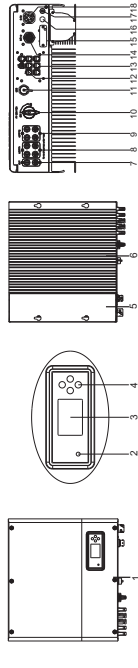


1. Overview



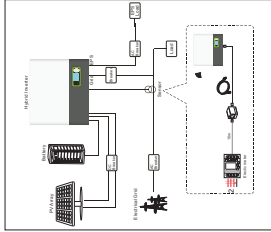
1. Front panel
2. Double color LED
3. LCD screen
4. Push button
5. Magnetic devices
6. Heat sink
7. Battery connector
8. PVA connector
9. PVB connector
10. PV switch
11. USB port
12. Dry connector
13. Communication ports
14. AC grid connector
15. Reserved hole
16. Breathable valve
17. Grounding screw
18. EPS connector

▲ Note:
 1. Only three-phase meter supports current detection detection.
 2. For more information, please refer to the manual.

▲ Note:
 1. This file will be updated from time to time due to product upgrades or other reasons. Unless otherwise agreed, this document is intended as a reference only. All information and suggestions do not constitute an express or implied warranty. The final interpretation of the content is at Growatt.
 2. This document is for quick guidance installation only. For details, please refer to the User Manual.
 3. Machine damage caused by failure to follow the content is not covered by the warranty.

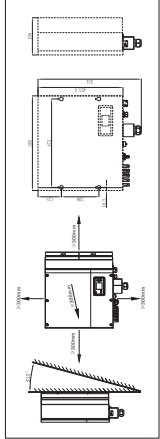
2. Installation

System Overview

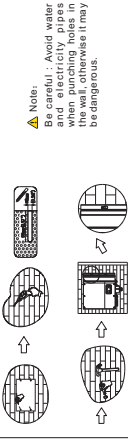


▲ Note:
 The installation of this hybrid system needs to comprehensively consider the position of the battery and the power collector.

2.1 Installation requirements

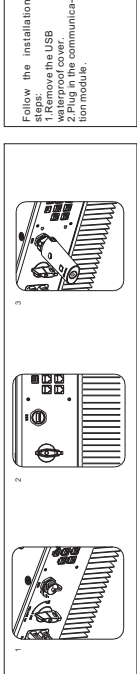


2.2 Wall mounting



▲ Note:
 Be careful! Avoid water when punching holes in the wall, otherwise it may be dangerous.

2.3 communication module installation



Follow the installation steps:
 1. Remove the USB waterproof cover.
 2. Plug in the communication module.

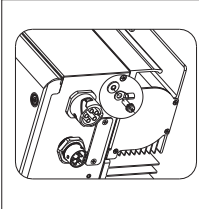
3. Connecting cables

Please prepare the cable before connecting as follows.

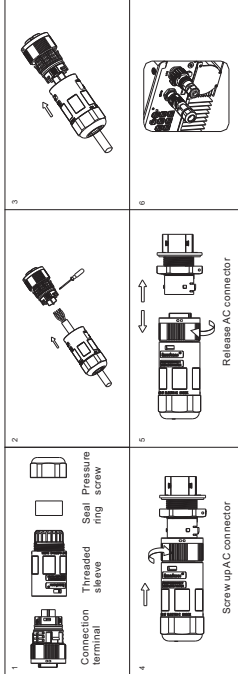
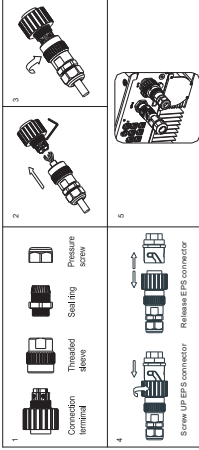
Number	Cable name	Type	Recommend module
1	Grounding wire	Single multi-core yellow-green copper wire	Wire diameter:AWG10
2	AC output wire	Two or three different color multi-core copper wires	Wire diameter:AWG12
3	PV input wire	Photovoltaic dedicated cable (such as PV1-F)	4mm²-6mm²
4	Battery input wire	Red and black multi-core copper	Wire diameter:AWG10
5	Communication wire	CAT5E	/

▲ Notice:
 1. Lithium battery has its own power protection function, so please use them directly.
 2. Hybrid inverter include the basic communication line. So please use them directly.
 3. Please make sure all the switches off before connection. For your safety, please do not operation when power on.

