Pytes

User Manual
V15

—

LITHIUM ION BATTERIES

Pytes V15 LFP Battery
User Manual

Dear Customer,

Thank you for purchasing Pytes V15. V15 is developed and produced by Pytes to provide safe, reliable and high-performance energy storage solution for residential, small commercial and industrial energy storage systems.

We strongly recommend that you carefully read this manual before install the Product and follow the instructions carefully during the whole installation process. This manual provides all the necessary information on installation, use of the Product. Please be advised that only qualified personnel (such as an electrician) should install and perform maintenance on the Product.

It is important to keep in mind the boundaries of use, as described in this manual. The Product is not intended for use in medical or aviation-related applications, and should only be used for its intended purpose as described in this manual. Improper use of the Product will void the warranty of the Product, and Pytes cannot be held responsibility for any damage caused by improper or incorrect use of the Product.

For your safety and the safety of others, please follow all user safety instructions during the use of the Product. This manual is intended for the installers and users of the Product.

Please keep this manual in a safe location, as it is the original manual. For the latest version of all manuals, please visit our website at http://www.pytesgroup.com.

Thank you again for choosing Pytes, and please do not hesitate to contact us if you have any questions or concerns about your Product.

Best regards,

Shanghai Pytes Energy CO., LTD.
Add: No.3492 Jinqian Road, Fengxian District, Shanghai, China
Website: http://www.pytesgroup.com
Email: ess_support@pytesgroup.com

Before Using

Read and understand the following instructions:

⚠️ Warning

1.This equipment must be installed, operated and maintained by qualified personnel (electrician).
2.The local safety regulations and relevant operating procedures must be observed during the installation, operation and maintenance of the Product, otherwise the Product may get damaged. The safety precautions mentioned in the manual are only the supplement to local safety regulations.

⚠️ Caution

1. Do not dispose of batteries in fire. The batteries may explode.
2. Do not open or mutilate batteries. Released electrolyte can prove harmful to the skin and eyes. It may be toxic.
3. A battery can present a risk of electric shock and burns by high short-circuit current.
4. A malfunctioned battery can reach temperatures that exceed the threshold of contact surface.
   The following precautions should be observed when working on batteries:
   a) Dis-connect the power and loads before connecting or disconnecting battery terminals;
   b) Do not wear any metal objects including watches and rings;
   c) Use tools with insulated handles;
   d) Do not lay tools or metal parts on top of batteries;
   e) Wear personal protective equipment.
   f) Make sure the battery is well grounded. Contact with any part of a poorly grounded or ungrounded battery can cause electric shock and burns by high short-circuit current.
The risk of such hazards can be reduced if conductive surroundings are removed by a skilled and qualified personnel.
5.Before moving or reconnecting the running system, the power must be turned off and the system should be shut down, otherwise there will be a risk of electric shock.
6. Do not expose Li-ion battery to heat or fire. In case of fire, please use fire extinguisher.
7. Do not dismantle any part of the Product without contacting and permission from Pytes or Pytes authorized technical engineers. System failure caused by such action will not be covered by the warranty.
8. Before operating inverter, make sure that all batteries have been started up.
9. The battery should be charged within 12 hours when it's fully discharged or over-discharging protection mode is activated. Fail to follow this instruction will damage the battery and is not covered by warranty.
10. Do not connect the Product with PV solar wiring directly.
11. The product should be installed in a restricted area without access to children and pet.

⚠️ Danger

1. Keep the Li-ion battery away from water, dust and contamination, otherwise it may cause explosion or other harmful conditions that may even lead to personal injury.

2. Do not short-circuit the Li-ion battery.

3. Observe the positive (+) and negative (-) marks on the Li-ion battery and equipment and ensure correct use. Do not reverse connect the Li-ion batteries.

4. Do not dismantle, crush, puncture, open or shred the Li-ion battery.

5. Before removing or reconnecting with the running system, the power must be off and the system should be shut down, otherwise there will be a risk of electric shock.

6. Do not expose Li-ion battery to heat or fire. In case of fire, please use fire extinguisher.

7. Do not dismantle any part of the system without contacting PYTES or PYTES authorized technical engineers. System failure caused by such action will not be covered by the warranty.

