disable control Parame...</div> <div> <div> <div>PV7 fuse detection enable</div> <div>0x2635 - 9781</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>PV8 fuse detection enable</div> <div>0x2636 - 9782</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>PV9 fuse detection enable</div> <div>0x2637 - 9783</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>PV10 fuse detection enable</div> <div>0x2638 - 9784</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>PV11 fuse detection enable</div> <div>0x2639 - 9785</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>PV12 fuse detection enable</div> <div>0x263A - 9786</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>PV13 fuse detection enable</div> <div>0x263B - 9787</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>PV14 fuse detection enable</div> <div>0x263C - 9788</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>PV15 fuse detection enable</div> <div>0x263D - 9789</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> <div> <div> <div>PV16 fuse detection enable</div> <div>0x263E - 9790</div> <div></div> </div> <div> <div>Disable.</div> <div>▶</div> </div> </div> </div>

Figure 5-18 Enable/disable Control Parameters

5.2.9. Control Commands

Control Commands are used for perform the functions of the inverter, such as power on or off the inverter, force restart, scan MPPT, ARC detect, Remote Power Factor value setting (PFSetValueRemote), Remote Active Power Setting (PSetPercentRemote), Remote Reactive Power Value setting (QSetPercentRemote), etc.

Control Commands	
PowerOnOff 0x2700 - 9984	0x0000
ForceRestart 0x2701 - 9985	
FactoryDefaults 0x2702 - 9986	
AutoTest(CEI) 0x2703 - 9987	
MPPTScan 0x2704 - 9988	
ARCDetect 0x2705 - 9989	
ARCClear 0x2706 - 9990	
PFSetValueRemote 0x2707 - 9991	0.000
PSetPercentRemote 0x2708 - 9992	0.0
QSetPercentRemote 0x2709 - 9993	0.0

Control Commands	
ForceRestart 0x2701 - 9985	
FactoryDefaults 0x2702 - 9986	
AutoTest(CEI) 0x2703 - 9987	
MPPTScan 0x2704 - 9988	
ARCDetect 0x2705 - 9989	
ARCClear 0x2706 - 9990	
PFSetValueRemote 0x2707 - 9991	0.000
PSetPercentRemote 0x2708 - 9992	0.0
QSetPercentRemote 0x2709 - 9993	0.0
Under CEI regulations, frequency secondary protection is enabled 0x270A - 9994	0

Figure 5-19 Control Commands

- **Power OnOff:** Manual power on or power off. Normally, it is not necessary to turn off the inverter, but it can be shut down manually if Grid Code setting or maintenance is required.
- **Force Restart:** When a permanent failure occurs, you have the option to re-energize the inverter. After re-energizing, the fault will be restored. Alternatively, you can perform a forced restart through the APP or web interface, and the fault will also be restored. There are no limitations on the number of times these procedures can be carried out.
- **Factory Defaults:** The manufacturer's parameter default values can be restored when the inverter is not in operation mode. Otherwise "Fault Operated" will be reported.
- **AutoTest(CEI):** Only for Italian Grid Code.
- **MPPT Scan:** It is used to execute the MPPT scanning manually. The device screen will skip to normal operation interface if the MPPT scanning succeeds, or remain on the interface if the scanning fails.
MPPT scan function is used for multi-MPP tracking, and is useful if the PV panels are partly shadowed or installed with different angles. The factory setting of MPPT scan is enabled, yet can also be set to Disabled. When the MPPT scan function is enabled, the scan period is 60 minutes.
The inverter will scan the maximum power point in the MPPT range, according to the following conditions:
The total input power is lower than 90% of the active power.

Once this MPPT scan function is activated on the device, it will search the maximum power point at a voltage step of 5V in the MPPT range for full load, and retrieve the maximum power point.

- **ARC Detect:** This function is used to manually detect whether the ARC board is faulty (if 4G network card is connected, this function can be used remotely on web page). During normal operation, using this function will shut down the running device for ARC detection. If there is a fault, the “ARCDetect” item will display "Error" and an ARC board fault record will show on the fault page under the "Fault History" menu (refer to section 6.2 Fault History to check fault information); If there are no faults, the “ARCDetect” item will display "successful".
Note: The device will automatically perform ARC board detection before normal operation every day. Therefore, it's unnecessary to perform this function when the device is running normally.
- **ARC Clear:** This function is used to manually clear the ARC protection of the machine (if 4G network card is connected, this function can be used remotely on web page). The device is preset to automatically reconnect 5 times within 24 hours by default (the automatic reconnection time can be set in parameter area of ARC Parameters under Hold Register Map. When ARC protection is triggered for the fifth time, it is necessary to manually clear the ARC fault. Then the device will resume the automatic reconnection function – reconnect five times within 24 hours.
- **PFSetValueRemote:** When the mode of CtrModeReactivePw under “Enable/disable Control Parameters” group is set to remote dispatch mode, you can set the PF value.
- **PSetPercentRemote:** When the mode of CtrModeReactivePw under “Enable/disable Control Parameters” group is set to remote dispatch mode, you can set the target value of reactive power.
- **QSetPercentRemote:** When the mode of CtrModeActivePw under “Enable/disable Control Parameters” group is set to remote dispatch mode, you can set the target value of active power.
- **Under CEI regulations, frequency secondary protection is enabled:** Perform it under CEI regulations.

