



ShineTools Guide

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I. ShineTools Description

ShineTools is a smart APP that could realize the inverter system local commissioning function via the smart phone. It communicates with the inverter through internal WiFi or datalogger to realize real-time status monitoring, alarm query, parameter configuration, intelligent diagnosis and other routine maintenance functions, is a convenient local configuration platform.

Real-time status monitoring: Grasps the real-time status of inverters and dataloggers timely;

Alarm query: There are easy-to-operate alarm function and flexible alarm display mechanism could help obtain fault location information quickly, and convenience for customers to take countermeasures timely, improve the efficiency of operation and maintenance.

Parameter configuration: Simple and safe parameter configuration, and one-stop unified configuration can be realized through the datalogger;

II. Commissioning Tools

There are three dataloggers could be used to realize the local commissioning function, please select the corresponding one according to your needs.

Commissioning Tools	Description
USB/232-WiFi	Suitable for all inverter devices
Shine WiFi-S/-X	Only support datalogger with 3.0.0.2/3.1.0.2 and above version
Direct WiFi	Only built-in -US inverters

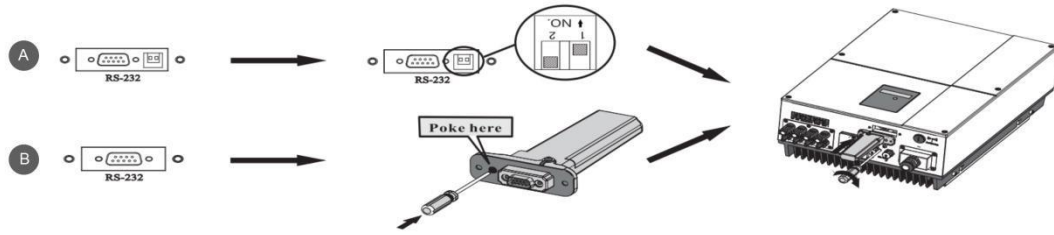
III . Shine WiFi-S/X Quick Installation Guide

● Electrical Connection ShineWiFi-S

Use a screwdriver to remove the waterproof metal sheet on the RS-232 interface of the photovoltaic device:

- When the specification of the RS-232 interface is shown as (A), set the DIP switch 1 to the "ON" position, then dock the RS-232 interface of the ShineWiFi-S and the inverter and screw the ShineWifi-S to the inverter.

When the specification of the RS-232 interface is shown as (B), poke the rubber plug on the waterproof gasket with a screwdriver firstly, then dock the RS-232 interface of the ShineWiFi-S and the inverter and screw the ShineWifi-S to the inverter



- **Electrical Connection ShineWiFi-X**

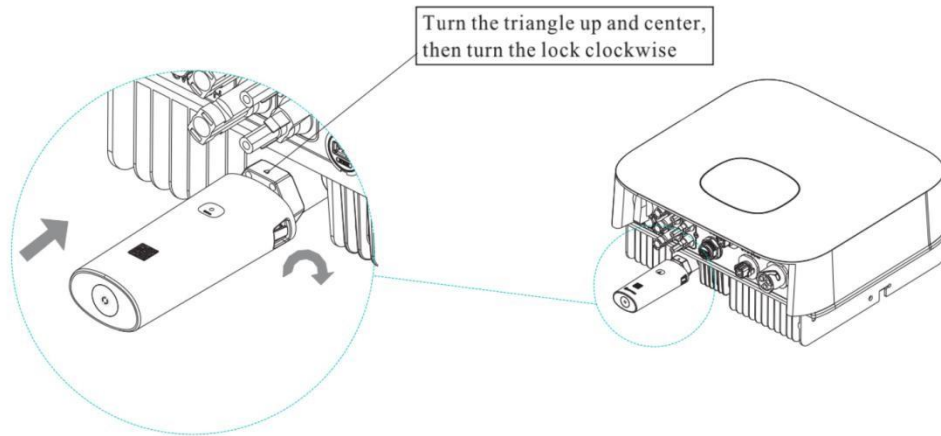
- Rotate counterclockwise to unscrew the upper cover of the photovoltaic equipment USB interface ;
- Rotate the datalogger locker on the upper, make sure the triangle is on the front side and in the middle

LED status	Working condition
ALL three LEDs are off	ShineWiFi-S/X not connected well with inverter USB port

Only Red LED flashes

The communication between ShineWiFi-S/X and inverter is OK

- Connect the datalogger to the inverter USB port, make sure the triangle is on the front side, press the locker and rotate clockwise until it is tighten.



