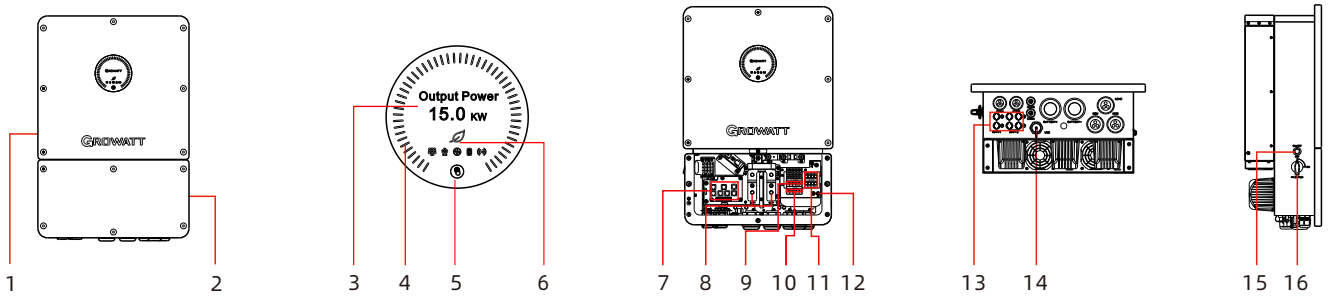
GROWATT

WIT 4-15K-HU Quick Guide

1. Overview



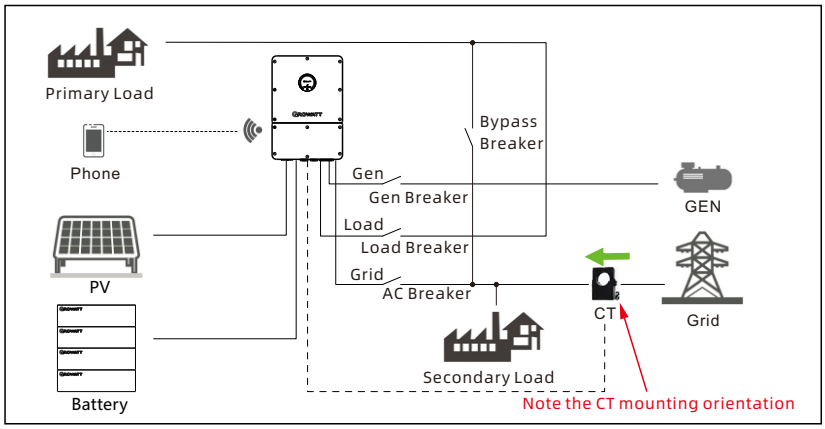
(1)Top cover plate	(2) Bottom cover plate	(3)OLED Display screen	(4)Battery status indicator
(5) Push button	(6)System indicator	(7)Communication terminal	(8)Battery wiring terminal
(9)Load wiring terminal	(10)Generator wiring terminal	(11)Grid wiring terminal	(12)PE wiring terminal
(13)PV wiring terminal	(14)USB port	(15) Battery button	(16)PV switch

⚠Note:

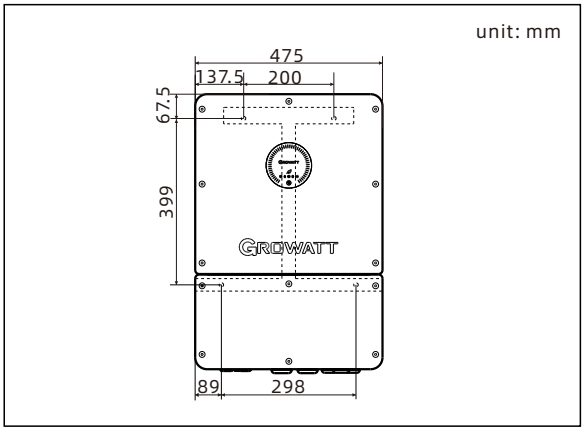
1. The content of this document is continually reviewed and amended, where necessary. Growatt reserves the right to make changes to the material at any time and without notice. Unless otherwise agreed, this document is for quick installation guidance only. All information and suggestions in this document do not constitute a warranty of any kind, express or implied. Growatt reserves all rights for final explanation.
2. This document is for quick installation guidance only. For details, please refer to the User Manual.
3. Machine damage caused by failure to follow the instructions is not covered under any warranty.