Symbols

	Read the instruction manual before starting installation and operation.
	Caution, do not dispose of batteries in a fire, the battery may explode.
	Caution, a battery can present a risk of electric shock and burns by high short-circuit current. Do not short-circuit the Li-ion battery.
	Caution, do not dispose the product with household wastes.
	Danger, keep the Li-ion battery away from water, dust and contamination, otherwise it may cause explosion or lead to personal injury.
	Danger, do not place near open flame or flammable materials.
	Danger, do not place at children or pet touchable area.
	Recyclable.

CONTENTS

1. Safety Precautions

1.1 Transportation

Pytes V15 original packaging complies with regulation of UN3480, Class 9, Packaging Group II. Always check all applicable local, national, and international regulations before transporting a LFP battery.

The battery must be transported in its original or equivalent package and in an upright position. Protect the battery from severe vibration, shock, squeeze, and exposure to rain and direct sunlight during transportation.

Use soft slings during loading and unloading process when battery is in its package to avoid damage. Do not lift the battery at the terminals or communication cable; only lift the battery at handles. Do not stand below a product when it's hoisted.

1.2 Storage

Follow the storage instructions in this manual to optimize the lifespan of the LFP battery during storage. If these instructions are not followed and the LFP battery has no energy remained when it is checked, consider it to be damaged. Do not attempt to recharge or use it. Replace it with a new LFP battery.

Disconnect the LFP battery from all loads, and the charging device if applicable.

Store the battery in a cool and dry place without direct sunlight.

Keep the battery away from corrosive substances, inflammable and explosive material as well as hazardous gases.

The Self-discharge of the LFP battery pack is ≤3% per month.

Charge the LFP battery to more than 90% of its rated capacity for long-term storage (＞6months) every 6 months.

1.3 Emergency Situations

1) Leaking Batteries
If the battery pack leaks electrolyte, avoid contact with the leaking liquid or gas. If one is exposed to the leaked substance, immediately perform the actions described below.
Inhalation: Evacuate the contaminated area, and seek medical attention.
Contact with eyes: Rinse eyes with flowing water for15minutes, and seek medical attention.
Contact with skin: Wash the affected area thoroughly with soap and water, and seek medical attention.
Ingestion: Induce vomiting, and seek medical attention.

2) Fire
Only dry powder fire extinguisher can be used; if possible, move the battery pack to a safe area before it catches fire.
3) Wet Batteries
If the battery pack is wet or submerged in water, do not allow any person access, and then contact PYTES or an authorized dealer for technical support.
4) Damaged Batteries
Damaged batteries are dangerous and must be handled with extreme care. They are not suitable for use and may cause danger to persons or property. If the battery pack appears to be damaged, do not allow any person access, and then contact PYTES or an authorized dealer for support.

NOTE:Damaged batteries may leak electrolyte or produce flammable gas.
In case a damaged battery needs recycling; it shall follow the local recycling regulation to process, and using the best available techniques to achieve a relevant recycling efficiency.

5) Short-Circuit
Only inspected and approved by qualified personnel (such as an electrician) when short-circuited, the system can be operated.

1.4 Disposal

Disposal of the batteries should be in accordance with local laws and regulations and should be carried out by an expert with specialized knowledge and experience in electrical and environmental safety, at designated waste disposal facilities using safe and appropriate method.

2. Specifications

2.1 Parameters

Battery Model	V15
Chemistry	LFP
Nominal Voltage	51.2V
Voltage Range	47.5V-57.6V
Nominal Capacity	280Ah
Nominal Energy	14.34kWh
Dimensions (H x W x D)	700 x 282 x 730 mm / 27.56 x 11.1 x 28.74 inch
Unit Weight	135kg / 297.6lbs
Standard Charge/Discharge Current	140A@25°C / 77°F
Maximum Charge/Discharge Current	200A@180S
Peak Current	300A@15s
Round-Trip Efficiency	≥95%
External Communication	RS485 / CAN / Dry Contact / WiFi
Internal Communication	RS232
Cycle Life	≥6000 Cycles@0.5C / 0.5C, 25°C / 77°F 90% DoD
Calendar Life	≥10 Years
Operating Temperature	Charge: 0°C~ 55°C / 32°F~131°F Discharge: -20°C~ 55°C / -4°F~131°F
WiFi Module	WiFi frequency range: 2412-2472MHz WiFi Max. transmission power<20dBm Bluetooth frequency range: 2402-2480MHz Bluetooth Max. transmission power≤15dBm
Ingress Protection	IP21
Certificates	UN38.3
Storage Temperature	Within 1month: -20°C~45°C / -4°F~113°F 1-12months: 0°C~35°C / 32°F~95°F