- **Turn on the inverter and check the connection status**

After installing the ShineWiFi-S/X module, turn on the inverter, then the red LED flashing indicates the inverter and ShineWiFi-X communication is normal for the first time installation.

- Description of LED status

Only Green LED flashes

The communication between ShineWiFi-S/X, inverter and router is OK

Only Blue LED flashes

The communication between ShineWiFi-S/X, inverter, router and server is OK

IV . Scan the QR code to download and install the APP

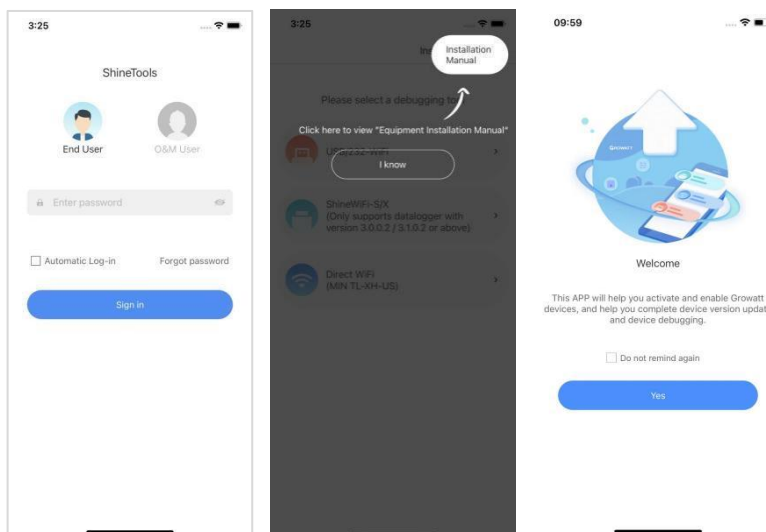
Scan the QR code or search for "ShineTools" in GooglePlay or Apple Store to download and install the APP;



Android & iOS

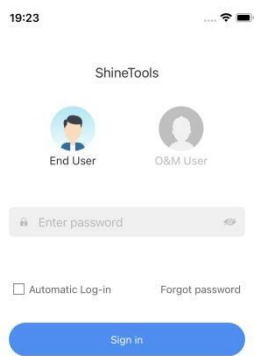
① Login

- Start the APP;
- Choose the end user or O&M account;
- Enter the account and password and log in;
- After login successfully, you can check the "Installation Manual."
- When you log in for the first time, the APP will display the welcome interface, you can click the "Do not remind again" to enter the next interface

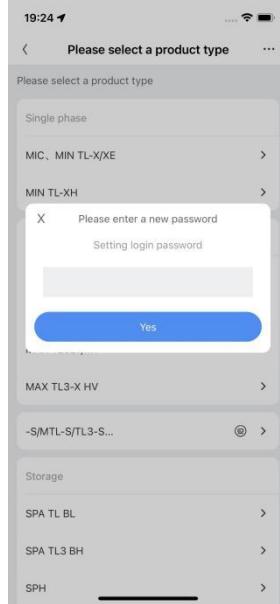


1 End User Login:

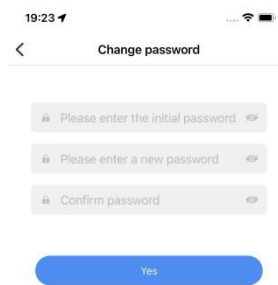
The initial password is: OSS + today's date (for example: 20220510), click Automatic Login to realize the next automatic login without entering anything. After logging in, you can change the password. If you forget your password, you can change your password in Forgot Password



Login



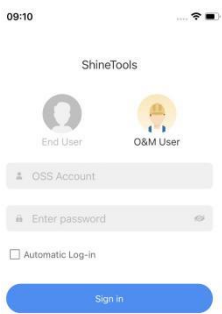
Set new password



Forget Password

2 O&M User Login

For installer/distributor users, could use the OSS account to login the ShineTools APP, they also can click Automatic Login to realize the next automatic login without entering anything.

