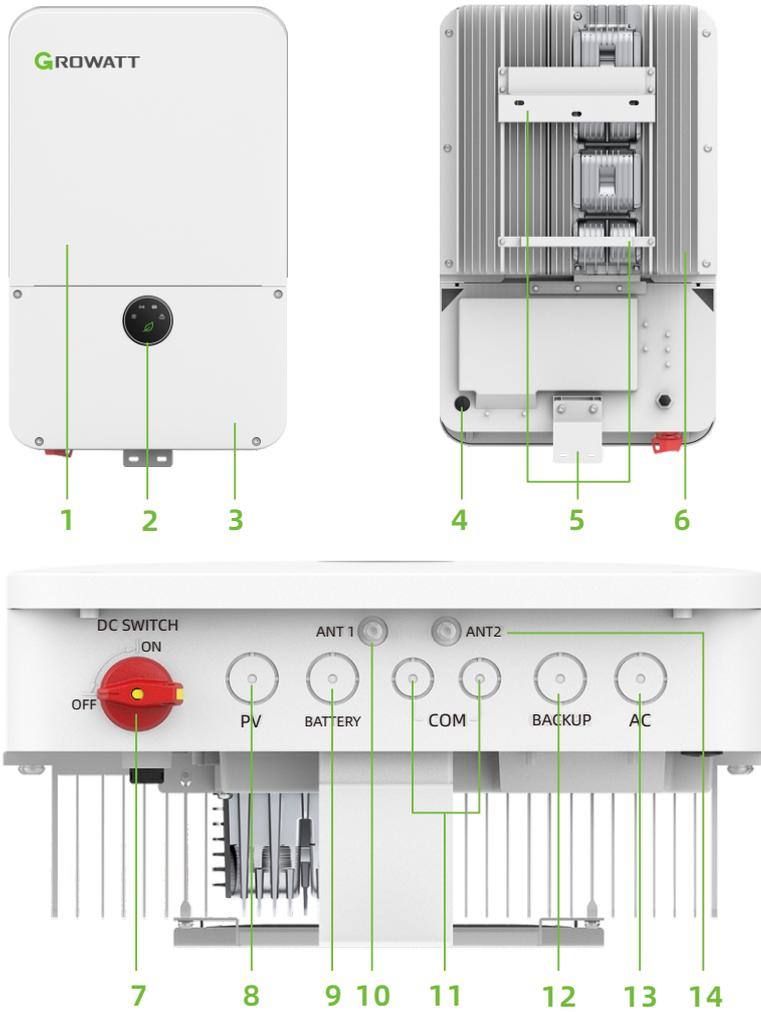


1. General information



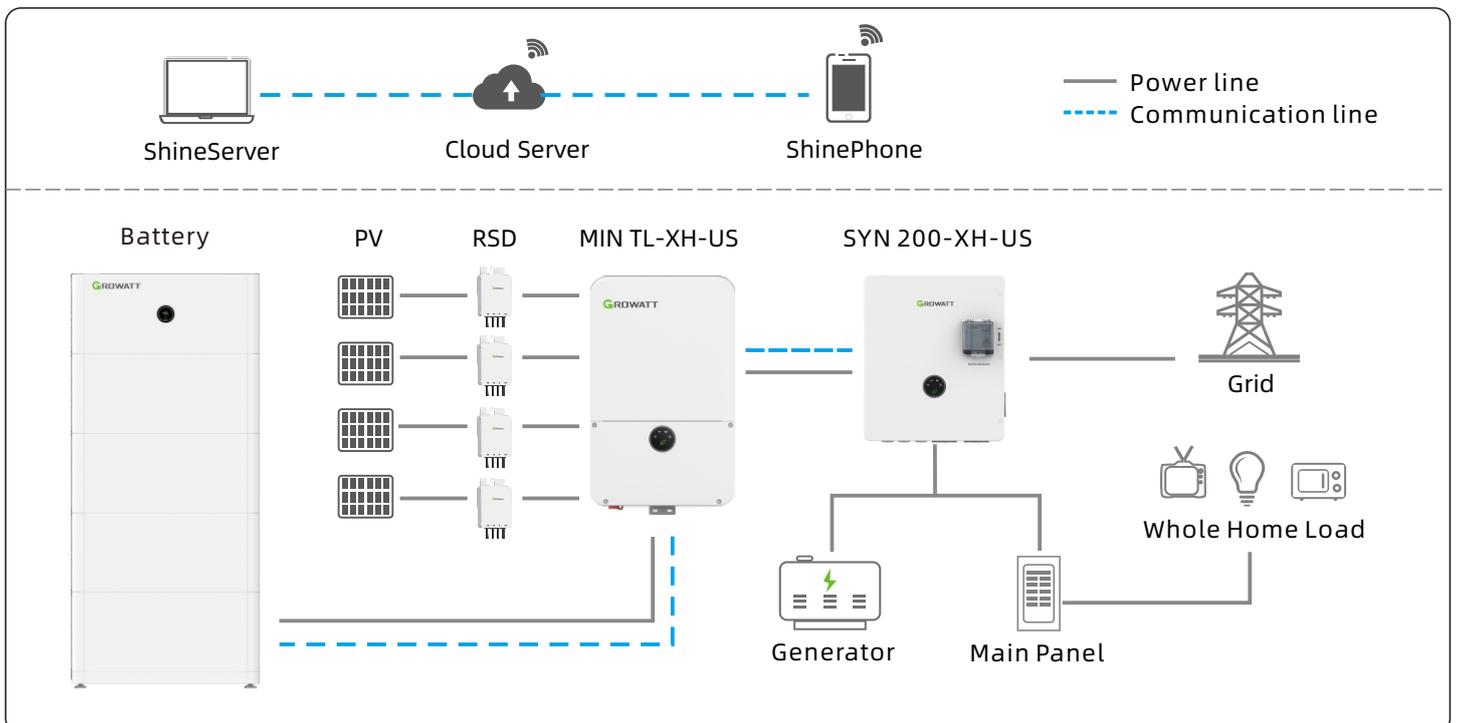
1	Host panel
2	LED indicators
3	Wiring box cover
4	Battery wake-up button or end cap
5	Mounting bracket
6	Heat sink
7	DC switch
8	PV input port
9	Battery input port
10	WIFI Antenna port
11	Communication port
12	Backup output port
13	AC output port
14	4G Antenna port