2.2 Packing List

Item	Qty	Specifications	Picture
V15 LFP Battery	1pc	LFP Battery Pack Voltage: 51.2V Capacity: 280Ah Energy:14.34kWh	
Power Cable	1 Set	UL10269-00AWG/ 2000mm/SC70-10 x 2	
Communication Cable	1pc	CAT6-2000mm-Blue-RJ45 x 2 Communication protocol: CAN/RS485 Standard Pin Sequence	
Communication Cable	1pc	UL1015-10AWG-2000mm- Yellow/Green-SC6-6 x 2	
Antenna	1pc	I5400002-109MM	
Socket Wrench	1pc	13mm Tool for cabling (Power Cables)	
Socket Wrench	1pc	10mm Tool for cabling (Earthing Cable)	
Spare RJ45 Connector	2pcs	Backup	

2.3 BMS Functions

Protection and Alarm	Protection and Alarm
Charge/Discharge End Cut-off	Cells Balance
Charge over Voltage	Intelligent Charge algorithm
Discharge under Voltage	Charge/Discharge current Limit
Charge/Discharge Over Current	Capacity Retention Calculation
High/Low Temperature	Administrator Monitor
Short Circuit	Log Record
Power Cable Reverse Protection	

3. Interface and Components

3.1 Interface

Alarm Indicator ------- Capacity Indicator

Power Switch

Start Button

Running Light

Wifi Antenna Connector

Cascade Communication Ports ---- RS485/CAN External Communication Port

Dry Contact ---- DIP Switch

DC Breaker

Power Interace ----

RS232 Console Port ---- Ground Point
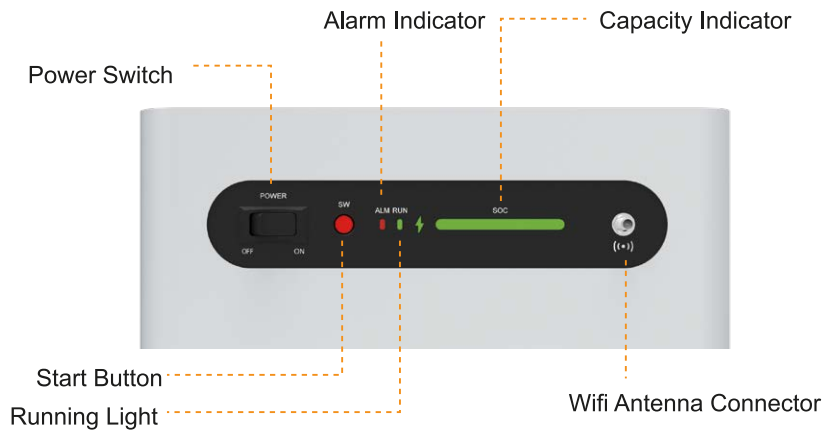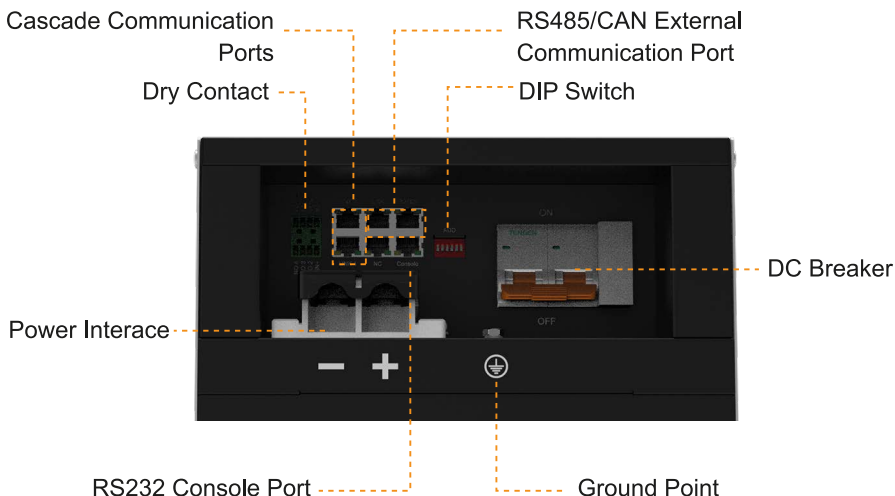
Remarks: The RJ45 port printed with NC underneath is idle