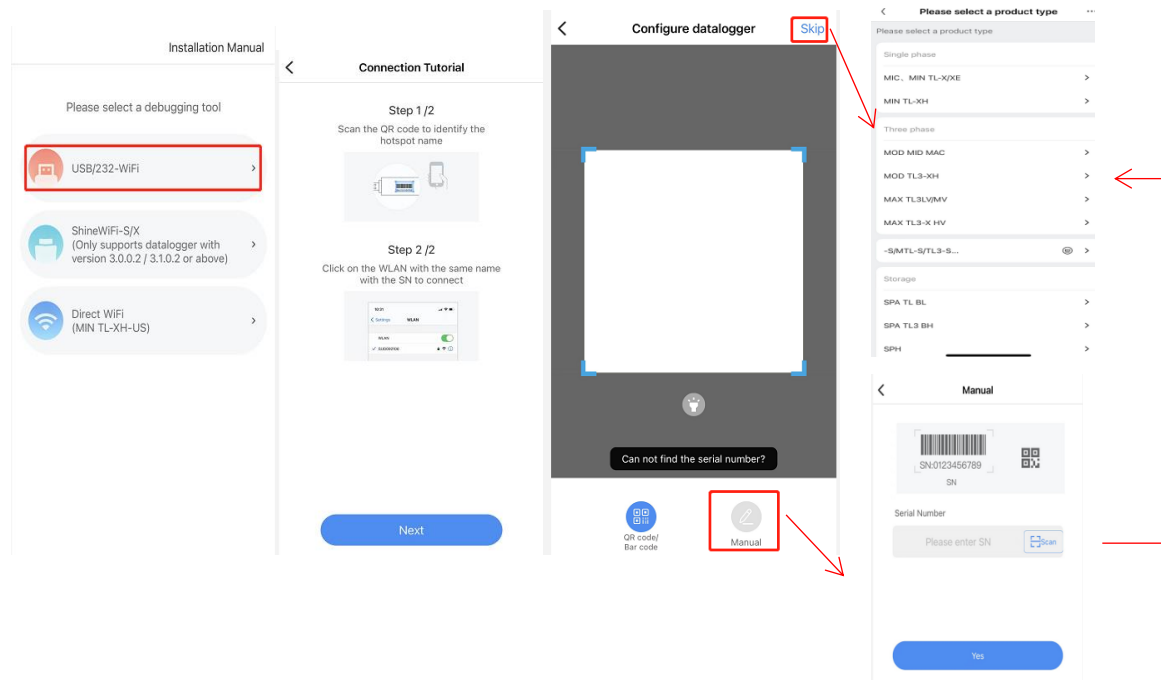


3 The difference between end users and O&M users

End users and O&M users have different permissions (for example: some parameters can not be set by the end users can; while O&M users can read and set.)