2. Installation

System overview

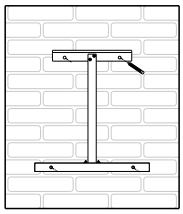


2.1 Installation requirements

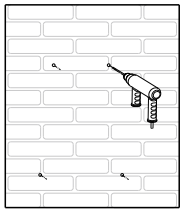


2.2 Wall-mounted installation

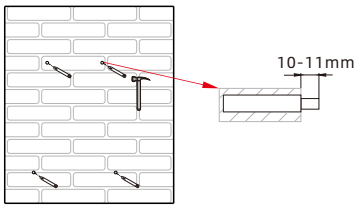
1.Mark the hole positions



2.Drill: Depth 70mm
Diameter ϕ10mm



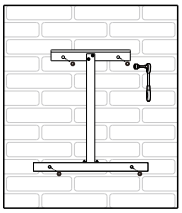
3.Install the expansion screws



⚠Note:

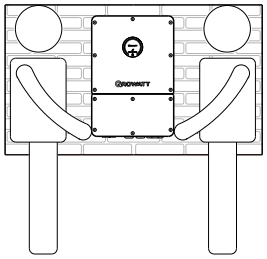
1. When determining the installation position of the inverter, please consider the position of the batteries and the distribution panel.
2. When drilling holes, avoid the water pipes and power cables buried in the wall.

4.Install the wall mount

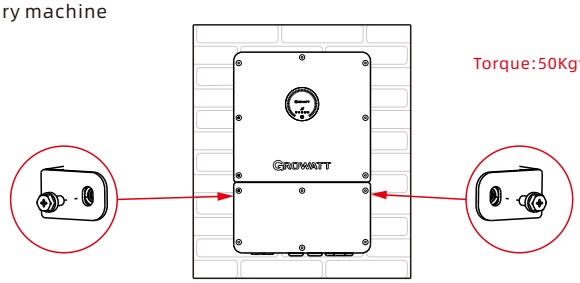


Torque:396Kgf.cm

5.Install the machine



6.Stationary machine



3. Connecting cables

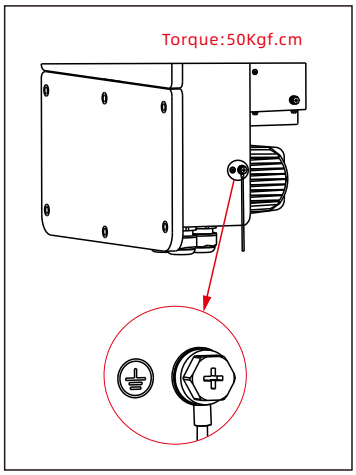
Please prepare the cables listed below before electrical connections.

No.	Cable	Type	Recommended specifications
1	PE cable	Multi-core copper cable (yellow-green)	6mm²
2	Grid/Generator/Load cable	Multi-core copper cable	10mm²
3	PV input cable	PV cable	4mm²-6mm²
4	Battery input cable	Multi-core copper cable (orange and black)	50mm²/120mm²
5	COM1/COM2 communication cable	Standard network cable-568B	/
6	COM3 communication cable	Multi-core copper cable	22AWG
7	COM4 communication cable	Multi-core copper cable	22AWG