5.2.10. Inverter Basic Information

Inverter Basic Information displays the basic information of inverter, such as machine version, DSP firmware version, Boot firmware version, etc. You can also configure SN, grid code, neutral line, PV input mode, etc.

Inverter Basic Information		
MachineVersion 0x2900 - 10496	00.02	
DSPFWVersion 0x2901 - 10497	02.06.00	
DSPFWChkSum 0x2902 - 10498	0cbd	
BootFWVersion 0x2903 - 10499	01.00	
BootFWCodeChkSum 0x2904 - 10500	55089	
CPLDVersion 0x2905 - 10501	03.00	
SN20-17 0x2906 - 10502	1111	
SN16-13 0x2907 - 10503	0002	
SN12-9 0x2908 - 10504	1111	
SN8-5 0x2909 - 10505	0211	

Inverter Basic Information		
SN4-1 0x290A - 10506	4445	
ProductCode 0x290B - 10507	6496	
GridConnectionRule 0x290C - 10508	EN50549-1	
NeutralLineSetting 0x290D - 10509	connected to N line.	
PVInputMode 0x290E - 10510	parallel connection.	
DSPSafetyFirmwareCodeC heckSum 0x290F - 10511	17185	
Min MCU software version number 0x2910 - 10512	01.00	
ThisfieldCheckSum 0x2911 - 10513	0	
DspSafetyVer 0x2912 - 10514	2	
OptnPvDectBrd 0x2914 - 10516	HaveConfig.	

Inverter Basic Information		
GridConnectionRule 0x290C - 10508	EN50549-1	
NeutralLineSetting 0x290D - 10509	connected to N line.	
PVInputMode 0x290E - 10510	parallel connection.	
DSPSafetyFirmwareCodeC heckSum 0x290F - 10511	17185	
Min MCU software version number 0x2910 - 10512	01.00	
ThisfieldCheckSum 0x2911 - 10513	0	
DspSafetyVer 0x2912 - 10514	2	
OptnPvDectBrd 0x2914 - 10516	HaveConfig.	
RegisterUnitFlag1 0x2916 - 10518	0.01s	
Rated voltage information V 0x2927 - 10535	415.0	

Figure 5-20 Inverter Basic Information Parameters

5.2.11. Factory Automatic Test Command

This page is used for enabling/disabling factory fast start, board test mode, PWM control, etc., and configuring common output control, MPPT fixed-point voltage, fan control command, etc..

Factory automatic test comma...		
Factory fast start command 0x2A00 - 10752	Disable.	
Board test mode command 0x2A01 - 10753	0	
PWM control command 0x2A02 - 10754	0	
Common output control command_one 0x2A03 - 10755		
Common output control command_two 0x2A04 - 10756		
Tz Clear command 0x2A05 - 10757	0	
12-circuit MPPT fixed- point voltage setting command 0x2A06 - 10758	0	
MPPT1 fixed-point voltage setting command 0x2A07 - 10759	0	
MPPT2 fixed-point voltage setting command 0x2A08 - 10760	0	

Factory automatic test comma...		
MPPT3 fixed-point voltage setting command 0x2A09 - 10761	0	
Complete machine factory calibration "enable" command 0x2A0A - 10762	0	
Complete machine open-loop on-load test command 0x2A0B - 10763	0	
Fan control command during machine test 0x2A0C - 10764	0	
Enable calibration of string detection board 0x2A0D - 10765	0	
MPPT4 fixed-point voltage setting command 0x2A0E - 10766	0	
MPPT5 fixed-point voltage setting command 0x2A0F - 10767	0	
MPPT6 fixed-point voltage setting command 0x2A10 - 10768	0	

Factory automatic test comma...		
MPPT7 fixed-point voltage setting command 0x2A0F - 10767	0	
MPPT6 fixed-point voltage setting command 0x2A10 - 10768	0	
MPPT7 fixed-point voltage setting command 0x2A11 - 10769	0	
MPPT8 fixed-point voltage setting command 0x2A12 - 10770	0	
MPPT9 fixed-point voltage setting command 0x2A13 - 10771	0	
MPPT10 fixed-point voltage setting command 0x2A14 - 10772	0	
MPPT11 fixed-point voltage setting command 0x2A15 - 10773	0	
MPPT12 fixed-point voltage setting command 0x2A16 - 10774	0	

Figure 5-21 Factory Automatic Test Command

5.2.12. Lcdless Basic Parameters

Lcdless Basic Parameters are used to configure reactive power unit, Modbus address, BAUD, common password, dry contact output terminal, external 485 address/baudrate, meter address, meter type, meter power trend, etc.