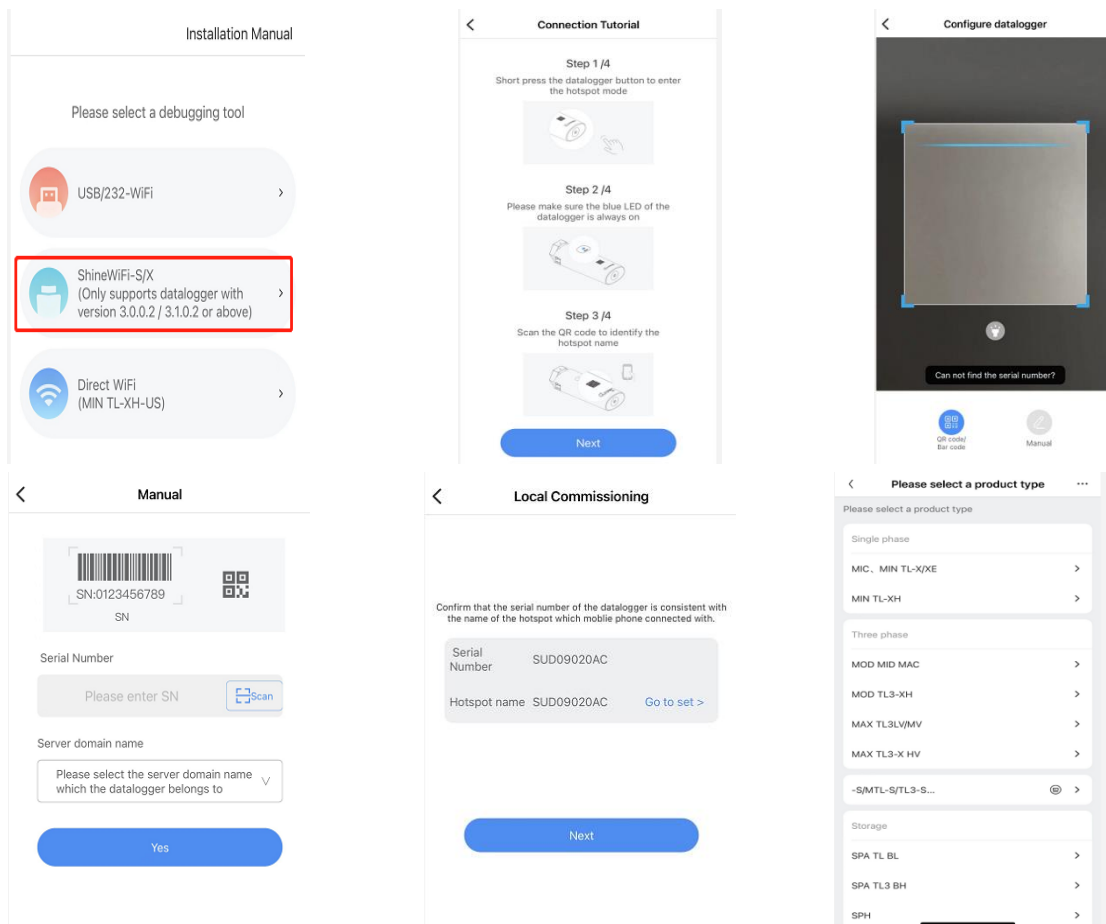
② USB/232-WiFi Commissioning Tool

- Select the USB/232-WiFi Chanel;
- Enter the Connection Tutorial, then click next step
- Scan or enter the SN of datalogger manually. If the datalogger has been connected, this step can be skipped
- Enter the Local Commissioning interface.



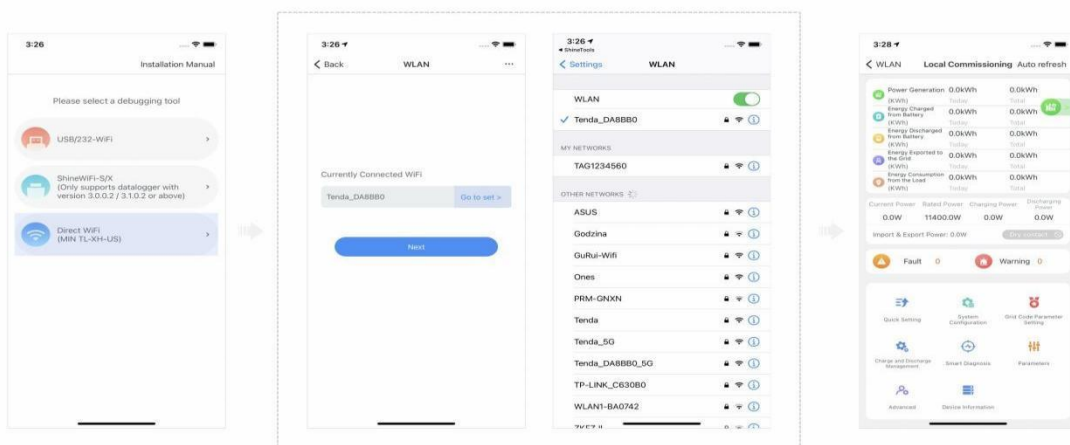
③ ShineWiFi-S/X Commissioning Tool

- Select the ShineWiFi-S/X Chanel;
- Enter the Connection Tutorial, then click next step
- Scan or enter the SN of datalogger manually, then choose the server.
- Connect with the Hotspot whose name consistent with the datalogger SN, then click the next step.
- Enter the Local Commissioning interface.



④ Direct WiFi Commissioning Tool

- Select the Direct WiFi Channel;
- Select the hotspot consistent with the inverter serial number to connect
- Enter the Local Commissioning interface.