⚠ Note:

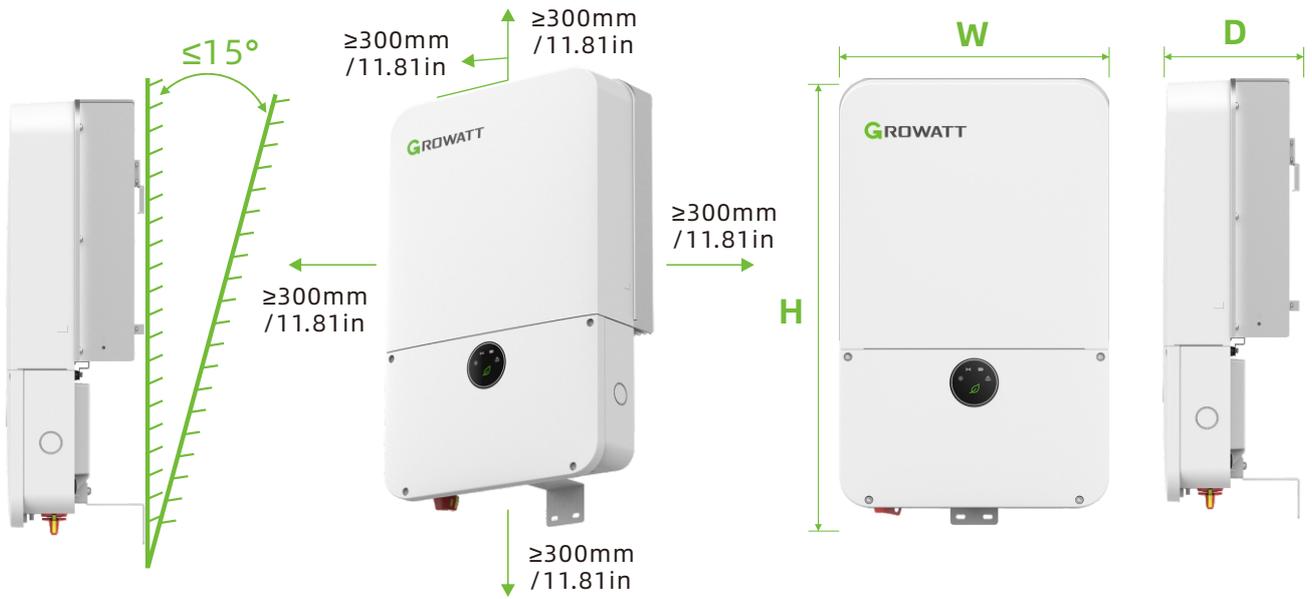
1. Before installing the device, check that the package contents are intact and complete against the packing list. If any damage is found or any component is missing, contact your dealer.
2. This file will be updated from time to time due to product upgrades or other reasons. Unless otherwise agreed, this document is intended as a guide only. All information and suggestions do not constitute an express or implied warranty. The final interpretation of the content is at GROWATT discretion.
3. This document is quick installation guidance only. For details, please refer to the Commissioning Guide and User Manual.
4. Machine damage caused by failure to follow the content is not covered by the warranty.

2. Installation

System Overview



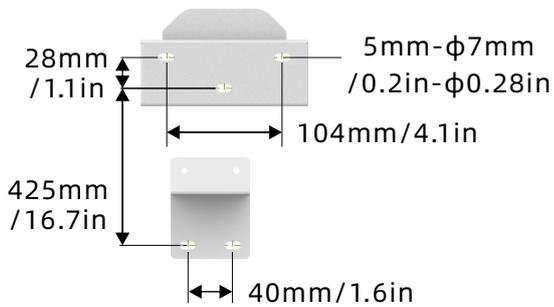
2.1 Installation requirements



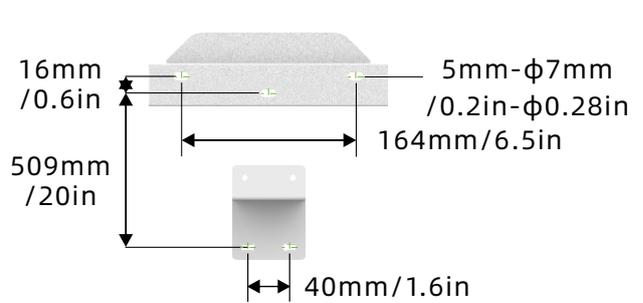
Dimension	W(mm/inch)	H(mm/inch)	D(mm/inch)	weight (lbs/kg)
MIN 3000~7600TL-XH-US	400/15.75"	569/22.41"	177.5/6.98"	39.6lbs/18kg
MIN 8200~11400TL-XH-US	400/15.75"	649/25.55"	187/7.36"	45.2lbs/20.5kg

