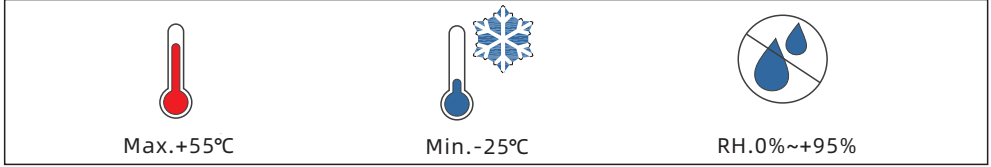


RISE 261H-XH Quick Guide

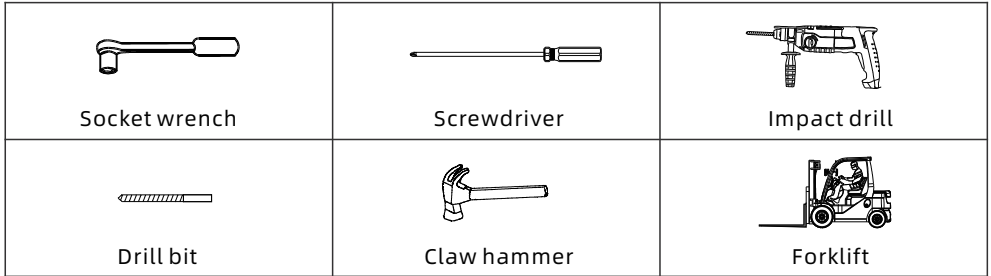


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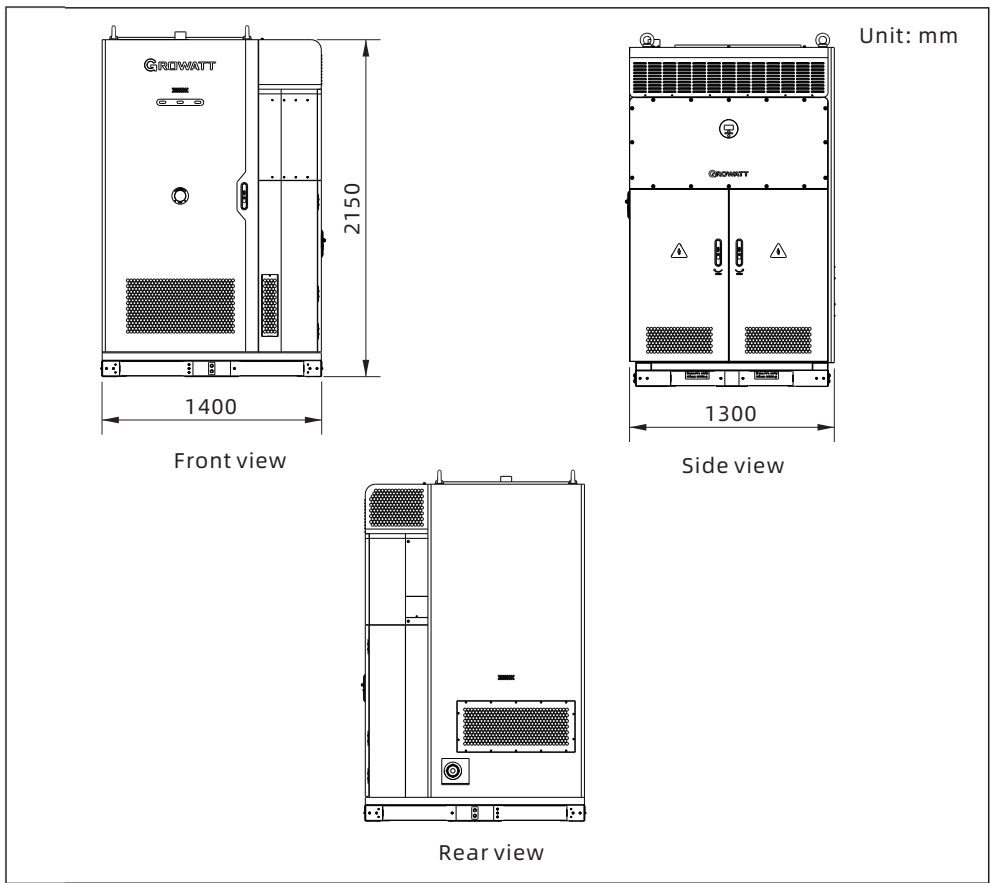
Installation Environment



Installation Tools



Appearance & Dimensions



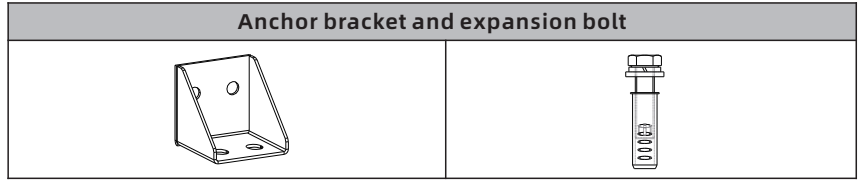
1. Inspection upon Delivery

1-1 Check the Scope of Delivery

No.	Description	Qty	No.	Description	Qty
A	The RISE 261H-XH	1	F	Certificate of Conformity	1
B	Expansion bolt	8	G	Fire sealing mud	1
C	Anchor bracket	4	H	Desiccant	1
D	Quick guide	1	I	Base baffle	4
E	User manual	1			