<div><div><div><div><div></div><div>LcdLess Basic Parameters</div><div></div></div></div><div><div><div>↻</div><div>Reactive power unit 0x2B01 - 11009</div><div>KVar</div><div></div></div><div><div><div>↻</div><div>TimeSet 0x2B02 - 11010</div><div>2024-12-09 10:12:11</div><div></div></div><div><div><div>↻</div><div>ModbusAddr 0x2B06 - 11014</div><div>1</div><div></div></div><div><div><div>↻</div><div>BAUD 0x2B07 - 11015</div><div>9600</div><div></div></div><div><div><div>↻</div><div>ComPaswd 0x2B08 - 11016</div><div>1111</div><div></div></div><div><div><div>↻</div><div>Actions and Mode 0x2B09 - 11017</div><div>Linkage operation</div><div></div></div><div><div><div>↻</div><div>LcdlessBootFwChkCode 0x2B0A - 11018</div><div>0001</div><div></div></div><div><div><div>↻</div><div>LcdlessAppFwChkCode 0x2B0B - 11019</div><div>0002</div><div></div></div><div><div><div>↻</div><div>LcdlessBootVer 0x2B0C - 11020</div><div>02.00</div><div></div></div><div><div><div>↻</div><div>LcdlessAppVer 0x2B0D - 11021</div><div>15.00</div><div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>	<div><div><div><div><div></div><div>LcdLess Basic Parameters</div><div></div></div></div><div><div><div>↻</div><div>Clear historical faults and operational records 0x2B0E - 11022</div><div>0</div><div></div></div><div><div><div>↻</div><div>Clear power generation data 0x2B0F - 11023</div><div>0</div><div></div></div><div><div><div>↻</div><div>RestoreComBrd 0x2B10 - 11024</div><div>0</div><div></div></div><div><div><div>↻</div><div>Clear historical IV curves and fault recording records 0x2B11 - 11025</div><div>0</div><div></div></div><div><div><div>↻</div><div>IV curve scanning 0x2B12 - 11026</div><div>0</div><div></div></div><div><div><div>↻</div><div>Restart Lcdless microcontroller 0x2B15 - 11029</div><div>0</div><div></div></div><div><div><div>↻</div><div>Dry contact output terminal 0x2B18 - 11032</div><div>0</div><div></div></div><div><div><div>↻</div><div>Dry contact input terminal 1 0x2B19 - 11033</div><div>1st input terminal disconnected (default)</div><div></div></div><div><div><div>↻</div><div>Dry contact input terminal 2 0x2B1A - 11034</div><div>513</div><div></div></div><div><div><div>↻</div><div>Logo selection 0x2B1B - 11035</div><div>0</div><div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>	<div><div><div><div><div></div><div>LcdLess Basic Parameters</div><div></div></div></div><div><div><div>↻</div><div>Upgrading DSP without Derating 0x2B1C - 11036</div><div>Disabled</div><div></div></div><div><div><div>↻</div><div>Starting value of PID- SVG time range in hours h 0x2B1E - 11038</div><div>20</div><div></div></div><div><div><div>↻</div><div>Starting value of PID- SVG time range in minutes min 0x2B1F - 11039</div><div>0</div><div></div></div><div><div><div>↻</div><div>PID-SVG time range end value hours h 0x2B20 - 11040</div><div>5</div><div></div></div><div><div><div>↻</div><div>PID-SVG time range end value in minutes min 0x2B21 - 11041</div><div>0</div><div></div></div><div><div><div>↻</div><div>DER-AVM operation display bit 0x2B22 - 11042</div><div>Regular operation</div><div></div></div><div><div><div>↻</div><div>PID preset voltage value V 0x2B23 - 11043</div><div>500</div><div></div></div><div><div><div>↻</div><div>ConfigIVfun 0x2B24 - 11044</div><div>With configuration</div><div></div></div><div><div><div>↻</div><div>ConfigAuMdsfun 0x2B25 - 11045</div><div>With configuration</div><div></div></div></div></div></div></div></div></div></div></div></div></div></div>
<div><div><div><div><div></div><div>LcdLess Basic Parameters</div><div></div></div></div><div><div><div>↻</div><div>ConfigFault 0x2B26 - 11046</div><div>With configuration</div><div></div></div><div><div><div>↻</div><div>ExHMIAppVer 0x2B27 - 11047</div><div>0</div><div></div></div><div><div><div>↻</div><div>ExHMIBootVer 0x2B28 - 11048</div><div>0</div><div></div></div><div><div><div>↻</div><div>ExHMIFwlapFig 0x2B29 - 11049</div><div>Do not upgrade ExHMI.</div><div></div></div><div><div><div>↻</div><div>Restart ExHMI microcontroller 0x2B2A - 11050</div><div>0</div><div></div></div><div><div><div>↻</div><div>External 485 address 0x2B2B - 11051</div><div>1</div><div></div></div><div><div><div>↻</div><div>External 485 baudrate 0x2B2C - 11052</div><div>9600</div><div></div></div><div><div><div>↻</div><div>DER-RTU Inv Mode 0x2B2D - 11053</div><div>Shutdown.</div><div></div></div><div><div><div>↻</div><div>DER-RTU Test Value 0x2B2E - 11054</div><div>Prohibited.</div><div></div></div><div><div><div>↻</div><div>MeterAddr 0x2E3E - 11838</div><div>1</div><div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>	<div><div><div><div><div></div><div>LcdLess Basic Parameters</div><div></div></div></div><div><div><div>↻</div><div>ExHMIBootVer 0x2B28 - 11048</div><div>0</div><div></div></div><div><div><div>↻</div><div>ExHMIFwlapFig 0x2B29 - 11049</div><div>Do not upgrade ExHMI.</div><div></div></div><div><div><div>↻</div><div>Restart ExHMI microcontroller 0x2B2A - 11050</div><div>0</div><div></div></div><div><div><div>↻</div><div>External 485 address 0x2B2B - 11051</div><div>1</div><div></div></div><div><div><div>↻</div><div>External 485 baudrate 0x2B2C - 11052</div><div>9600</div><div></div></div><div><div><div>↻</div><div>DER-RTU Inv Mode 0x2B2D - 11053</div><div>Shutdown.</div><div></div></div><div><div><div>↻</div><div>DER-RTU Test Value 0x2B2E - 11054</div><div>Prohibited.</div><div></div></div><div><div><div>↻</div><div>MeterAddr 0x2E3E - 11838</div><div>1</div><div></div></div><div><div><div>↻</div><div>MeterType 0x2E3F - 11839</div><div>DTSU666</div><div></div></div><div><div><div>↻</div><div>MeterPowerTrend 0x2E40 - 11840</div><div>Null</div><div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>	