⑤ Supported devices

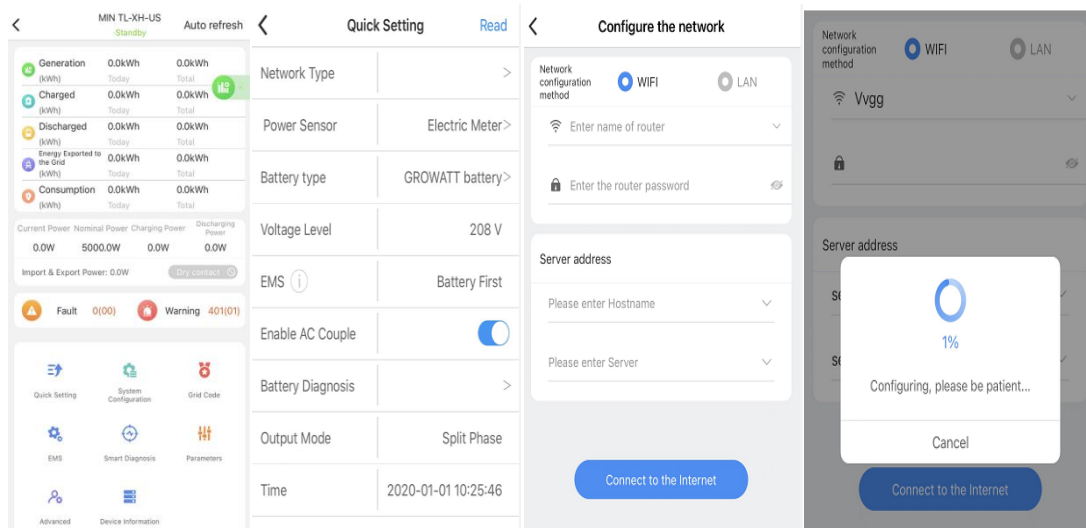
Supported devices	
Single phase	MIC、MIN TL-X/XE
	MIN TL-XH
Three phase	MOD MID MAC
	MOD TL3-XH
	MAX TL3 LV/MV
	MAX TL3-X HV
-S MTL-S/TL3-S...	
Storage	SPA TL BL
	SPA TL3 BH
	SPH
	SPH TL3 BH
	SPH TL BL-US
Direct WiFi	MIN TL-XH-US

⑥ Commissioning of TL-XH-US

Take TL-XH-US as example to introduce the APP function.

① Local Commissioning for TL-XH-US

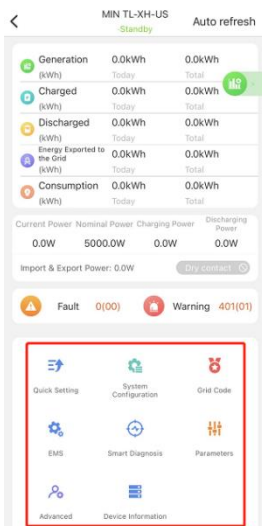
- Local Commissioning> Quick Setting> Configuration;
- Choose the network configuration method _WiFi;
- Select/fill network, enter the password, and select the server address;
- Click to connect to the network.



Tips:
 The router name and password cannot contain space characters;
 Only support English input mode characters;
 (1) Supported punctuation: (.,?!:@;+=#/()_-'^*&..\$<>[]{})
 (2) Unsupported punctuation: (`` `... • € '%¥\'')

2 Functions Introduction

There are Quick Setting, System Configuration, Grid Code, EMS, Smart Diagnosis, Basic Parameters, Advanced and Device Information channel for TL-XH-US series.



● **Quick Setting:** Include some common functions for the PV system installation, like voltage level, sensor type. For other regions, the AFCI control will be also listed here

Quick Setting		Read
Network Type		>
Power Sensor	Electric Meter>	
Battery type	GROWATT battery>	
Voltage Level	208 V	
EMS ⓘ	Battery First	
Enable AC Couple	<input checked="" type="checkbox"/>	
Battery Diagnosis		>
Output Mode	Split Phase	
Time	2020-01-01 10:25:46	

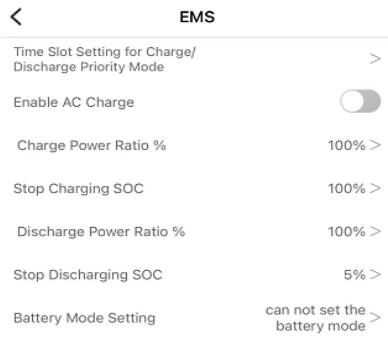
● **System Setting:** this channel is about the system control, you can control the inverter ON/OFF, change the active power or export limitation setting, also include the dry contact setting, AFCI, and the function relevant to the system output.