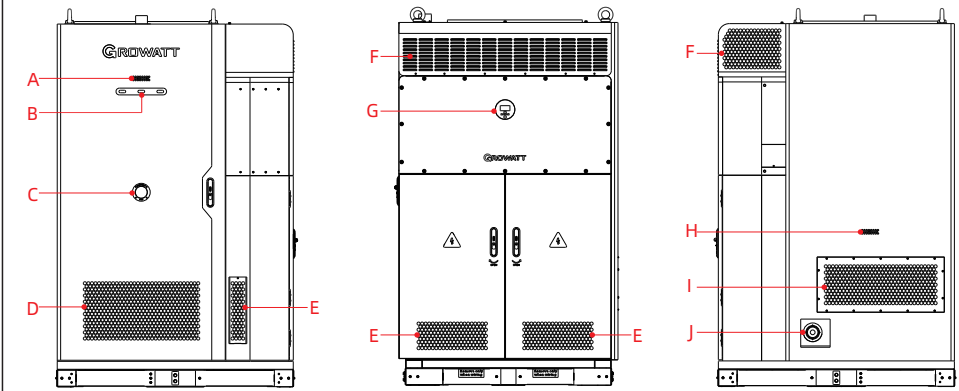
1-2 Check the Accessories

List of the installation kit



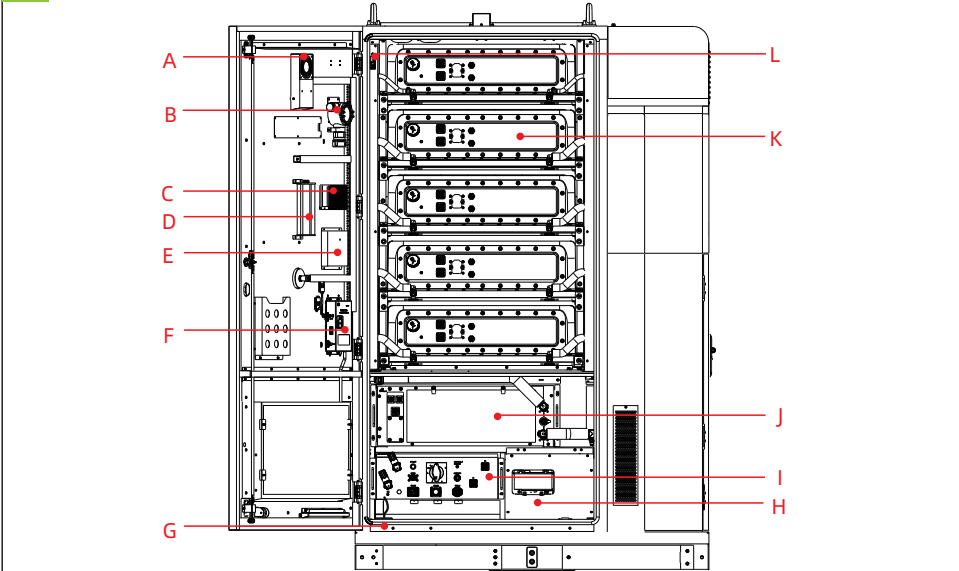
2. RISE Integrated Cabinet Introduction

2-1 Panel Description



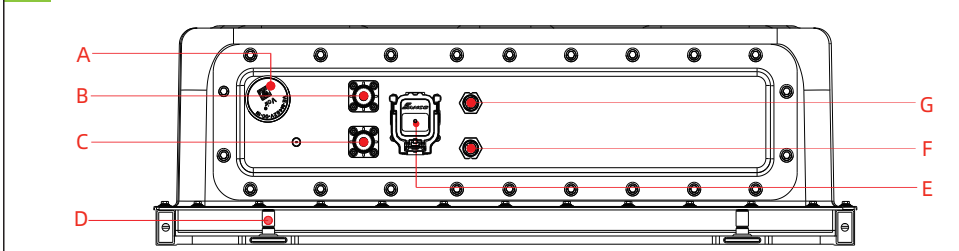
No.	Description	No.	Description
A	Hydrogen exhaust outlet	F	Hybrid inverter air outlet
B	Battery cabinet operation indicator	G	Hybrid inverter display
C	EPO switch	H	Hydrogen exhaust inlet
D	Liquid cooling unit air inlet	I	Liquid cooling unit air outlet
E	Hybrid inverter air inlet	J	Fire water connection

2-2 Introduction to Internal Components



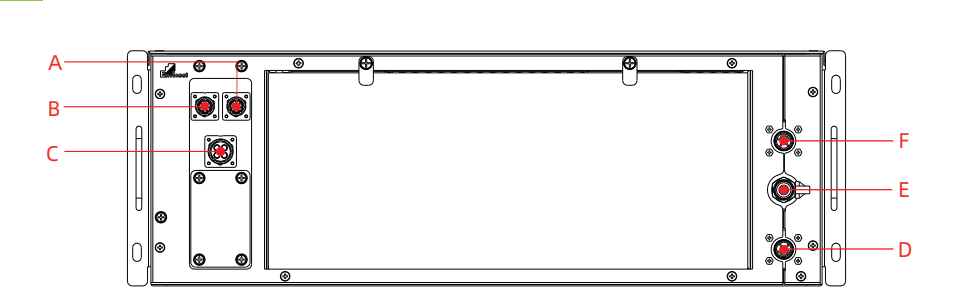
No.	Description	No.	Description
A	Hydrogen exhaust fan	G	Water immersion sensor
B	Combustible gas detection sensor	H	Battery power distribution compartment
C	24V DC Source	I	High-voltage box
D	Aerosol	J	Liquid cooling unit
E	EM board	K	Battery pack
F	Dehumidifier	L	Access control switch