2.2 Wall mounting

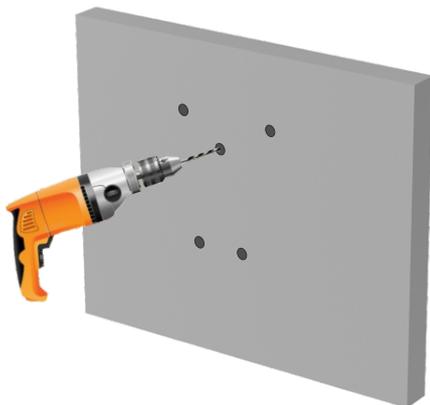
for MIN 3000-7600TL-XH-US



for MIN 8200-11400TL-XH-US

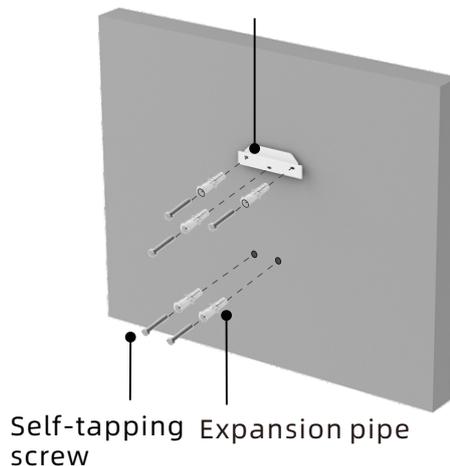


1



2

Wall bracket



3

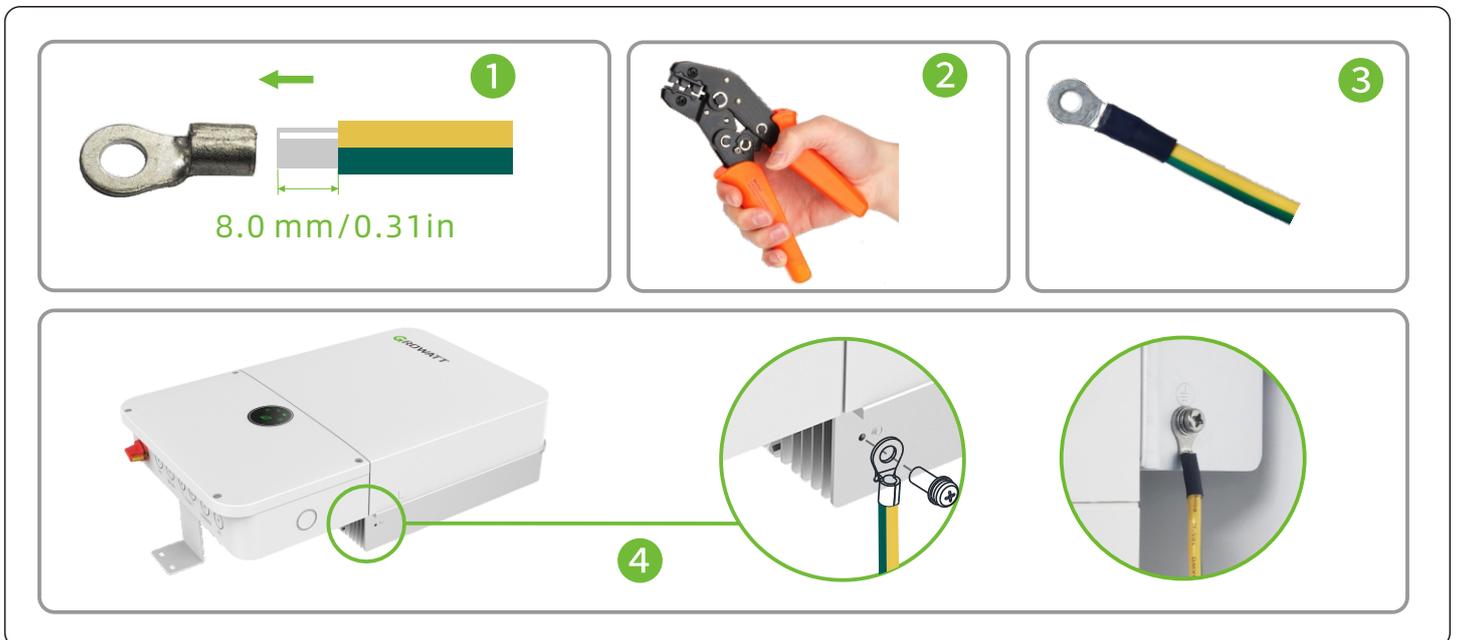


3. Electrical connection

Please prepare the following cables before cable connection.

No.	Cable name	Type	Recommended specification	⚠ Note: Please make sure all switches are OFF before wiring. For personal safety, please do not operate with electricity.
1	Grounding wire	One standard yellow-green cable	AWG10≤Wire diameters≤AWG8	
2	AC output wire	Two or three standard copper cables in different colors	AWG8≤Wire diameters≤AWG6	
3	PV input wire	PV cable (eg. PV1-F)	AWG10≤Wire diameters≤AWG8	
4	Battery input wire	Red and black standard copper cables	AWG10≤Wire diameters≤AWG8	
5	Other communication	Cat5e (recommended)	/	