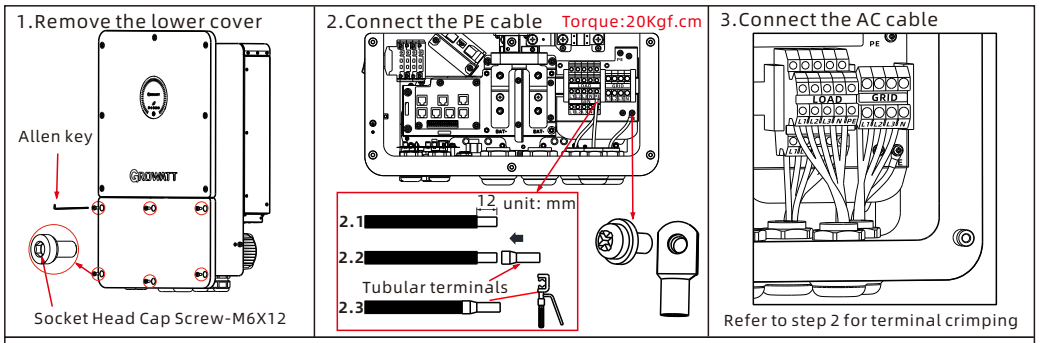
⚠Note:

1. Make sure all switches are OFF before connecting the cables. For personal safety, do not operate when power-on.
2. If the diameter of the cable does not match the terminal,or the cable is aluminum wire, please contact our after-sales personnel.

3.1 Grounding



3.2 Connection of AC side

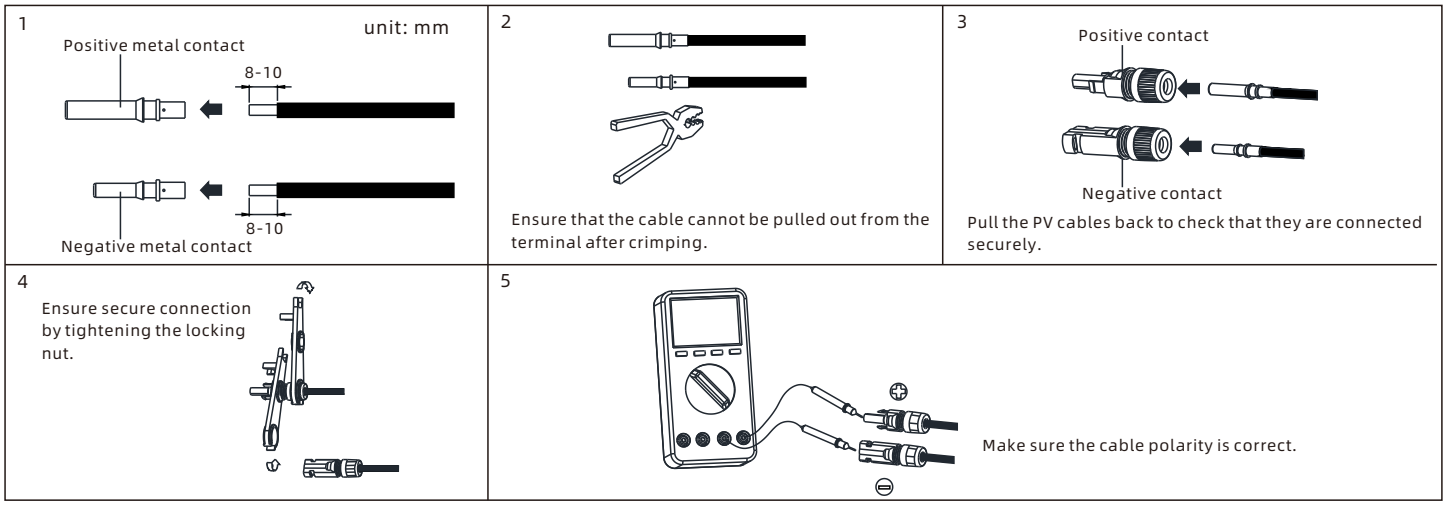


⚠Note:

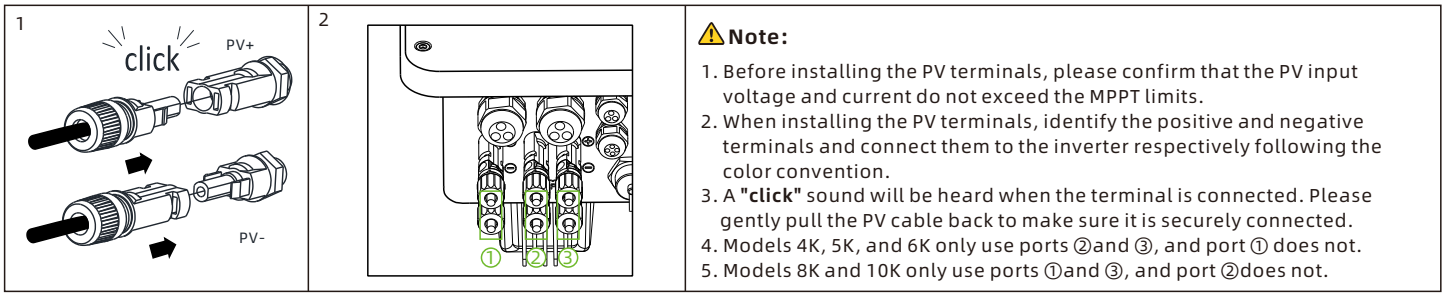
1. After connecting the cables, tighten the PG cable glands to ensure reliable protection
2. Do not install the bottom cover plate at this step; it should be installed after all internal cables are connected.

3.3 Connection on the PV side

3.3.1 Assembling the PV connector



3.3.2 Connecting the PV cables



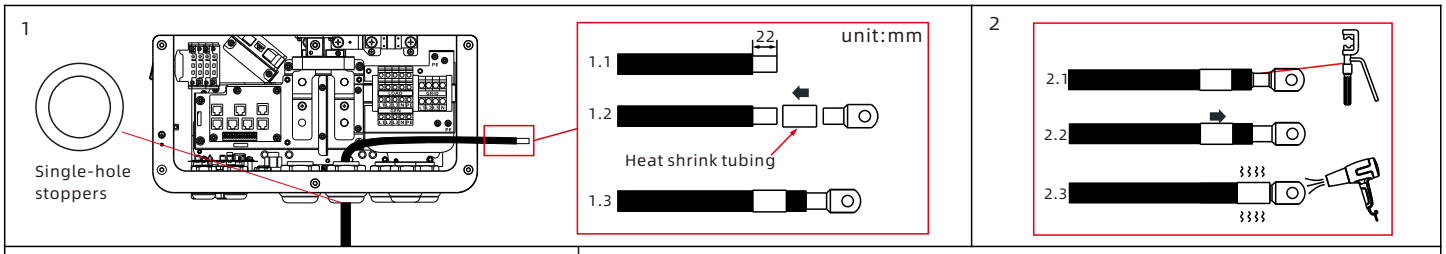
⚠Note:

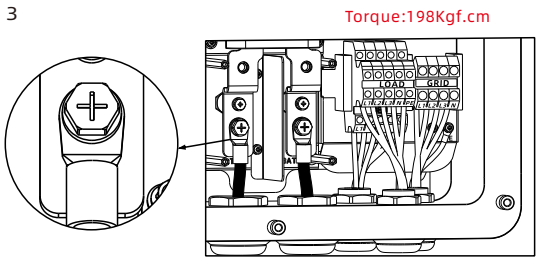
1. Before installing the PV terminals, please confirm that the PV input voltage and current do not exceed the MPPT limits.
2. When installing the PV terminals, identify the positive and negative terminals and connect them to the inverter respectively following the color convention.
3. A **"click"** sound will be heard when the terminal is connected. Please gently pull the PV cable back to make sure it is securely connected.
4. Models 4K, 5K, and 6K only use ports ②and ③, and port ① does not.
5. Models 8K and 10K only use ports ①and ③, and port ②does not.