2-3 Introduction to Battery PACK



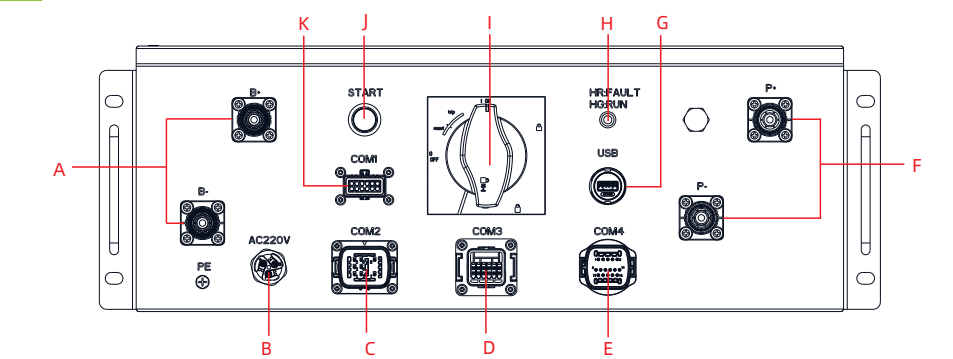
No.	Description	No.	Description
A	Explosion-proof valve	E	MSD safety switch
B	Negative output terminal	F	Communication output port
C	Positive output terminal	G	Communication input port
D	Coolant inlet/outlet		

2-4 Introduction to Battery Liquid Cooling Unit



No.	Description	No.	Description
A	Communication terminal	D	Coolant outlet
B	Handheld device debugging terminal	E	Coolant injection port
C	Power terminal	F	Coolant inlet

2-5 Introduction to Battery High Voltage Box Panel

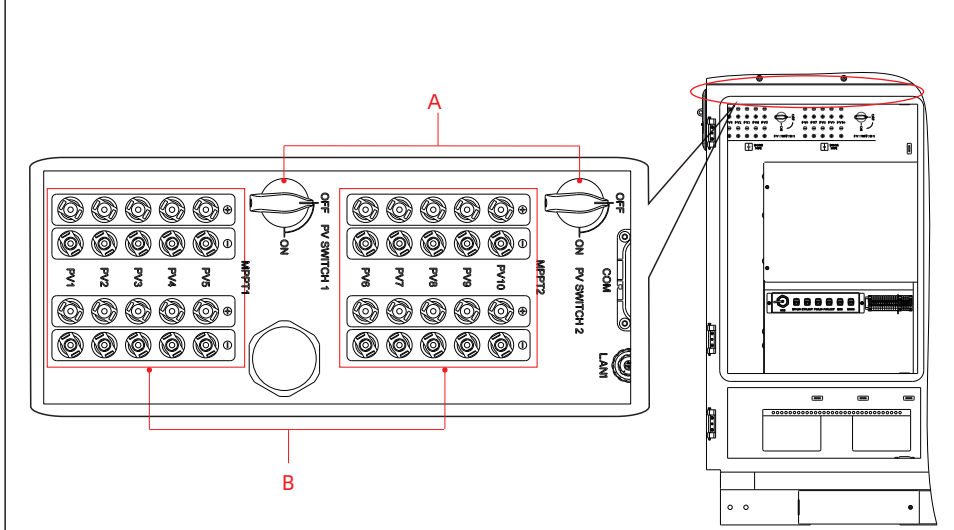


No.	Description	No.	Description
A	Battery input terminal	G	USB
B	Battery 220VAC	H	Battery running indicator
C	COM2 communication terminal	I	Battery input circuit breaker(QF1)
D	COM3 communication terminal	J	Battery button
E	COM4 communication terminal	K	COM1 communication terminal
F	Battery output terminal		