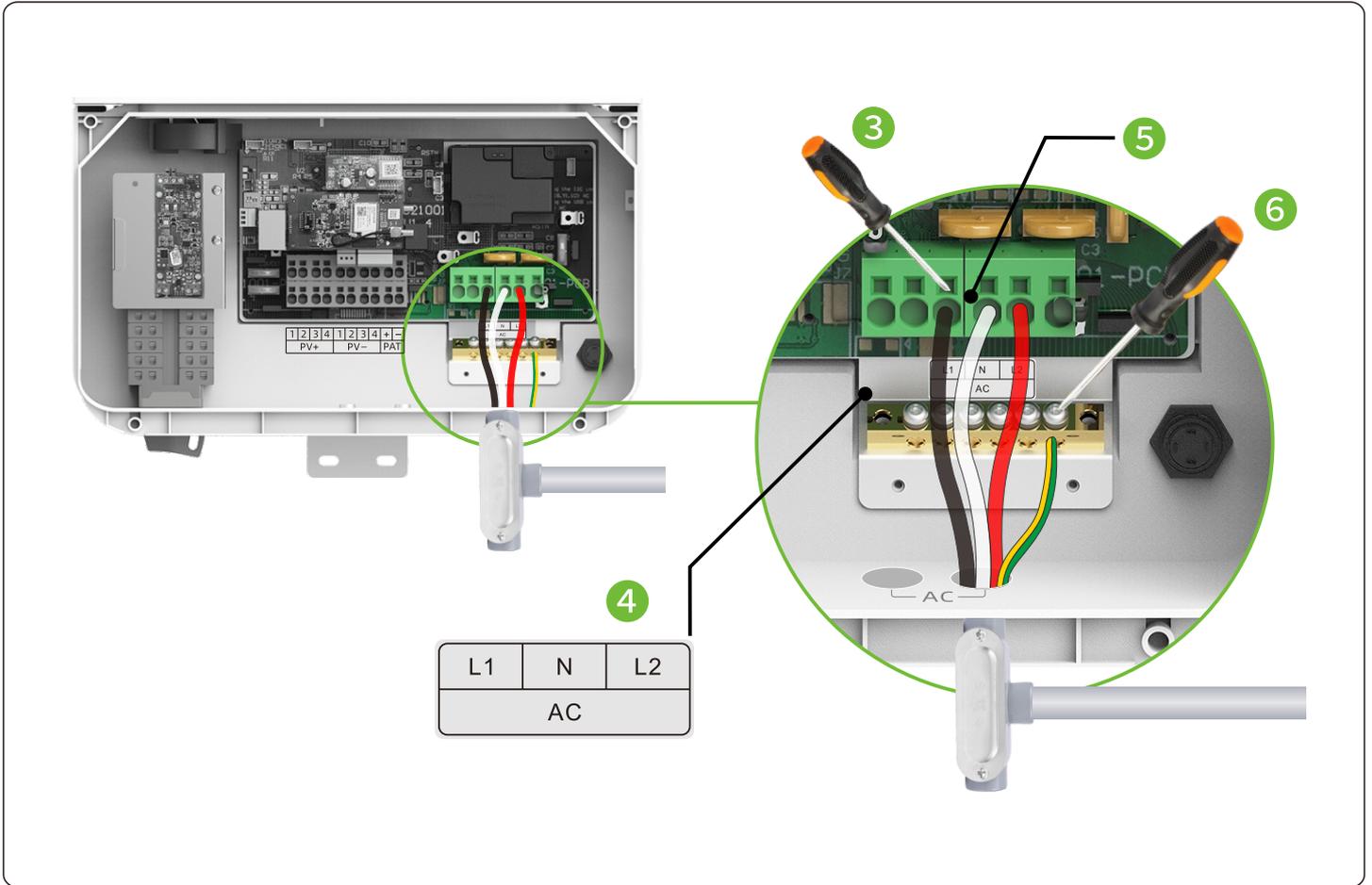
3.1 Grounding



3.2 AC output connection



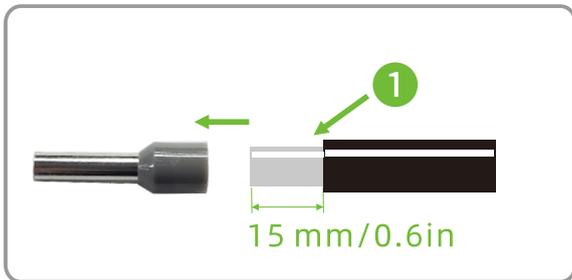
- Strip 0.7 ± 0.08 inches (18 ± 2mm) of the AC cable insulation.
- Insert the AC conduit into the AC-side drill guide that was opened.
- Insert the 0.8*4.0 mm standard flat-blade screwdriver, press the release mechanism and open the clamp.
- Connect the cables to the appropriate terminal blocks according to the labels on the terminal blocks (L1, N, L2, of AC Grid).
- Insert the cable into the round opening and remove the screwdriver, then the cable will be automatically clamped.
- Connect the PE cable to the Grounding terminal.