System Setting	
Inverter Power On/Off	<input checked="" type="checkbox"/>
Active Power %	>
PV Input Mode	Independent MPPT >
Export Limitation Setting	>
Dry Contact Function	>
Enable N-PE Detection Function	<input type="checkbox"/>
Off-Grid Function	>
AFCI Function	>

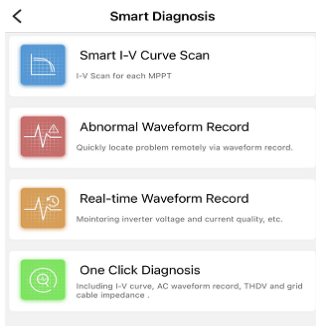
● **Grid Code:** Which is used to change the grid parameters, some region has special requirement besides the normal safety standard, the installers need to change the frequency/voltage limit, PF value or reset the LVRT setting personally, it is mainly for qualified electrical technicians, the end users can not change.

Grid Code	
Voltage ride through ⓘ	>
Frequency ride through ⓘ	>
Ramp Rate	>
Frequency/Watt	>
Voltage/Watt	>
Voltage/Var	>
Synchronization Range	>
PF setting	>

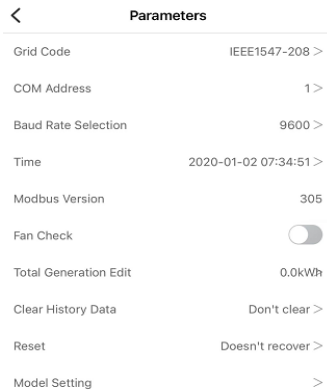
● **EMS Channel:** Customers can choose the battery charge and discharge mode and the corresponding time period (support up to nine periods)



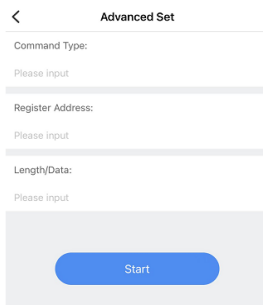
● Smart Diagnosis: Include Smart I-V Curve Scan, Abnormal Waveform Record, Real-time Waveform Record and One Click Diagnosis



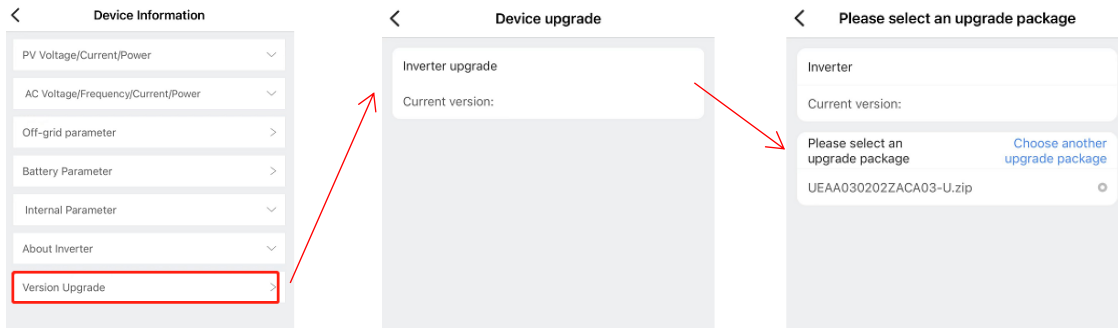
● The Basic Parameters channel shows the basic information, include the Grid Code standard, COM Address, etc.,.



● The Advanced channel is for the O&M users, they can read or set parameters according to the register address.