2-6 Internal Distribution Box Description

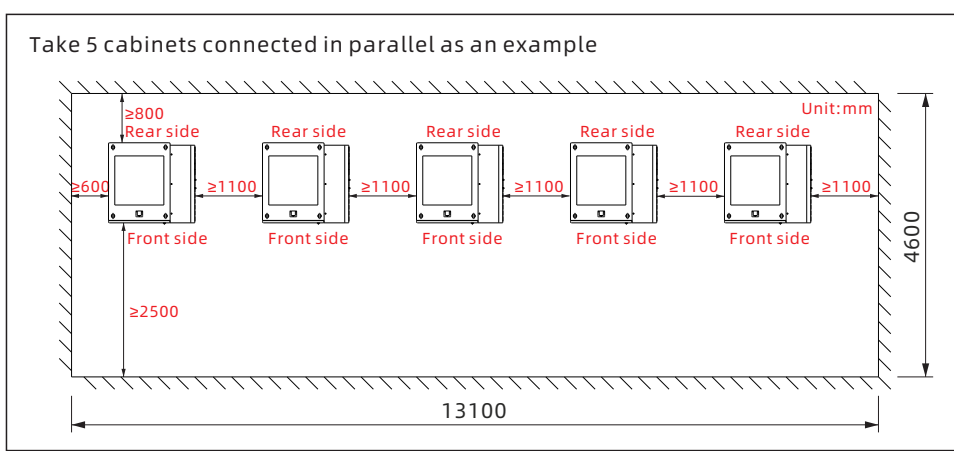
No.	Description	No.	Description
A	USB interface	F	GEN breaker(QF12)
B	Network communication port	G	Grid breaker(QF11)
C	Communication terminal block	H	PE
D	PE terminal block	I	SPD
E	Load breaker(QF13)	J	SPD breaker

2-7 Introduction to PV Wiring Panel



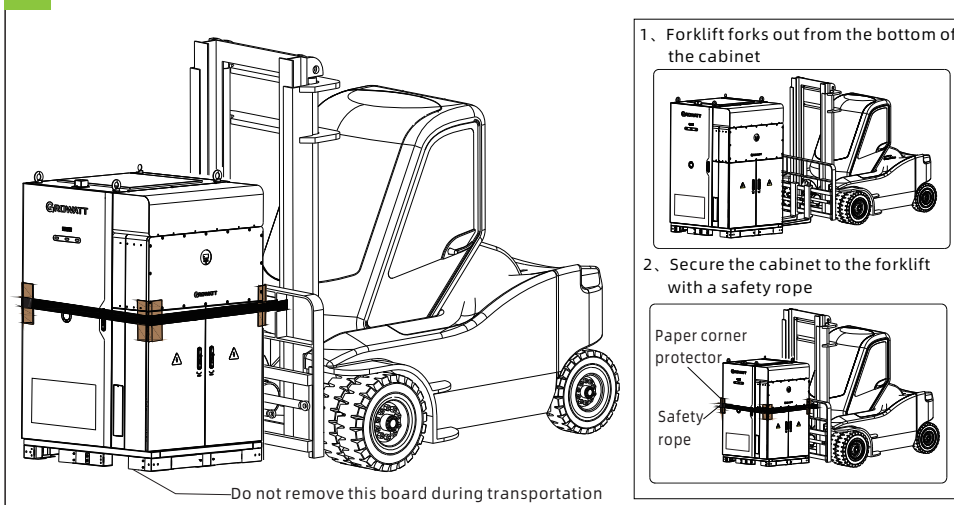
No.	Description	No.	Description
A	PV switch	B	PV terminal

3. Basic Installation Requirements



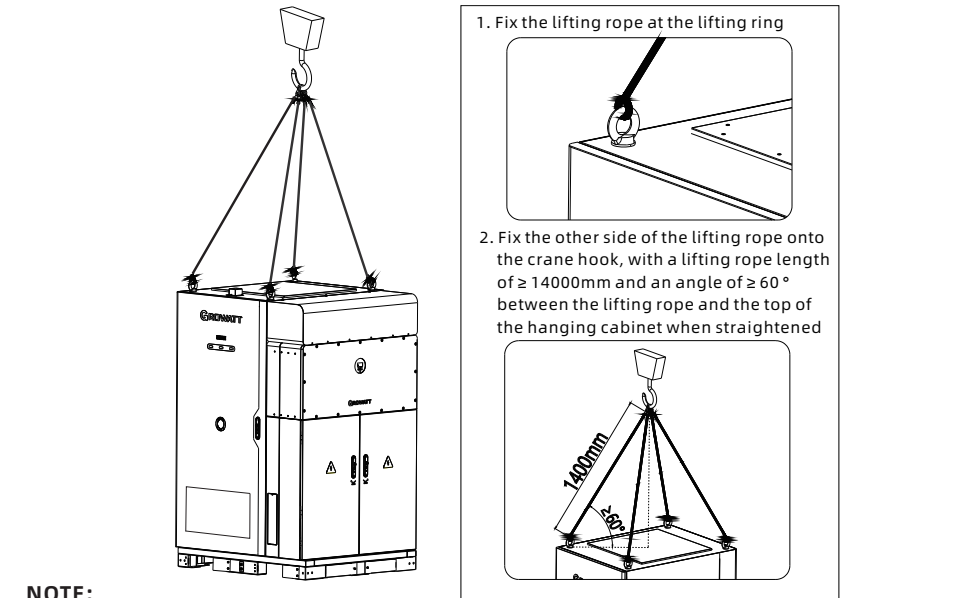
4. Transportation and Installation

4-1 Transport with a Forklift



Note:
When using a forklift to move equipment, it is necessary to tie and fix it according to the actual situation to ensure that the equipment is not at risk of tipping over.