3.4 Connection on the battery side

Select 3.4.1 or 3.4.2 based on requirements

3.4.1 Single-cluster battery wiring

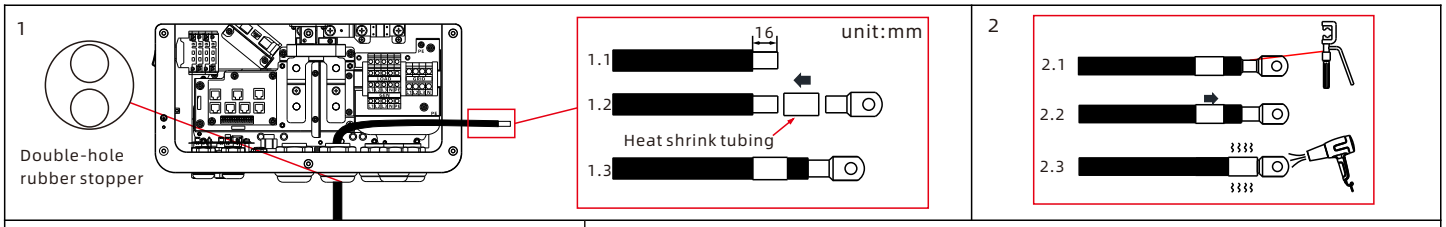


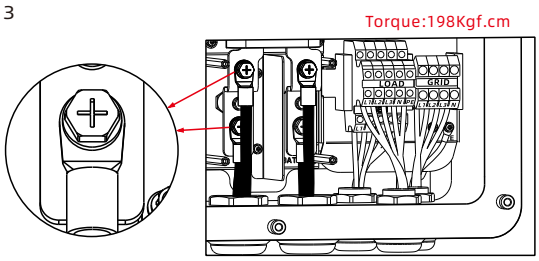


⚠Note:

1. Before installing the battery terminals, please ensure that the battery input voltage and current are within the acceptable range.
2. When installing battery terminals, ensure the correct polarity.
3. When securing the OT terminal, ensure that the fixing screws are tightened. Please gently pull back the battery cable to ensure a secure connection.

3.4.2 Dual-cluster battery wiring



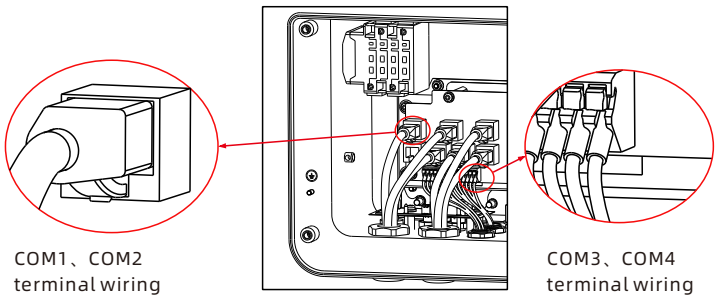


⚠Note:

1. Before installing the battery terminals, please ensure that the battery input voltage and current are within the acceptable range.
2. When installing battery terminals, ensure the correct polarity.
3. When securing the OT terminal, ensure that the fixing screws are tightened. Please gently pull back the battery cable to ensure a secure connection.
4. The rubber plug needs to be replaced with a double-hole rubber plug of 2-ϕ14 for the wiring of the double group battery.

3.5 Installing the communication cable

Please refer to the user manual for details on PIN and meter wiring

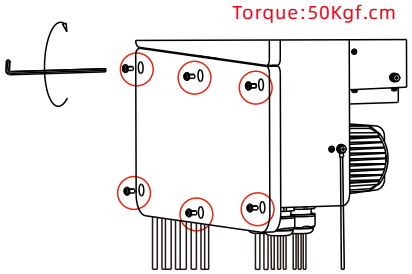


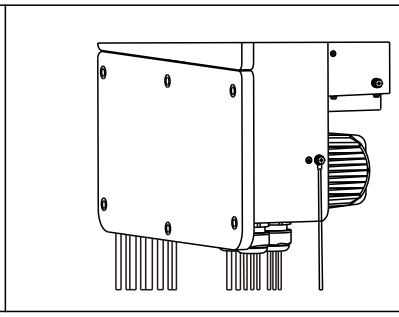
Pin	COM3
1	REPO.WIT
2	GND.S
3	DG_START+
4	DG_START-
5	NTC.BAT1 OUT
6	NTC.BAT1 OUT.G