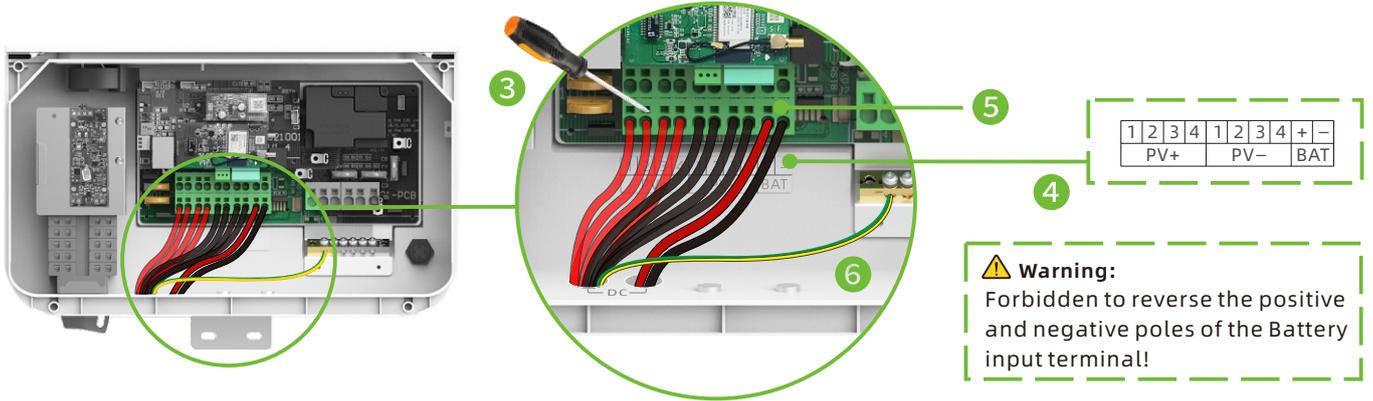


3.3 DC connection

3.3.1 PV and Battery input terminal installation

1. Strip 0.59 inches (15mm) of the PV and Battery power cable insulation.
2. Insert the conduit into the DC-side drill guide that was opened.

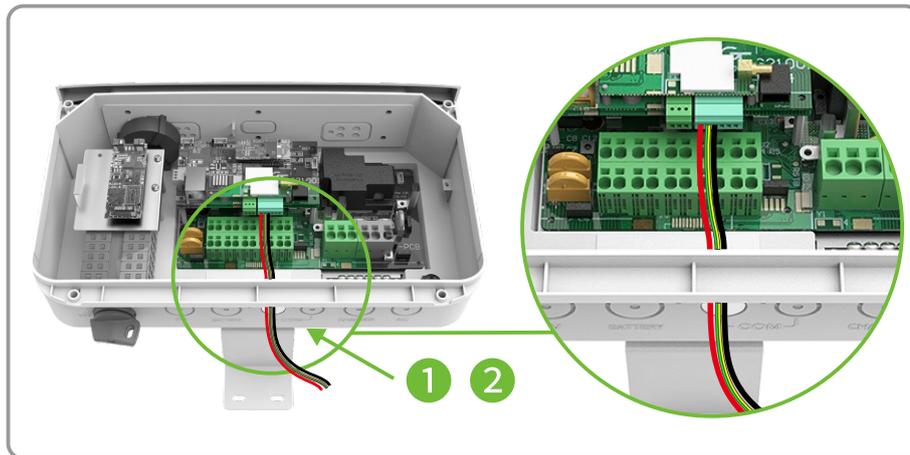




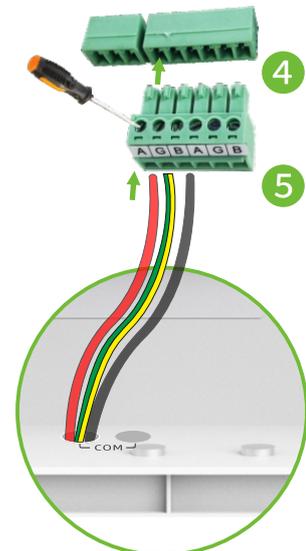
Warning:
Forbidden to reverse the positive and negative poles of the Battery input terminal!

3. Insert the 0.6*3.5 mm standard flat-blade screwdriver, press the release mechanism and open the clamp.
4. Connect the cables to the appropriate terminal blocks according to the labels on the terminal blocks (PV+1/2/3/4, PV-1/2/3/4, BAT+, BAT-).
5. Insert the cable into the round opening and remove the screwdriver, then the cable will be automatically clamped.
6. Connect the PE cable to the Grounding terminal.

3.4 RS485 external communication cable installation (The communication cable can be connected to the master computer, but not commonly used by users)