3.2 Components

No.	Name	Label	Function description
1	Power Switch	POWER	When switched to "ON", the system can be activated by "SW" or external power supply; when switched to "OFF", the system is off.
2	Start Button	SW	Long Press for 1s/3s to Power on/off V15
3	Alarm indicator	ALM	Red light. The light flashes when Alarm. The light is continuously on when under protection.
4	Running light	RUN	Green light. The light flashes when Standby. The light is constantly on when charging. The light flashes when discharging
5	Capacity indicator	SOC	Green light bar indicates battery present capacity
6	WiFi Antenna Connector	(((••)))	WiFi Module for remote system data monitoring and firmware upgrading
7	Dry contact	IN1-/IN1+ COM2/NO2 COM3/NO3 COM4/NO4	1 way input and 3 ways output dry contact signal.

8	Cascade Communication Ports	Port 1/0	RJ45 ports, connect Port 1 of the battery to Port 0 to the next battery. Port 0 of Master Battery is vacant. RJ45 ports, connect Port 1 of the battery to Port 0 to the next battery. Port 0 of Master Battery is vacant.
9	RS485 External Communication Port	RS485	RJ45 port, follow RS485 protocol, to connect to inverter and output system information. Pin Definition: Pin 1 & Pin 8 - RS485_B Pin 2 & Pin 7 - RS485_A
10	CAN External Communication Port	CAN	RJ45 port, follow CAN protocol, to connect to inverter and output system information. Pin Definition: Pin 4 – CAN_H Pin 5 – CAN_L
11	RS232 Console Port	Console	RJ45 port, follow RS232 protocol, to connect to PC/laptop for battery data local monitoring and firmware upgrading.
12	DIP Switch	ADD	Protocol address to set for communicating with certain inverter
13	DC Breaker	ON/OFF	Double Pole Single Throw, DC 250V 125A, reach 250A rating.
14	Power terminal -		Negative power input and output interface
15	Power terminal +		Positive power input and output interface
16	Earthing Point		Connection for ground cable

4. Operating Environment

Battery Installation, operating, maintenance environment requirements:

◇ Operating Temperature: -20°C~55°C
◇ Relative Humidity: 20%-80%, no condensation
◇ Altitude: <4000m
◇ Installation Location Conditions:
  1) no heat source, flammable or explosive materials.
  2) no direct sunlight.
  3) a restricted area that children or pet can't access.

4) the floor to install the Product is flat and level.
5) no puddle water.
6) minimal dust and dirt.
7) minimum 0.5meters away from inverter.
8) no cover or wrap to the Product.

5. Installation and Configuration

5.1 Installation Preparation

5.1.1 Safety Requirements

Only those who have been trained in the power system and have a good knowledge of the power system are allowed to install the Product. Always observe local safety regulations and the safety requirements listed below during the installation process.

Before installing or removing the battery, make sure that the system is disconnected from any power source and that the battery is off state. Distribution cabling needs to be handled carefully with protective measures.

5.1.2 Checking the Operating Environment

The operating environment should meet the requirements described in Chapter 4, "Operating Environment".

5.1.3 Tools and Safety Gears

The tools that may be used are shown in Table 5-1.

Table 5-1 Tools

Tools		
Z Screwdriver	Electric Drill	Pencil
Cable Clamp	Wire cutter	Ruler

Use properly insulated tools to prevent accidental electric shock or short circuits. If insulated tools are not available, cover the entire exposed metal surfaces of the available tools, except their tips, with electrical tape.

Safety Gear		
Insulated Gloves	Safety Goggles	Safety shoes

It is recommended to wear safety gears when dealing with the Product.

5.1.4 Technical Preparation

Electrical interface settings:

If the battery is connected to the user device directly, please check:

◇ Whether the DC charging interface of the energy storage inverter meets charging voltage and current requirements in Table 1-1 Specifications.