3.1 Grounding



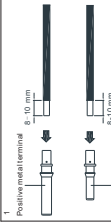
3.2 AC GRID and EPS output connection



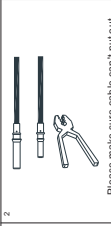
3.3 DC connection

3.3.1 PV and Battery input terminal installation

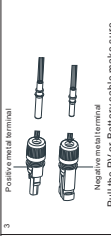
2



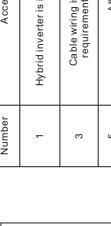
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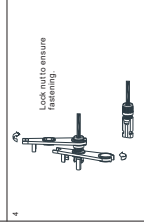
3



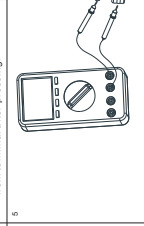
4



4



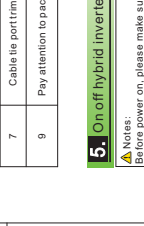
5



5



5

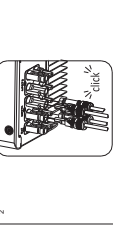


3.3.2 Plug in PV terminal

1

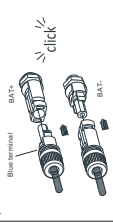


2

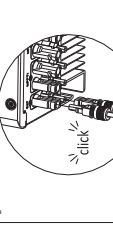


3.3.3 Plug in Battery terminal

1

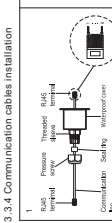


2



3.3.4 Communication cables installation

1



2



3



4



4. Post-installation check

Number

Acceptance Criteria

Number

Acceptance Criteria

1

Hybrid inverter is installed correctly and firmly

2

Shine WIFI-X or ShineLink or GPRS is installed correctly and firmly.

3

Cable wiring is reasonable, meets the requirements, no broken skin, etc.

4

The ground wire confirms the connection and is reliable.

5

All switches off

6

All wires are correct and securely connected.

7

Cable tie port trimming, no sharp corners, etc.

8

All exposed terminals are well protected, no vacant ports.

9

Pay attention to packing all the residual materials.

5. On/off hybrid inverter

Notes:

Before power on, please make sure all of the voltage and current are correct. If there is any error, it will be damage to hybrid inverter. Otherwise it will be damage to hybrid inverter.

Follow are the steps of turn on actions:

1. Turn on battery and the switch between battery and hybrid inverter.

2. Turn on battery and the switch between battery and hybrid inverter.

3. Turn on PV switch.

4. Turn on Battery switch.

5. If need to setup hybrid inverter, please turn to user manual of hybrid inverter for detail description.

6. If need to setup hybrid inverter, please turn to the above order.

7. The hybrid has an installation diagnosis function, please run "DiagnoseFun" after the installation is completed.

6. Status of hybrid inverter

Customer set read news information by push button. Follow are the instruction of button and LED.

Mark

Description

Explanation

Push button

Operation of display screen and set system

Status symbol of SPH

Green light on SPH run normally
Red light on Fault state
Green light blinking Alarm state
Red light blinking Software updating

7. Definition of RJ45 Port Pin

No.

CAN

METER

COM

DRMS

NTC

485-/485-2

485-3

1

/

RS485B

DRY+

DRM1/5

GND

RS485B

RS485B

2

/

GND

/

DRM2/6

GND

/

GND

3

/

/

DRY-

DRM3/7

GND

/

/

4

CANH

/

/

DRM4/8

GND

RS485B

/

5

CANL

RS485A

/

REF

NTC

RS485A

RS485A

6

GND

/

/

COM

/

/

/

7

/

/

/

/

NTC

RS485A

/

8

WAKEUP

/

/

/

/

RS485B

/

8. Service and contact

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