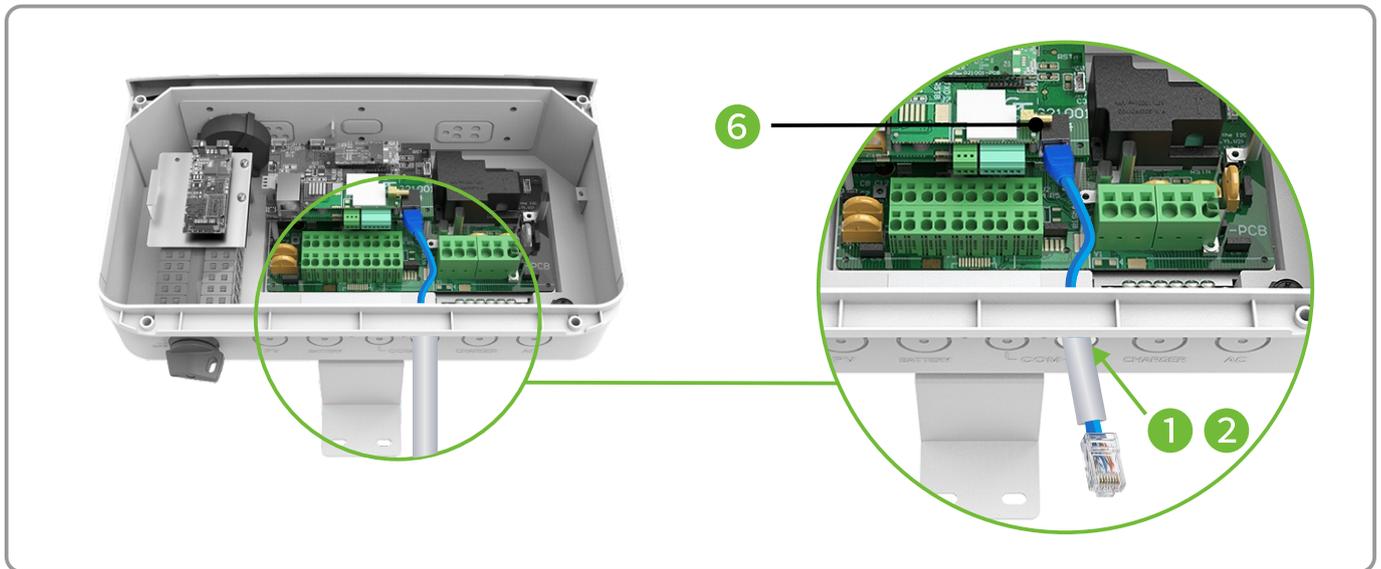
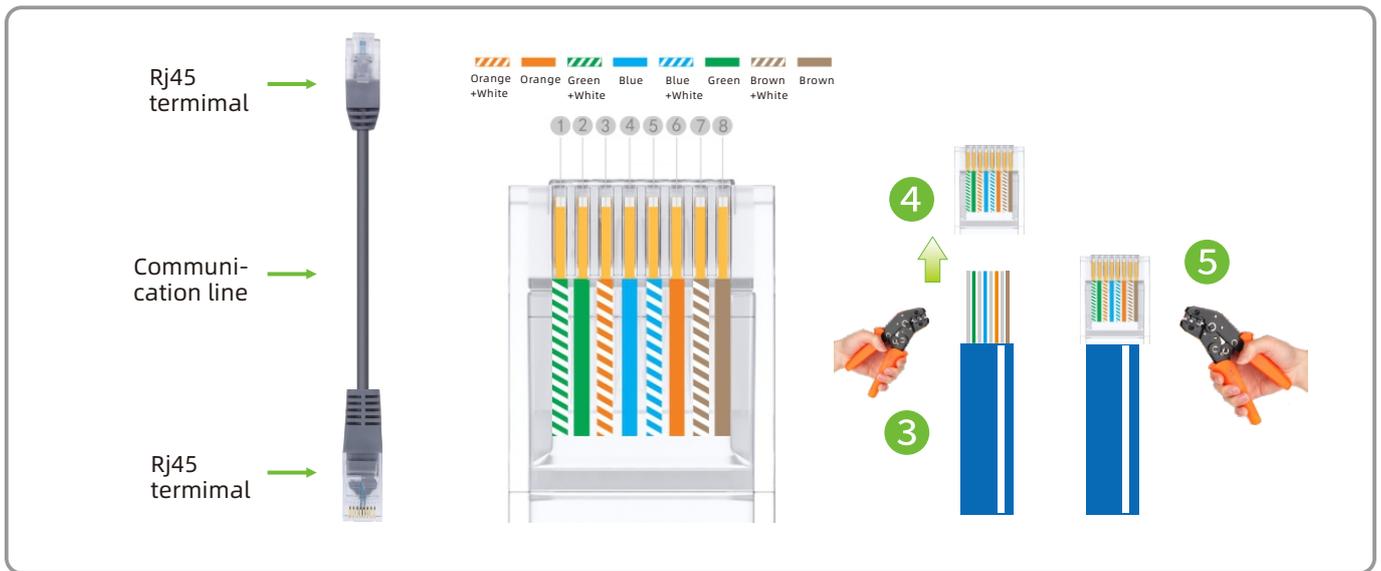


Note:
Both the left and right groups of terminal blocks (RS485A, GND, RS485B) can be used for connection.



1. Use the four-core or six-core twisted pair cable and strip 0.31 inches (8 mm) of the cable insulation.
2. Loosen the screws from the 6-pole RS485 terminal block.
3. Connect the cables to the appropriate terminal blocks according to the labels (RS485A, RS485B and GND) as the figure shows, or reserve the GND port.
4. Insert the conduit into the left side COM drill guide that was opened.
5. Connect the cable through the conduit to the inverter wiring box

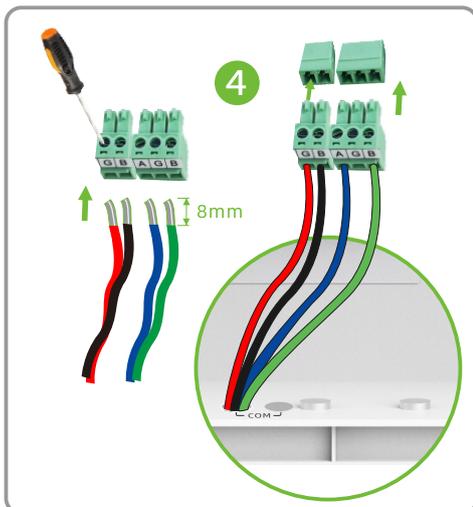
3.5 Battery communication cable installation