◇ Whether the power of the electrical equipment matches the parameters listed in "Table 1-1 Specifications".

Security check:

Fire-fighting equipment such as portable fire extinguishers should be available near the Product.

Follow the instructions in Chapter 4 for environment requirements.

5.2 Unpacking

◇ When the battery arrives at the installation site, it must be unloaded and stored properly and prevented from the direct sunshine and rain. Before installation, check if there is any component missing according to 2.2 Packing List and check whether the box appearance is intact;

◇ Carefully handling the unpacking to preserve the insulation coating on the casing's surface;

◇ Please contact PYTES if there is any damage or missing of products and / or components.

5.3 Installation

Note: All installation and operation must comply with local electrical standards

5.3.1 Install the Battery

Place V15 at desired installation position. LOCK the battery wheels and double check to ensure it's sturdy locked and is not movable.

5.3.2 Connect Ground Cable

Connect one end of ground cable to ground point on V15 and tighten the screw with screw driver. Connect the other end of the earthing cable to a reliable ground point. The minimum diameter of earthing cable must be >=10mm2.

Note: The grounding resistance should be less than 0.1Ω.

5.3.3 Connect the Power Cable

Before connecting the power cable, connect and disconnect the cable to identify the positive and negative terminal. Make a mark respectively. After the cable is connected, measure whether there is short-circuit or reverse connection.

Select correct cable based on load by referring to table below,

AWG	Area		Standard Current (A)	Max Current (A)
	(kcmil)	(mm²)		
4/0	211.48	107.22	423.2	482.6
3/0	167.67	85.01	335.5	382.6
2/0	133	67.43	266.2	303.6
1/0	105.5	53.49	211.1	240.7
1	83.65	42.41	167.4	190.9
2	66.31	33.62	132.7	161.3
3	52.6	26.67	105.2	120
4	41.7	21.15	83.5	95.2

5.3.3.1 Single Battery

Connect the positive and negative terminals of V15 to energy storage inverter with power cables.

5.3.3.2 Multiple Batteries

Connect the positive and negative terminals from V15 separately to positive and negative busbars. Then connect the positive and negative busbars to inverter. V15 supports up to 6pcs in parallel connection.
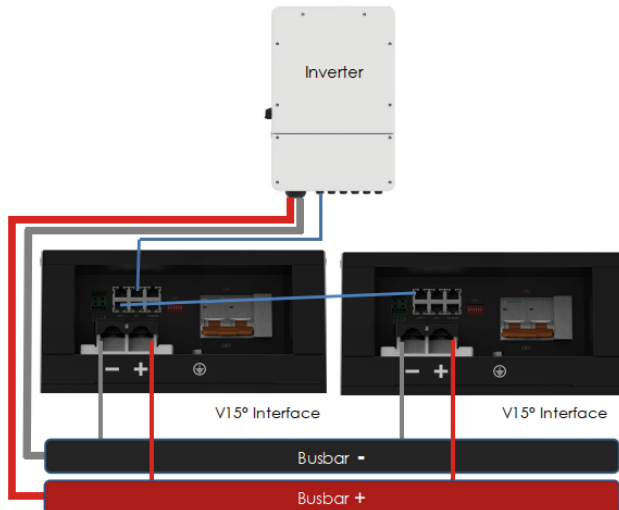
Warning: Connect the batteries in series is forbidden.

5.3.4 Connect Communication Cable

Please refer to Chapter 6.2 for information of communication ports.

Based on the communication protocol, connect either RS485 or CAN port of V15 to inverter.

Set inverter communication address on DIP.

Pytes may update due to new inverter integration without further notice. Please contact us for latest version.

5.3.5 Procedure of Starting/Shut Down

Start Procedure

Note: Before starting the system, strictly check the connection terminals to ensure that the terminals are firmly connected. Make sure V15 is powered on prior to turn on the inverter. This is to avoid battery shock by the in-rush current of the large capacitors of the inverter.

Step 1. Turn on the DC breaker.
Step 2. Turn on the power switch.
Step 3. Press SW button for 1 second to turn on V15.
If V15 is parallel connected, only press SW of master battery to power on the system.
Step 4. Battery indicator lights will go on indicating batteries are running.