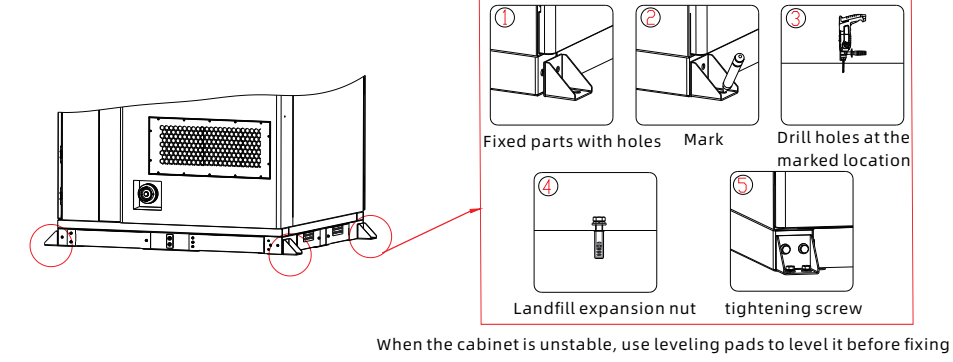
4-2 Use a Crane for Transportation



NOTE:
When forklifts cannot be used for the transportation route, please use a crane to transport the equipment.

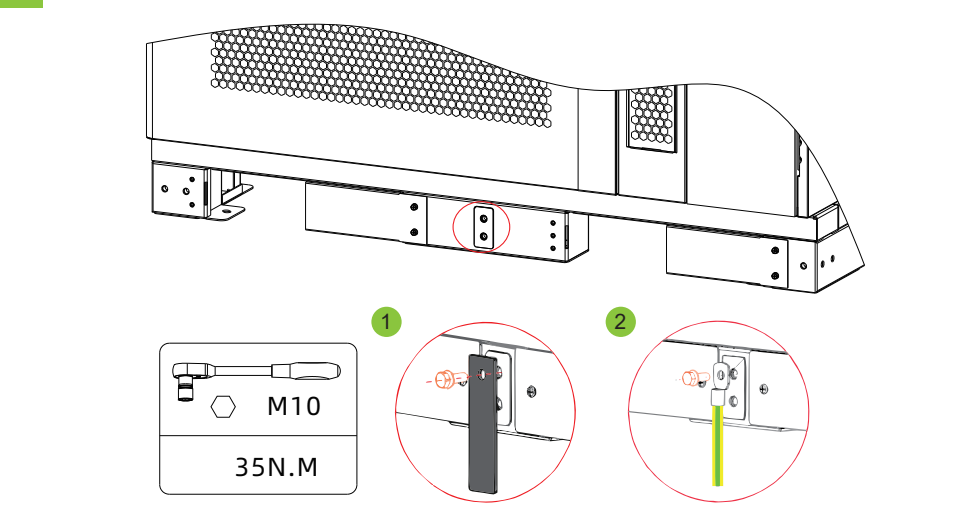
4-3 Secure the RISE Integrated Cabinet

After moving the equipment to the mounting location using a forklift, re-install the decorative panels. In case that the cabinet is unstable, use the leveling plate to level it, then secure it with the anchor brackets.



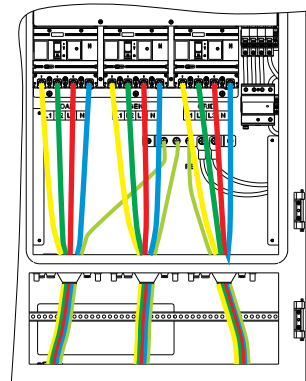
5. Customer Cable Connection

5-1 Shell PE Cable Connection



Position number silkscreen	Cable Specification	Terminal
PE	UL10269 1AWG	SC50-10

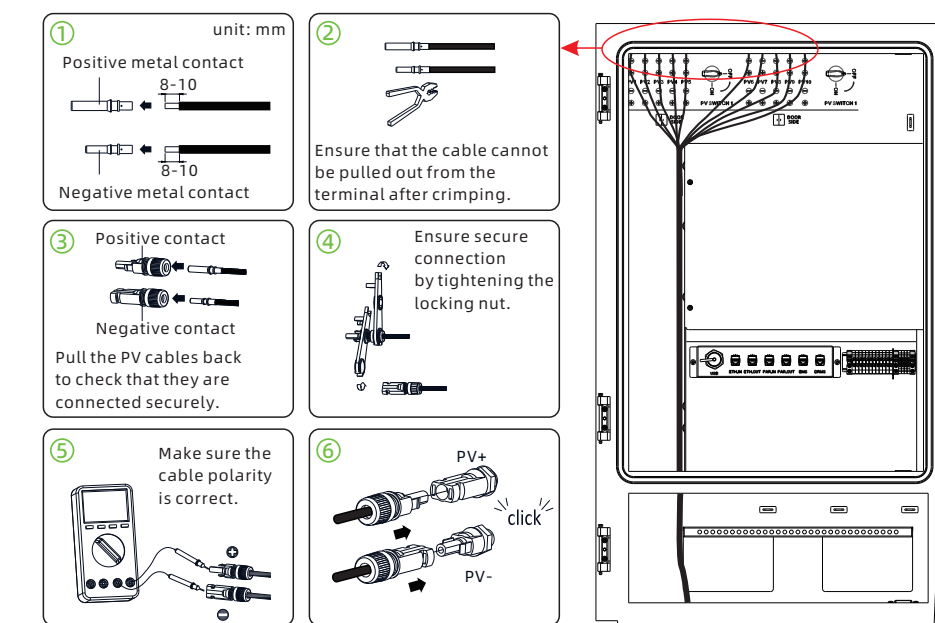
5-2 AC Cable Connection



Cable requirements:

Position number silkscreen	Cable Specification	Terminal
L1/L2/L3/N	UL1015 2/0AWG	SC70-8
PE	UL1015 2AWG	SC35-8

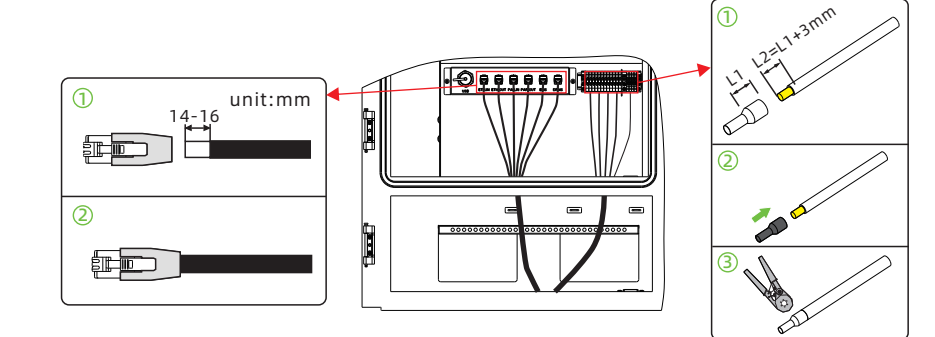
5-3 Secure the Battery Cabinet



Cable requirements:

Position number silkscreen	Cable Specification	Terminal
PV	UL10269 10AWG	PV Terminal

5-4 Communication Cable Connection



Cable requirements:

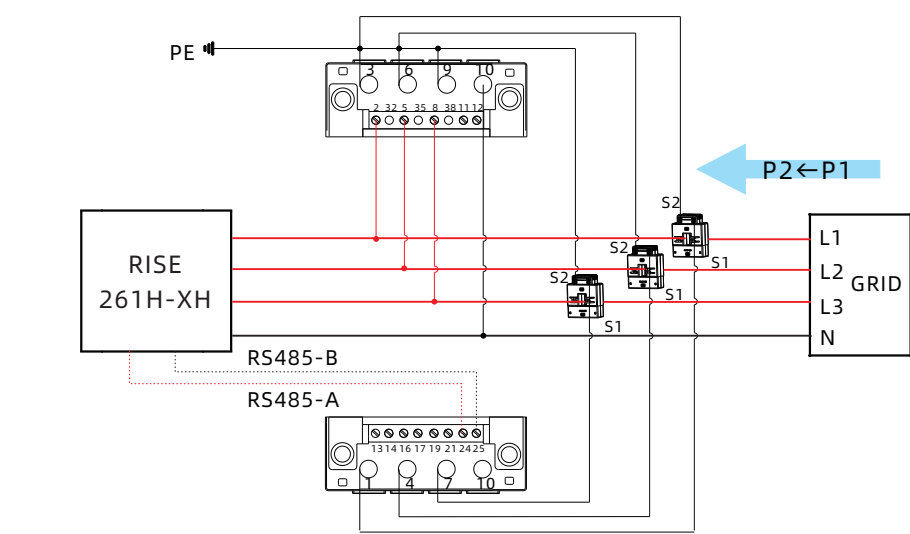
Position number silkscreen	Cable Specification	Terminal
Network communication port	Cat 6A STP Cable	RJ45
XT1 Terminal (Pin5/6/9/10)	UL1015 18AWG	ENY1510
XT1 Terminal (Pin3/4)	UL2464 20AWG	\

5-5 Installation and Setup of Meter

5.5.1 Installation of Meter

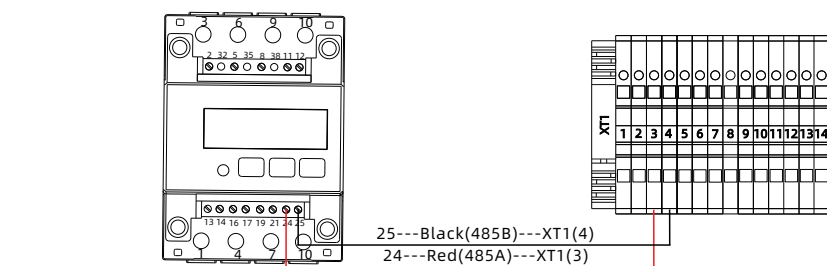
Note:

- When installing current transformers on site, there are directional requirements, where the P1 side is the power grid and the P2 side is the RISE integrated cabinet; Reversing the direction will affect the normal operation of on-site equipment;
- The RS485 communication line between the electricity meter and the RISE integrated cabinet should be kept as far away from the power line as possible to avoid interference;
- The voltage sampling of the electric meter and the installation position of the current transformer should be consistent;



Note:

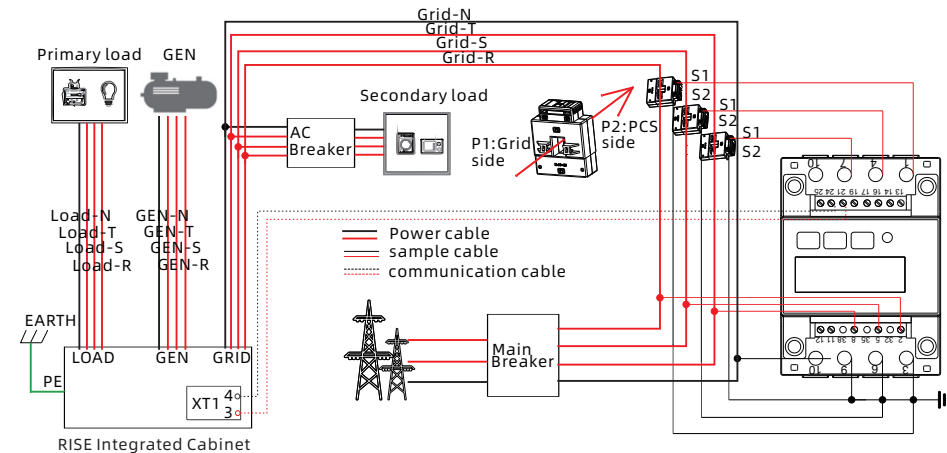
- Wiring for voltage sampling of electric meters
Wiring of the L1 voltage sampling line: corresponding to meter Pin 2;
Wiring of the L2 voltage sampling line: corresponding to meter Pin 5;
Wiring of the L3 voltage sampling line: corresponding to meter Pin 8;
Wiring of the N voltage sampling line: corresponding to meter Pin 10.
- Wiring of electric meters and current transformers
Please refer to the diagram above. The grid is on the right and the current flows from P1 to P2 (from the grid to the load).
Wiring of the L1 CT: S1 Line corresponding to meter Pin 1, S2 Line corresponding to meter Pin 3;
Wiring of the L2 CT: S1 Line corresponding to meter Pin 4, S2 Line corresponding to meter Pin 6;
Wiring of the L3 CT: S1 Line corresponding to meter Pin 7, S2 Line corresponding to meter Pin 9.



Note:

Wiring of electric meter and RISE Integrated Cabinet
Connect the RS485A to Pin 24 and RS485B to Pin 25 (The network cables delivered with the RISE Integrated Cabinet are labeled as 485-A and 485-B; If using homemade cables, please ensure that the connections are correct and reliable.)

The system wiring diagram is shown as follows. In case that the meter is not operating properly, you can refer to it to check the wiring. For the Growatt RISE Integrated Cabinet, please connect the meter to the XT1 port.



Note:

- Connect the input and output cables correctly. Please ensure that the input voltage and input current are within the permissible range; otherwise the meter will be damaged.
- The input and output wires of the meter should be correctly connected; otherwise, the meter will not be able to operate properly.

5.5.2 Setup of Meter

Note:

The communication address of the meter and the Growatt RISE Integrated Cabinet is 04 by default, the baud rate is 9600. If the meter fails to communicate with the RISE Integrated Cabinet, you can check the parameter settings by following the instructions:

Button description: "SET" button represents "confirmation", or "cursor shift" (when entering digits), "ESC" button represents "exit", "→" (↵) button represents "add". The password is 701 by default.