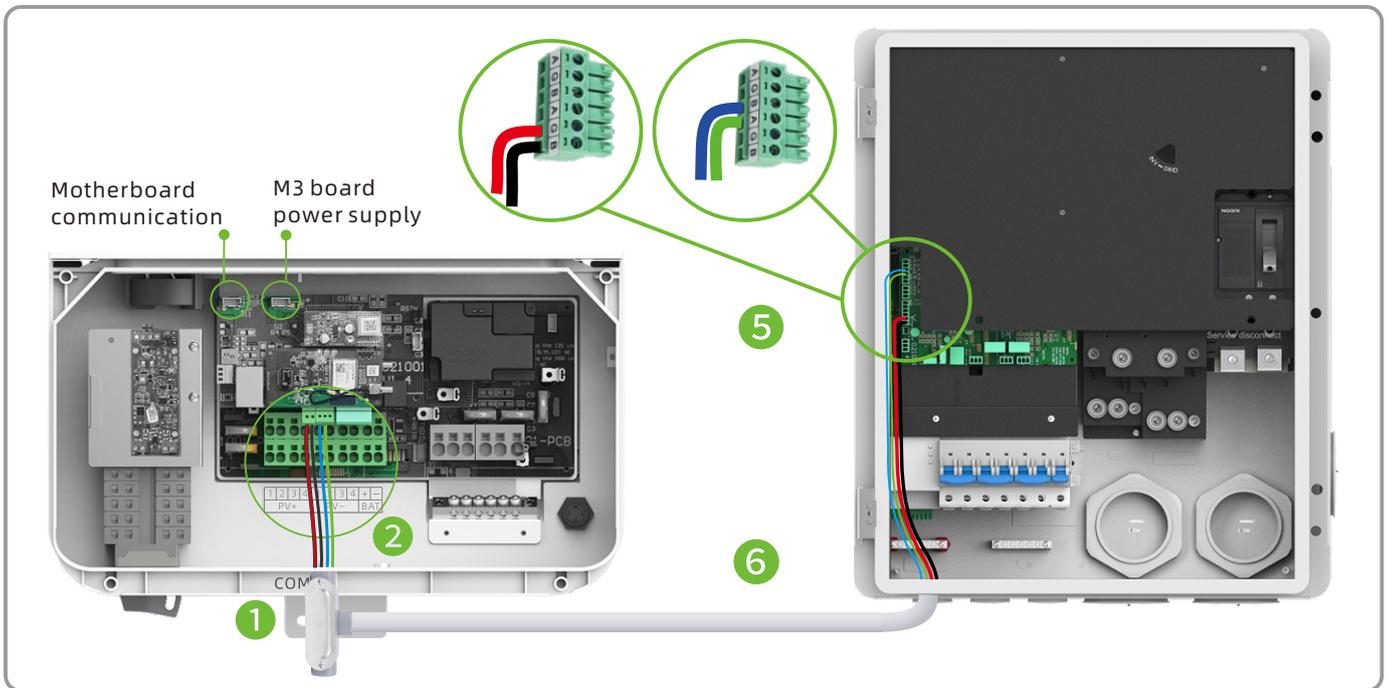
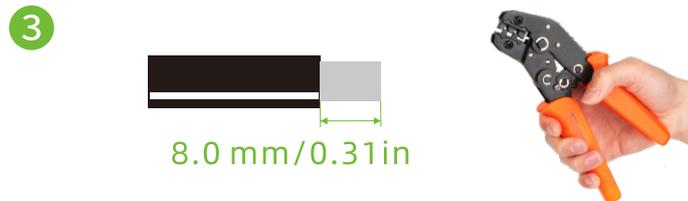
1. Insert the conduit into the right side COM drill guide that was opened.
2. Insert the CAT 5/6 cable through the conduit to the inverter wiring box.
3. Remove the cable's external insulation using a crimping tool or cable cutter and expose eight wires.
4. Insert the eight wires into an RJ45 connector .
5. Use a crimping tool to crimp the connector.
6. Connect the signal cable from the battery to the RJ45 port on the communication board.

Rj45 PIN#	Wire Color		Signal definition	Function
	T568B	T568A		
1	White/Orange	White/Green	Enable-	Battery wake-up signal
2	Orange	Green	Enable+	
3	White/Green	White/Orange	NC	Reserved
4	Blue	Blue	NC	
5	White/Blue	White/Blue	GND	GND
6	Green	Orange	Received-	NC
7	White/Brown	White/Brown	RS485B	Battery RS485 communication
8	Brown	Brown	RS485A	

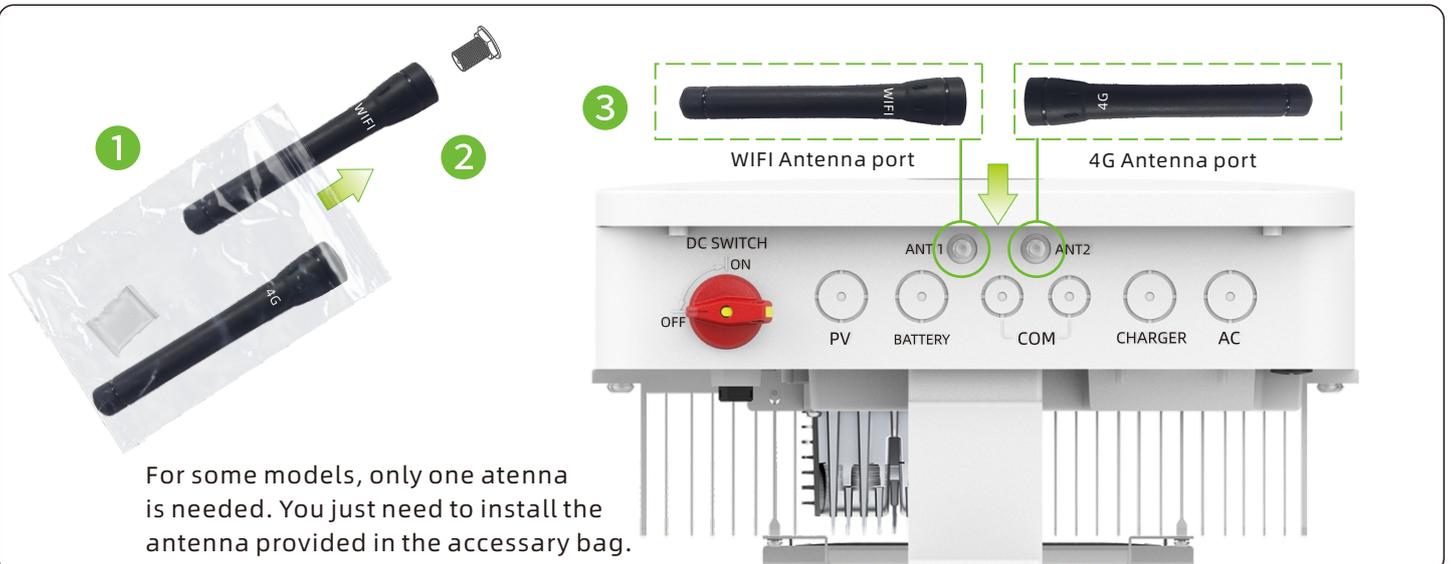
3.6 Cable installation between MIN TL-XH-US inverter and SYN 200-XH-US