Shut down Procedure
Step 1. Press SW button for 3 seconds.
If V15 is parallel connected, only press SW of master battery.
Step 2. Wait for the indicator lights to go off.
Step 3. Turn off the power switch.
Step 4. Turn off the DC breaker.

Note: If press SW button when battery is charging, V15 will stop charging, and discharging reply will be off together. To activate the battery back to normal working status, turn off the power switch and follow the Start Procedure.

Note: If short-circuit happens for 3 times to the product, please contact PYTES to replace the DC Breaker.

5.3.6 WiFi Setting

V15 is integrated with WIFI for remote battery
data monitoring and firmware upgrading.
Follow the steps below to complete WiFi Setting.
**Step 1. Download SOLARMAN APP**
Scanning the QR code with smart phone.

Step 2. Register
Run SOLARMAN APP and click Register to create your
account.After entering SOLA
RMAN Smart App，please register at SOLARMAN
Smart App to ensure the normal
function. Click "Register" to continue. System supports
E-mail or phone registration
currently.
Please follow:
1） Set login account. (Phone number and E-mail are
supported.)
2） Set password. (Password length: 6-50 bits) For
security reasons, passwords with
consecutive numbers (e.g. 123456) or same characters
(e.g. AAAAA123) will be forbidden to use.
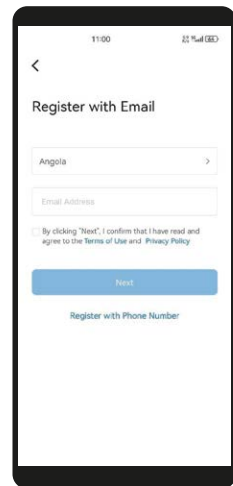
**Step 3. Create a Home**
1)Click "Start" to create your home on SOLARMAN Smart.
2)Please enter detailed home information according to your actual situation. System
will create a unique home for you. In order to calculate plant data precisely, please
enter : Home Name, Home Type, Grid Type, Home Location, Other information.
3)Click "Finish" to complete the creation.
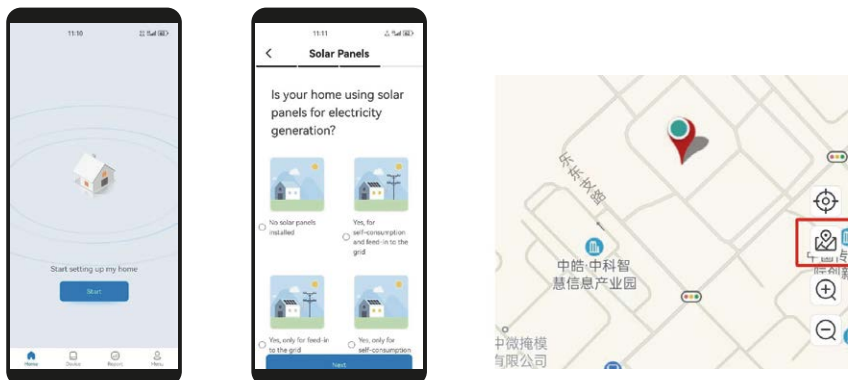
Step 4. Add a Logger
1) Go to "Home" , click "+" in the upper-right corner, select "Add a Logger"then 「Select a Home」according to your actual situation.
2) Go to「Device」, click"Start"to add a logger to the target plant.
3) Users can enterlogger SN manually or clickiconin the right to scan SN.
4) System will add a device to your plant according to your authorization mode.
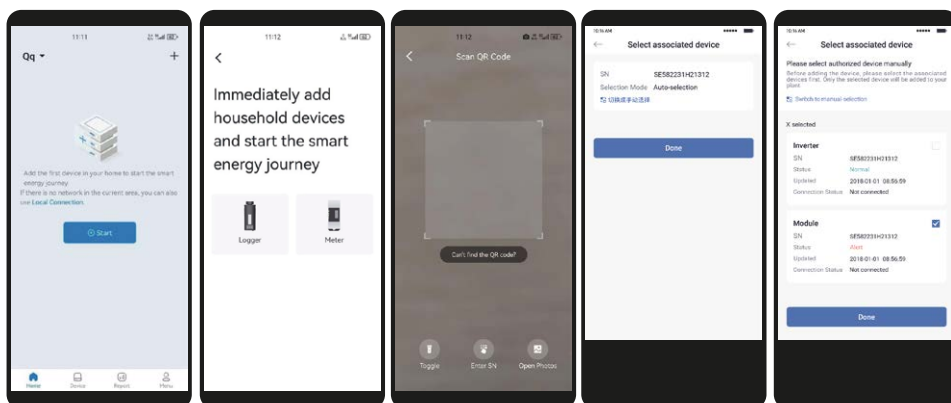
Step 5. Network Settings
Please use 2.4G network for configuration. 5G network is not supported.
1) Please make sure your phone has connected to the right WiFi network and click "Start".
2) Go to Phone Settings-WLAN, find the right "AP_XXXXX"network and click "Go to connect". Go back to SOLARMAN Smart after your phone has connected to AP network.