● **Device Information:** customers could see the device information, like parameters about the DC/AC sides, information about battery and off-grid output, and the device version, which is helpful for the after sales service. And the remote upgrade function could be realized here (for O&M users)

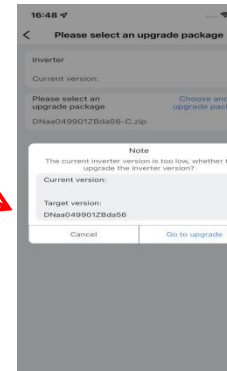
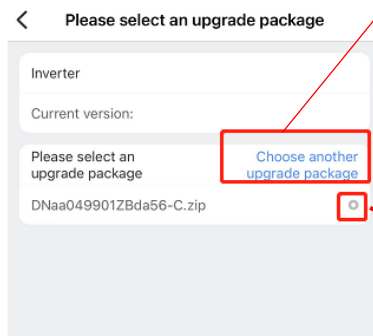
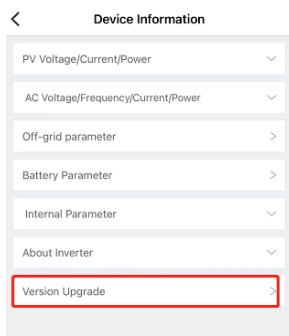
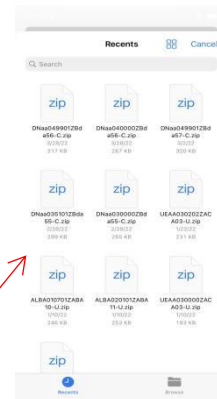
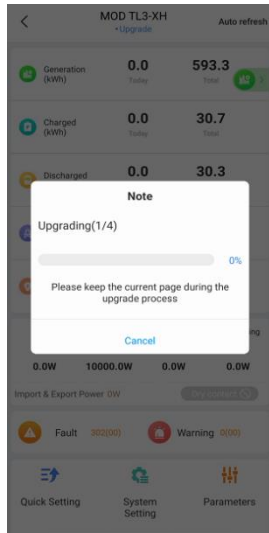
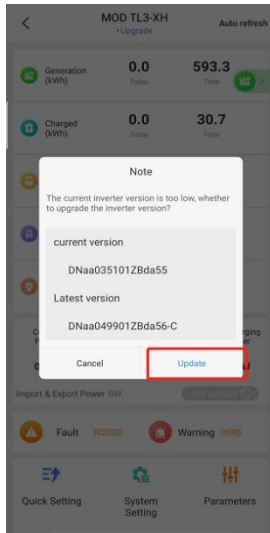


● Firmware Upgrade

Once the ShineTools APP connect with the inverter, the inverter's firmware version will be checked. If it is not the latest one, the APP could take the upgrade. There are two methods for the local upgrade.

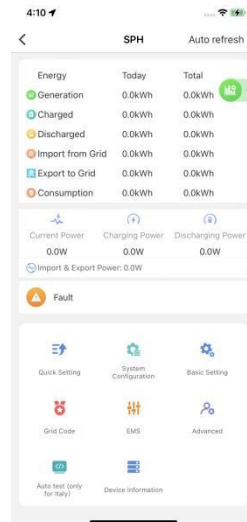
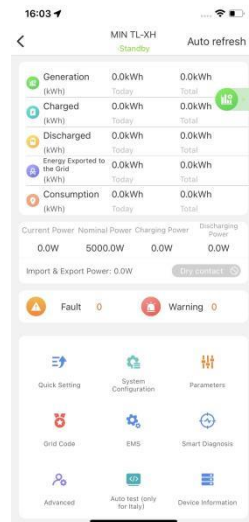
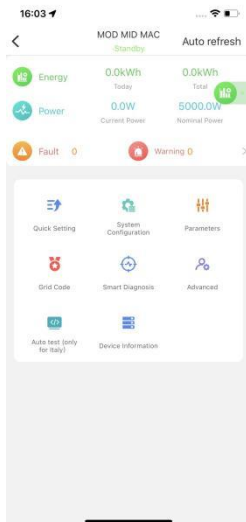
Auto upgrade: When the datalogger's hotspot is selected, once customer chooses the inverter, the inverter's firmware version will be checked. If it is not the latest one, there will be a pop-up: The current inverter version is too low, whether to upgrade the inverter version. If click the update, the inverter will upgrade, if cancel the process, customer also can upgrade the inverter in the [Device Information] channel.

Manual upgrade: If the latest version of the upgrade package has been downloaded locally, you can also select the package device upgrade in [Device Information], and click [Auto Upgrade] to select the installation package that needs to be upgraded in the [Device Information].



⑦ Interface layout for different series inverter

The parameters setting are varying for different inverter(PV inverter and storage inverter), please setting according to detailed interface.



⑧ Fault Warning

When the device has faults and warnings, the fault/warning codes and corresponding solution will appear on the page.