1. Insert the conduit into the left side COM drill guide that was opened .
2. Insert the cable through the conduit to the inverter wiring box .
3. Remove the cable's external insulation using a crimping tool or cable cutter .
4. Insert the cable into MIN TL-XH-US inverter RS485 connector(3 pin) and power connector(2 pin) , as shown on the left.
5. Insert the cable into SYN 200-XH-US RS485 connector(6 pin) and power connector (6 pin) , as shown below.
6. Connect the cable from MIN TL-XH-US inverter to SYN 200-XH-US.



3.7 Installing the Antenna



For some models, only one antenna is needed. You just need to install the antenna provided in the accessory bag.

4. Check before power-on

No.	Check Item	Acceptance Criteria	No.	Check Item	Acceptance Criteria
1	Inverter installation	The inverter is installed correctly, securely and reliably.	6	Cable connections	The AC output power cable, DC input power cable, battery cable, and signal cable are connected correctly, securely, and reliably.
2	Cable layout	Cables are routed properly as required by the customer.	7	Unused terminals and ports	Unused terminals and ports are fitted with waterproofing bolts or watertight caps or drill guide unopened.
3	Cable tie	Cable ties are secured evenly, with no sharp protrusions.	8	Cable routing pipe sealing	All cable routing pipes at the bottom of the enclosure are sealed.
4	Grounding	The ground cable is connected correctly, securely and reliably	9	Cleanliness in the maintenance compartment	The maintenance compartment interior is clean and tidy.
5	Switches	The DC switch and all the switches connecting to the MIN TL-XH-US are in the OFF position.	10	Installation environment	An appropriate installation space has been chosen, and the installation environment is clean and tidy.

5. Power on/off the inverter

Power on the system:

1. Make sure the PV/AC voltage is within the permissible range before powering on the equipment.
- 2.(Optional) Turn on the battery switch and the circuit breaker between the battery and the inverter (if any).
3. Turn on the DC Switch according to the inverter instruction label.
- 4.(Optional) Turn on all circuit breakers in SYN.
5. Connect to the grid. Turn on the circuit breaker on the PV side (if any).
6. Check the operating status of the inverter by observing the indicator, and set parameters using the APP with reference to Commissioning Guide.

Power off the system:

1. Set the inverter to "Power off" with the APP.
 2. Disconnect from the grid.
 3. Turn off the DC Switch.
 4. Turn off the battery.
- Note:** Make sure that the inverter has been set to "Power off" before disconnecting from the AC, PV and BAT power sources. Wait at least 5 minutes after the system is powered off, and take protective measures during operation.

6. Status of the inverter

MIN TL-XH-US inverters come with four LED indicators. From the front cover left to right, it shows the indicator of Power,Comm , Battery status,and Error.

Fuction	Color	Status	Action	Description	Fuction	Color	Status	Action	Description
POWER	Green	ON	Steady	Feed in grid	COMM	Green	ON	Steady	4G/WiFi, local WiFi ok
	Green	Blink	3s on/1s off	DC ON/AC OFF		Green	Blink	0.5s on/0.5s off	Local WiFi connecting
	Green	Blink	1s on/3s off	DC OFF/AC ON		Green	Blink	1s on/1s off	WiFi/4G fail, Local WiFi ok
	Green	Blink	0.5s on/0.5s off	Checking		Green	Blink	1s on/3s off	Local WiFi fail, 4G/WiFi ok
	Green	Blink	2s on/2s off	Standby mode		Blank	ON	Steady	Comm.Fail
BAT	Green	ON	Steady	BAT is in normal operation	FAULT	Red	ON	Steady	Arc Fault (with the buzzer on)
	Green	Blink	1s on/3s off	BAT is in low SOC		Red	Blink	1s on/1s off	Warning
	Green	Blink	0.5s on/0.5s off	BAT is in fault mode		Red	ON	Steady	Fault

⚠ Note: For more detailed instructions, please refer to the User Manual and the Commissioning Guide.

7. Service and contact

Growatt USA, Inc.
9227 Reseda Blvd, #435 Northridge, CA 91324, USA.

T +1-866-686-0298
E usaservice@growatt.com
W us.growatt.com



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