Pin	COM4	Pin	COM4
7	\	11	CT_L2+(White)
8	\	12	CT_L2-(Black)
9	CT_L1+(White)	13	CT_L3+(White)
10	CT_L1-(Black)	14	CT_L3-(Black)

Communication port description							
Pin	BMS1	RS485_IN	RS485_OUT	METER	DI	PARA-IN	PARA-OUT
1	BAT RS485_B	RS485_1B	RS485_1B	Rs485_ 2B	DRM1/5	\	\
2	BAT RS485_A	GND.S	GND.S	GND.S	DRM2/6	\	\
3	BAT1 DI_1	\	\	\	DRM3/7	\	\
4	BAT1 CAN_H	RS485_ 1B	Rs485_ 1B	\	DRM4/8	\	\
5	BAT1 CAN_L	Rs485_ 1A	RS485_ 1A	RS485_2A	REF	\	\
6	BAT1 DI_2	\	\	\	COM	\	\
7	BAT1 WAKE-	RS485_ 3B	RS485_ 3B	\	\	\	\
8	BAT1 WAKE+	RS485_ 3A	Rs485_ 3A	\	\	\	\

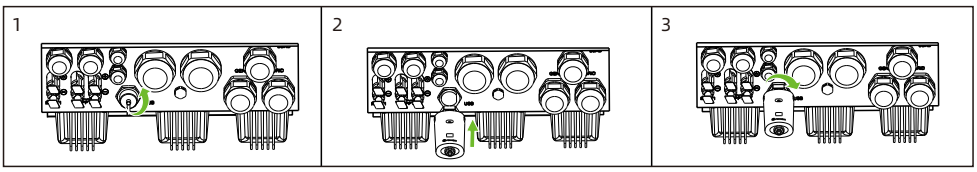
3.6 Fixed lower cover plate





⚠Note:
Upon completion of all cable connections, install the bottom cover plate as shown, and make sure the protection is reliable.

3.7 Installing the datalogger



Follow the installation steps:
1. Remove the waterproof cover from theUSB port.
2. Plug in the datalogger.
3. Secure the datalogger.

4. Post-installation check

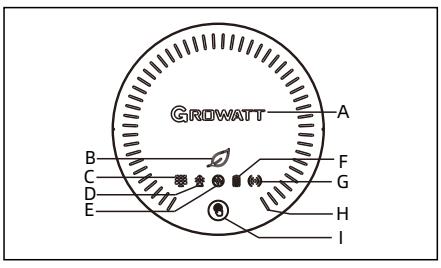
Number	Checking item	Number	Checking item
1	The hybrid inverter is installed correctly and reliably.	2	Ground cables are connected securely.
3	All switches are in the OFF position.	4	All cables are connected correctly and securely.
5	The lower cover is secured.	6	All the unused connectors are sealed.
7	Put away the unused accessories.	8	The installation position is clean and tidy.

5. Powering on/off the inverter

⚠Note:
Before turning the inverter on, please make sure the PV input voltage and current are within the MPPT limits .
Perform the following steps to power on the system:
1. Connect the PV cable , then turn on the PV switch.
2. Turn on the breaker between the grid and the inverter.
3. Turn on the breaker between the battery and the inverter, then turn on the switch of the battery. Wait for 30 seconds, and turn on the battery switch of the inverter.
4. The system will be powered on automatically when all the requirements are met.

To shut down the system, you need to send a shutdown command on the APP or website. Wait until the system is completely powered off, then turn off the switches in reverse order.

6. Description of the display panel



Indicator	Function	Indicator	Function
A	OLED display screen	F	Battery connection indicator
B	System indicator	G	Communication/GEN indicator
C	PV indicator	H	Battery status indicator
D	On-grid indicator	I	Push button
E	Off-grid indicator		

7. Service and contact

Shenzhen Growatt New Energy Co., Ltd.
4-13/F, Building A, Sino-German (Europe) Industrial Park,
Hangcheng Blvd, Bao'an District, Shenzhen, China
E service@growatt.com
W en.growatt.com

For local customer support, please visit https://en.growatt.com/support/contact

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