Figure 5-22 Lcdless Basic Parameter

6. More

Tap **More** icon and you can view or configure the following parameters:

- Basic Settings
- Fault History
- Running Log
- Upgrade
- Yield Statistics
- NFC write (Not available in this release)
- Gateway Configuration

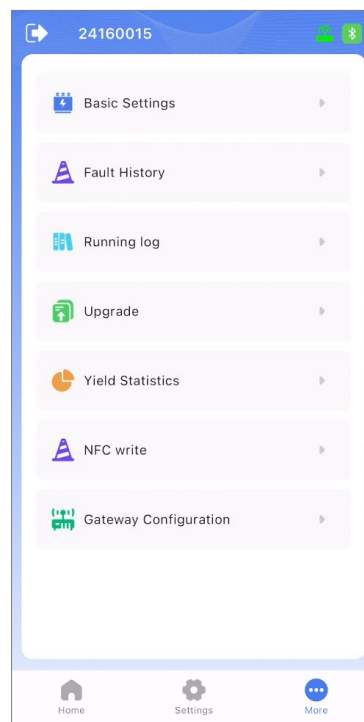


Figure 6-1 More

6.1. Basic Settings

The **Basic Settings** interface enables configuration of core parameters including Grid Code, Neutral Line connection, Modbus Address, and BAUD. (If password needed, enter “1111”)

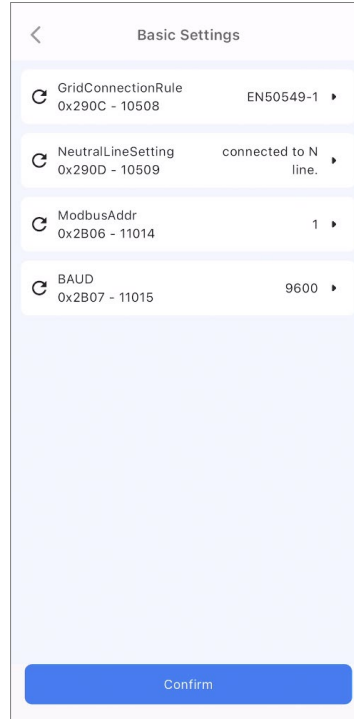


Figure 6-2 More > Basic Settings

6.2. Fault History

Fault History lists all the current and historical faults, tap fault to view the detail and solution.

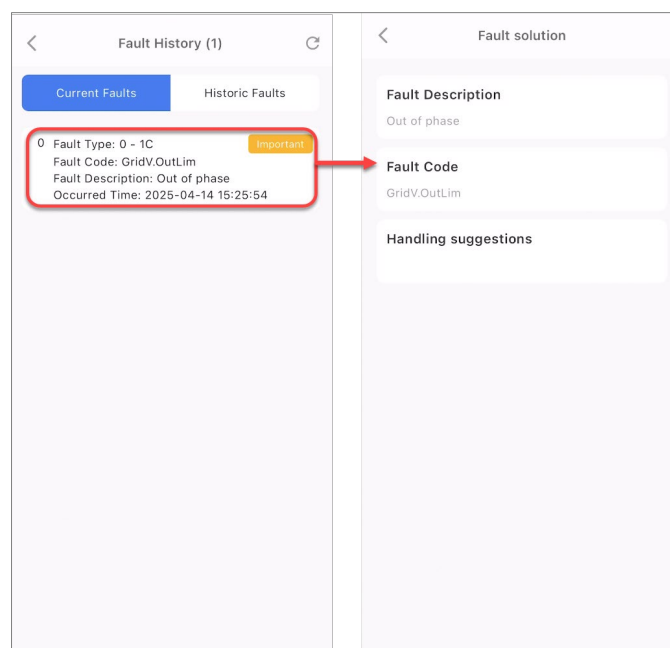


Figure 6-3 View Fault Solution

When an error occurs, a notification displays at the top of the screen. Tap **View** to troubleshoot the current fault.