3)Please wait for a while to complete the configuration. System will switch to the Configured Page automatically.
When you go back to 「Device List」, the logger will still at Offlinestatus. Usually, the data will be updated in 10 mins. Please wait patiently
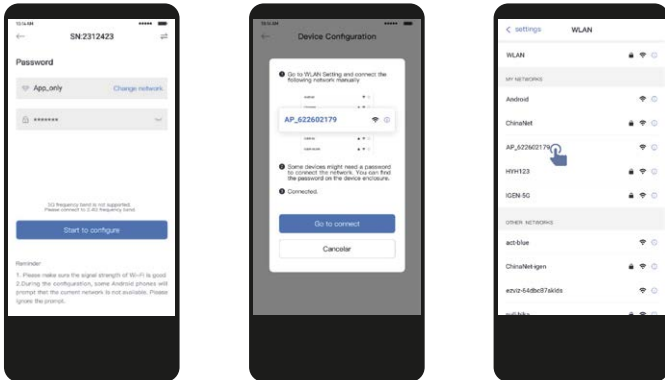
Wait for a few minutes and Configuration will be automatically completed. Click Done to view plant data.
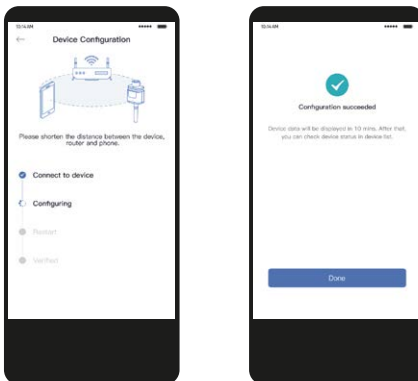
---End of installation---

6. Communication

There are RS-232, RS485 and CAN communication ports on the Product. The battery status can be obtained and the battery internal parameters can be modified via Pytes monitoring software.

CAN
CAN communication Terminal, RJ45 port, follow CAN protocol, to output batteries information.

RS485
RS485 Communication Terminal, RJ45 port, follow RS485 protocol, to output batteries information.

RS232
RS232 Communication Terminal, RJ45 port, follow RS232 protocol, to upgrade the software and communicate with PC/laptop.

6.1 RS232 port

Default baud rate of RS-232C ports: 115200bps.

Table 6-1 RS232 Connector Pin Assignments

Pin number	RS-232C port
1	
2	
3	TXD
4	GND
5	
6	RXD
7	
8	
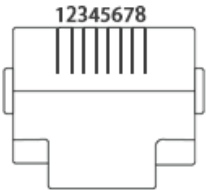
6.2 RS485 port and CAN port

Default baud rate of RS-485 port: 9600bps
Default baud rate of CAN port: 500K

Table 6-2 RS485 and CAN Connector Pin Assignments

Pin number	Serial	CAN
1	RS485B	
2	RS485A	
3	GND	
4		CANH
5		CANL
6	GND	
7	RS485A	
8	RS485B	

7. Troubleshooting

Table 7-1 V15 LED Indications

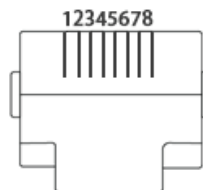| V15	Normal/ Alarm/ Protection	ALM ●	RUN ●	Capacity LED	Description
Shut down	/	OFF	OFF	OFF	All off
Power-on	Normal	ON	ON	ON	All lights will be on for 1 second at the same time
Standby	Normal	OFF	Blink 1	OFF	Standby
	Alarm	Blink 3	OFF	OFF	Low Voltage
Charging	Normal	OFF	Blink 2	Based on Capacity	
	Alarm	Blink 3	ON	Based on Capacity	
	Protection	ON	OFF	All off	Protection triggered, charging stops
Discharge	Normal	OFF	ON	Based on Capacity	
	Alarm	Blink 3	ON	Based on Capacity	
	Protection	ON	OFF	All off	Protection triggered, discharging stops