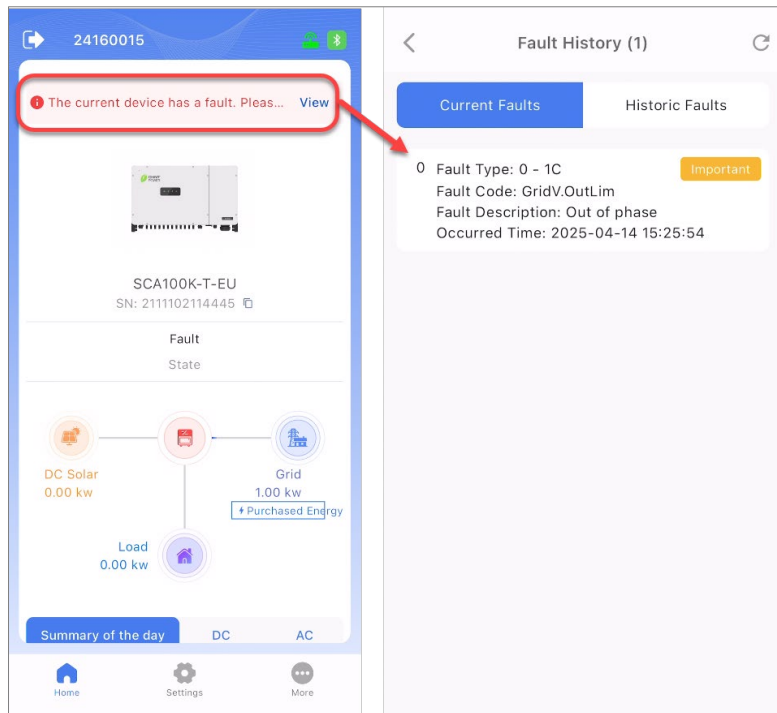


Figure 6-4 View current fault

6.3. Running log

The running log is a chronological record that tracks the running status of the inverter.

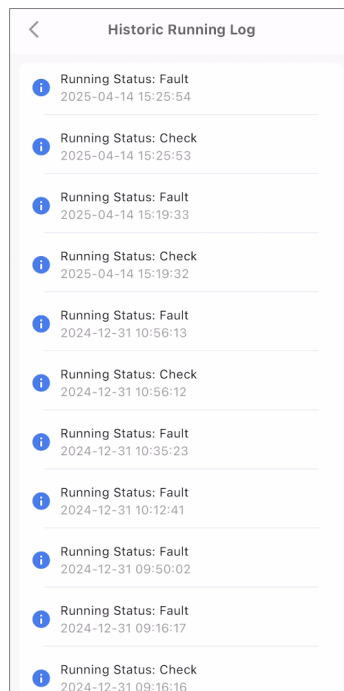


Figure 6-5 Running Log

6.4. Upgrade

Before upgrading the firmware via Bluetooth, log in to the App with account and password remotely, download the firmware, and then proceed with the upgrade locally. For instructions on how to download firmware, refer to *MatriCloud Platform Mobile App-Remote Mode Operation Guide* or consults the technical personnel.

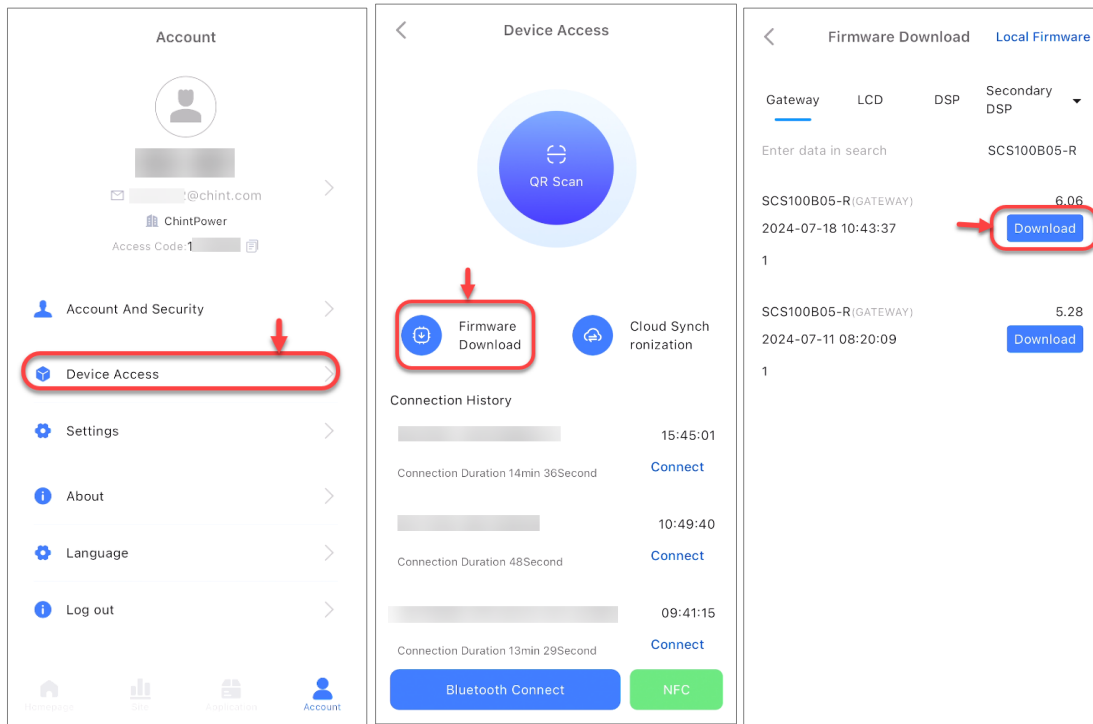


Figure 6-6 Upgrade

After the firmware package is successfully downloaded to the mobile device, implement the following upgrade steps via local connect mode:

1. Go to **More > Upgrade** interface.
2. Select the target firmware package for upgrade.

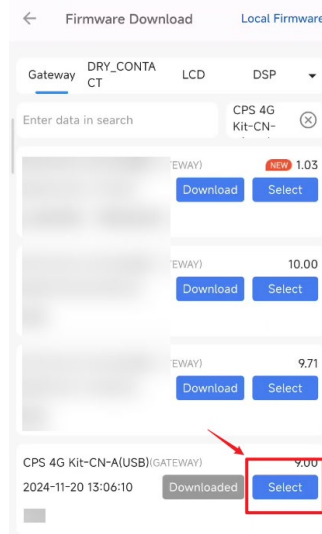


Figure 6-7 Select a target firmware package

3. Tap **Confirm** to create the upgrade task.

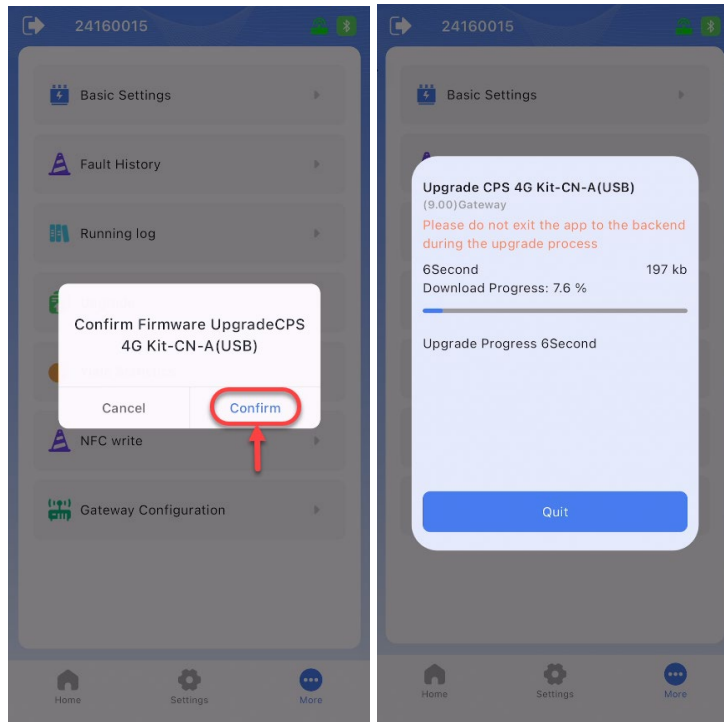


Figure 6-8 Confirm to create upgrade task

6.5. Yield Statistics

The Yield Statistics interface provides energy production visualization in hourly, daily, and monthly views.

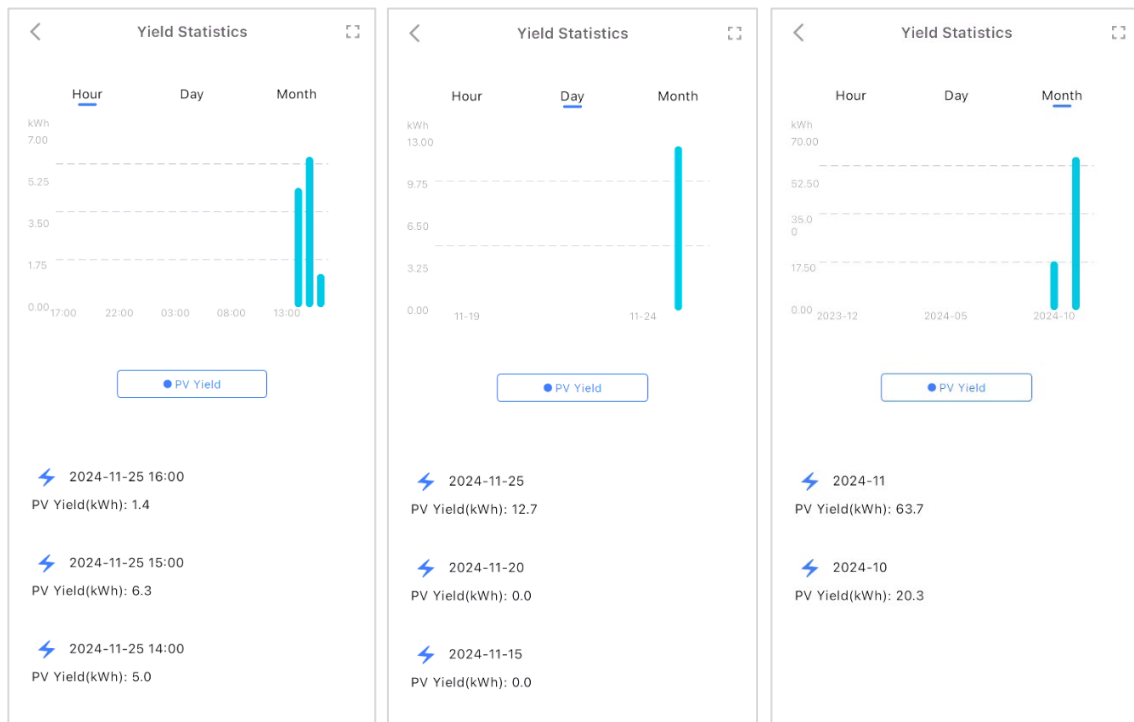


Figure 6-9 Yield Statistics

6.6. Gateway Configuration

The Gateway Configuration ("Terminal Parameter Setting") interface allows users to configure and manage gateway connectivity. This interface provides tools for monitoring gateway status, adjusting settings, and enabling logging features.

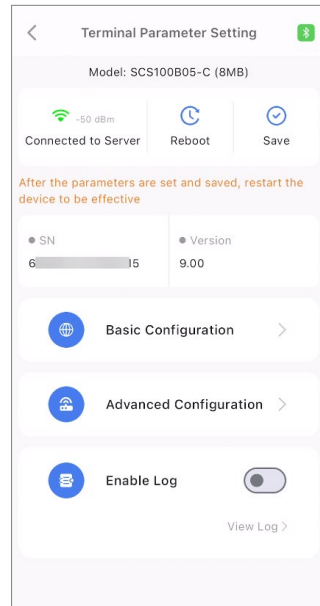


Figure 6-10 Gateway Configuration (Terminal Parameter Setting)

The gateway configuration interface can be accessed through the following methods:

- Via **Bluetooth Connect** interface: From the Bluetooth Connect screen, select the desired gateway, then swipe left to access the interface.

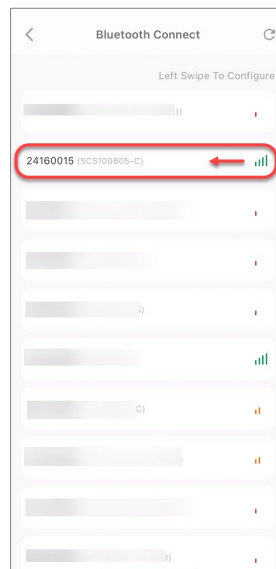


Figure 6-11 Access gateway configuration via bluetooth connect interface

- Via **Home** interface gateway icon: On the main interface, tap the gateway icon located in the upper-right corner to enter the settings.

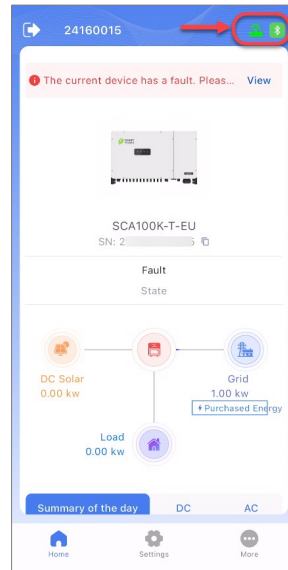


Figure 6-12 Access gateway configuration via Home interface

- Via **More** Menu: Navigate to **More > Gateway Configuration**, then select the option to access the interface.

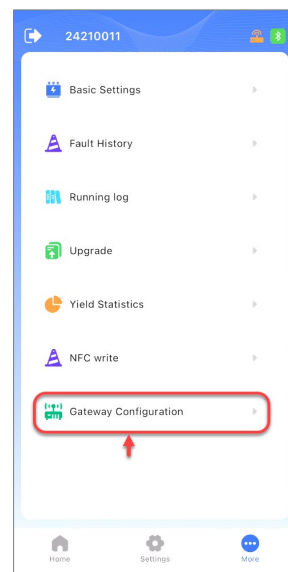


Figure 6-13 Access the gateway configuration via More interface

6.6.1. Basic Configuration

This Basic Configuration interface provides fields to configure network settings and communication intervals, with options to modify each parameter as needed. Below is a description of the configurable fields:

- **Protocol:** Displays the current communication protocol (not specified in the interface). Tap "Modify" to update the protocol or add a new protocol used by the gateway for data transmission.

- **WiFi SSID:** Displays the current WiFi network name (e.g., "CPS-GUEST"). Tap "Modify" to change the SSID for gateway connectivity.
- **WiFi PWD:** Shows the WiFi password in a masked format (e.g., "*****"). Tap "Modify" to update the password for the selected network.
- **Net:** Indicates the network protocol in use (e.g., "WIFI"). Tap "Modify" to switch between available network types, which include WiFi or 4G, depending on the gateway's capabilities.
- **UART0:** Specifies the UART communication port (e.g., "115200" baud rate). Tap "Modify" to adjust the baud rate for serial communication.
- **Period (min):** Sets the interval for periodic operations (e.g., "1" minute). Tap "Modify" to change the frequency of the gateway's periodic tasks.

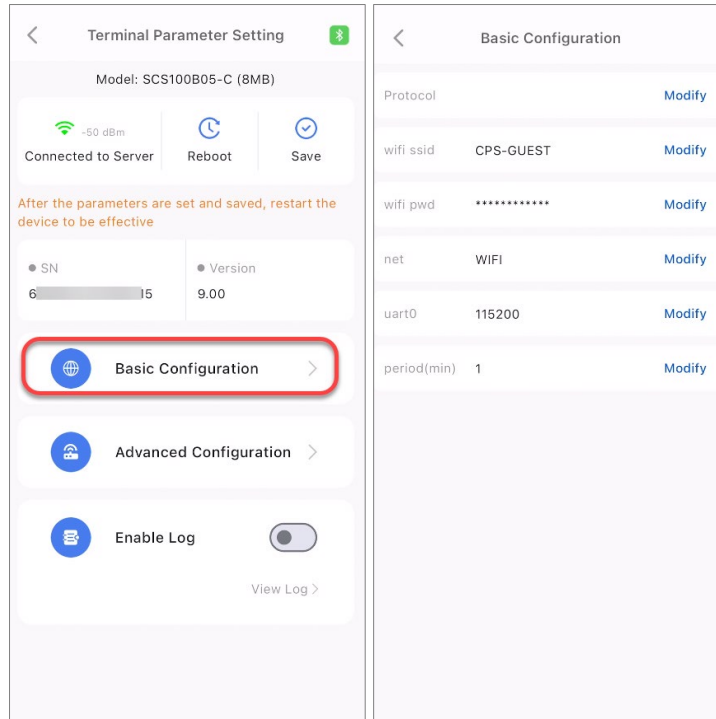


Figure 6-14 Gateway Configuraiton > Basic Configuration

6.6.2. Advanced Configuration

The **Advanced Configuration** interface allows users to configure specialized settings for the gateway, primarily related to MQTT communication and firmware updates. Below is a description of the configurable fields:

- **MQTT Host:** Displays the current MQTT server host (e.g., "Test"). Tap "Modify" to update the host address for MQTT communication.
- **MQTT Port:** Shows the port used for MQTT communication (e.g., "1883"). Tap "Modify" to change the port number for connecting to the MQTT server.
- **Upgrade:** Provides an option to initiate a firmware upgrade for the gateway. Tap "Modify" to start the upgrade process or configure upgrade settings, if applicable.

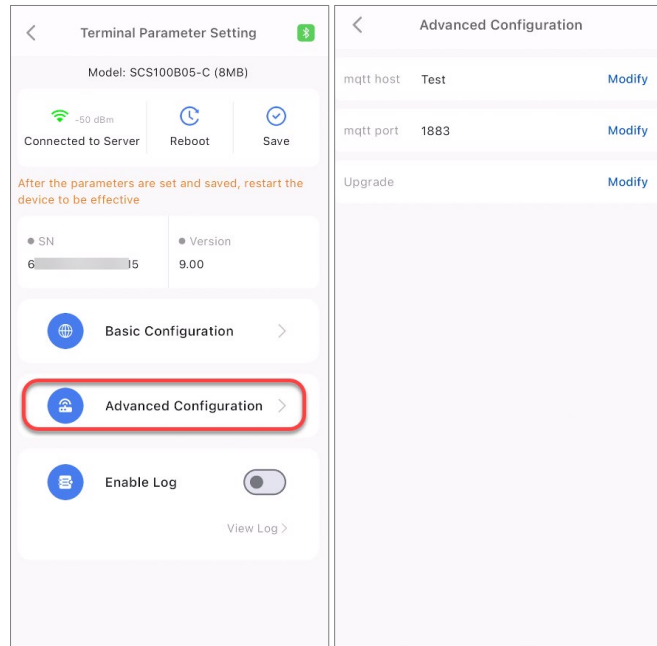


Figure 6-15 Gateway Configuration > Advanced Configuration

6.6.3. Enable Log

The **Enable Log** feature allows the users to activate logging for the gateway, facilitating troubleshooting and monitoring. Toggle the enable log button to activate logging. Once enabled, the gateway begins recording logs.

- **View Log:** After enabling logging, the "View Log" link becomes active. Tap "View Log" to access and review the recorded logs for diagnostic purposes.
- **Share Log:** Users can share the recorded logs with others for analysis or support. From the log view, select the option to share the log file via available sharing methods on the device (e.g., email, messaging apps).

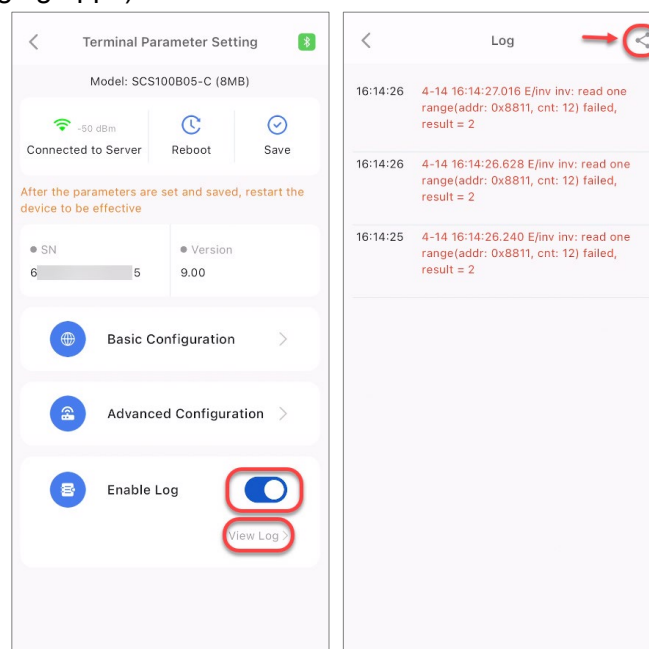


Figure 6-16 Gateway Configuration > Enable Log

After modifying settings in either the "Basic Configuration" or "Advanced 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.

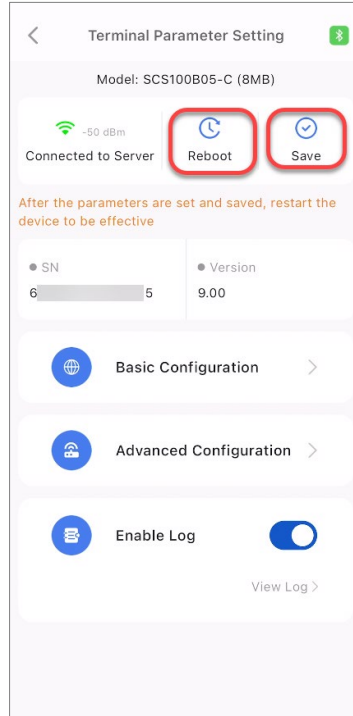


Figure 6-17 Save and Reboot

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