Notes: Blink descriptions: Blink 1"0.3s on/3.7s off"; Blink 2"0.5s on/0.5s off"; Blink 3"0.5s on/1.5s off";

Please refer to the troubleshooting methods below. Please read Table 7-1 of this manual before troubleshooting to prevent false operations. For example, it doesn't indicate the battery is faulty if the ALM alarm red light is blinking or constantly on. When there is an "alarm" indication, it usually works well and needs no troubleshooting. When there is "protection" indication, the battery will work normally automatically after "protection" status is released.

7.1 Unable to Start

Problem	Troubleshooting Steps	Solution
Press the POWER button to the "ON" state but the LED indicator doesn't respond or all the LEDs are off after 1second.	1. Confirm that the DC Breaker is in the "ON" state and the POWER button remains in the "ON" state; 2. Charge the battery correctly and observe if the battery can be charged properly.	1. If the battery enters charging mode, the battery can return to normal after charging. 2. If not, please contact the local reseller or Pytes.

7.2 Unable to Charge

Problem	Troubleshooting Steps	Solution
The battery can't properly charge while it's not fully charged.	1. Confirm the battery is turned on; 2. Check the power cable. Confirm the power cables are correctly connected and the charging circuit is correct; 3. Check the battery indicator LED to see if the battery is under "Protection" state. If so, find the cause of the protection, and fix the problem, then restart the battery; 4. Check if the charging voltage meets the battery charging require-ments. If not, adjust the power supply voltage to the proper range; 5. When battery is under voltage, confirm if external charging voltage is 1.5V or greater than battery voltage. The check period for the voltage condition is 300 seconds.	If the battery still does not charge properly after following the steps, please contact the local reseller or Pytes.

7.3 Unable to Discharge

Problem	Troubleshooting Steps	Solution
The battery can't discharge properly.	1. Confirm the battery is turned on; 2. Check the power cables to ensure that they are properly connected. 3. Unplug the battery power cable and measure the battery power output voltage. If the battery voltage is too low, charge it immediately. 4. Check the battery indicator LED to see if the battery is under "Protection" state. If so, find the cause of the protection, and fix the problem, then restart the battery; 5. When temperature of battery charging is 0°C, battery will go to protection. Restart the battery for discharge and charge function will be back to normal when battery temperature is higher than 0°C.	If the battery still does not discharge properly after following the above steps, please contact the local reseller or Pytes.

Warning: Do NOT repair the battery without authorization from PYTES.

7.4 Alarm Indicator Constantly on

When the ALM indicator is constantly on and the other indicators are off, the battery is in the "Protection" state. When protection condition is released, the battery will automatically return to normal operation. There are a few issues requiring immediate measures.

Problem	Troubleshooting Steps	Solution
The ALM indicator is constantly red and all other indicators are off.	1. Check the power cables to ensure that they are properly connected. 2. Check whether the charging voltage, charging/discharging current, battery/cell voltage and temperature meet the relevant protection conditions, and release the "protection" state to ensure that the voltage, current and temperature are within the normal working range. find the cause of the protection, and fix the problem, then restart the battery;	If the battery protection state can't be released, or the ALM indicator is constantly on when the battery is properly charged after it is restarted, please contact your local reseller or Pytes.

Warning: Do NOT repair the battery without authorization from PYTES.

Warranty Card

Customer Information			
Contact Name			
Phone Number		Email	
Address			

Product Information			
Battery Model		Inverter Brand/Model	
Battery Quantity		Inverter Quantity	
Purchase Date		Inverter Using Time	
Serial Number		on/off Grid	

Installer Information			
Installer Name		Installation Date	

Problem Description

Photos of Battery Wiring

Photos of Inverter Wiring and Panels

Shanghai PYTES Energy Co., LTD

Add：No.3492 Jinqian Road, Fengxian District, Shanghai, China

Tel：+86 21 57475852

Email：ess_support@pytesgroup.com