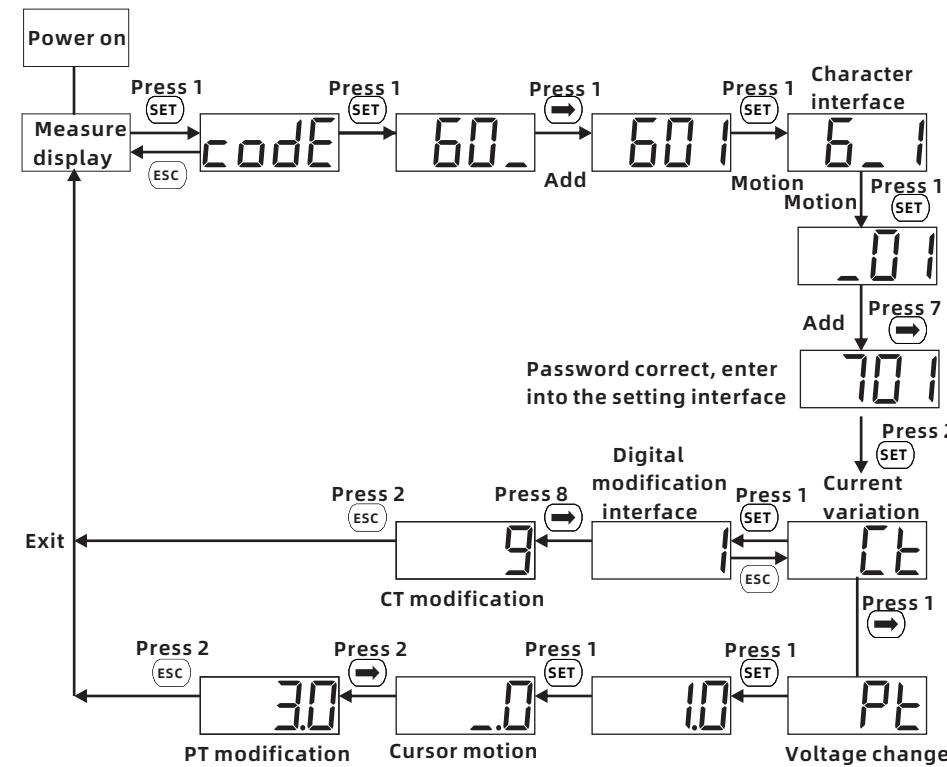


Diagram 1 Setting examples for modifying current ratio

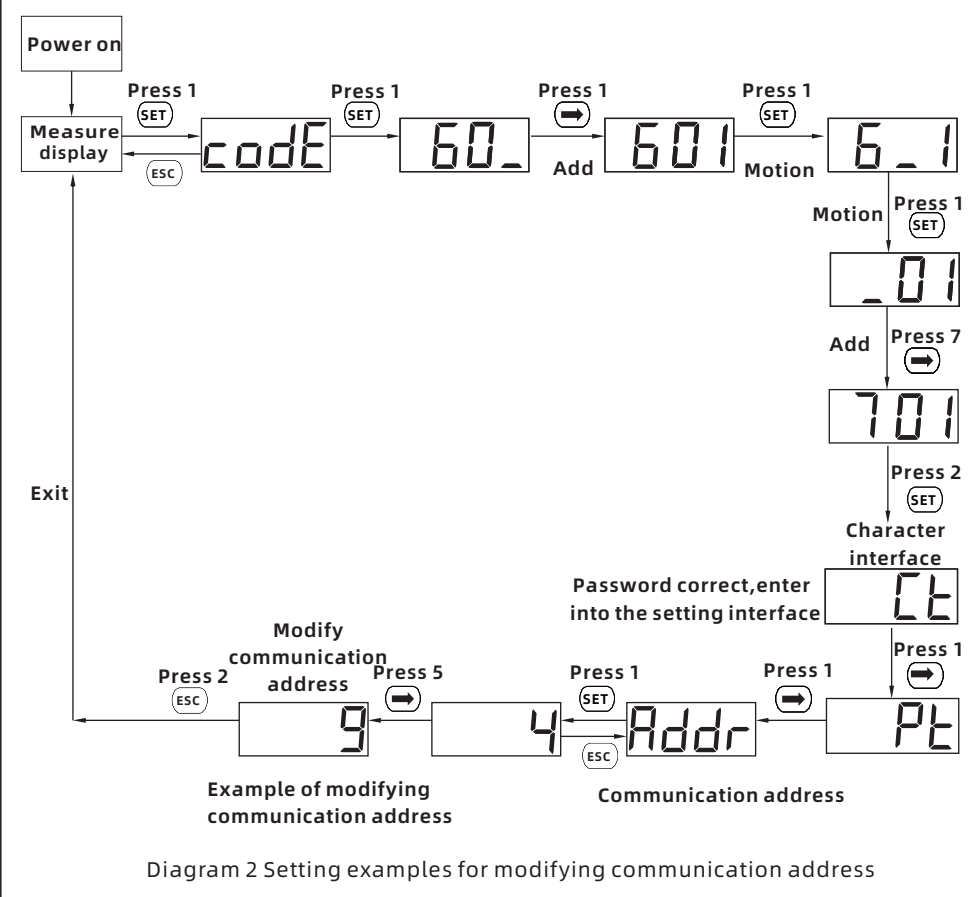
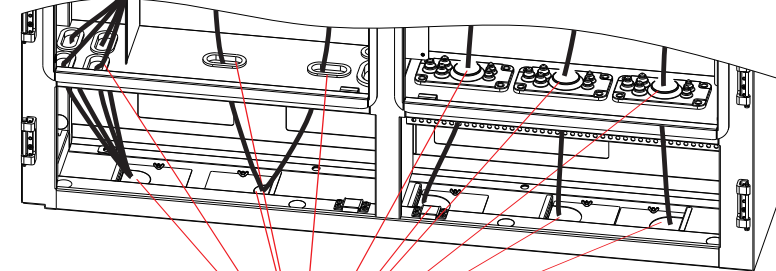


Diagram 2 Setting examples for modifying communication address

5-6 Seal the Cable Routing Holes

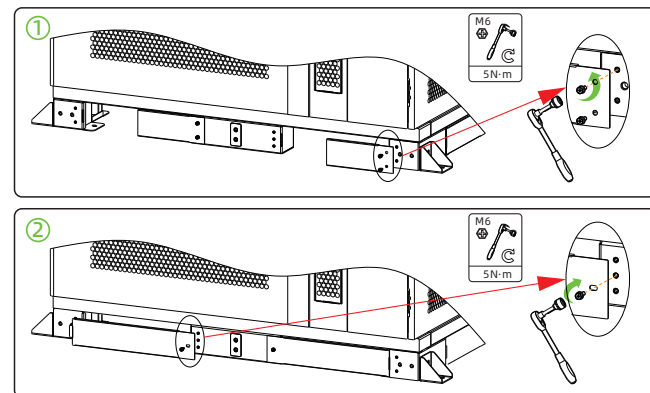
Upon completion of cable connections, seal the cable routing holes with the sealing mud delivered with the package.



Seal the cable routing holes with the sealing mud

5-7 Install the Base Baffle

After completing the above steps, install the base baffle.



6. Check before Power-On

6-1 Routine Check

No.	Checking item	Acceptance criteria
1	Equipment appearance	- The equipment is intact, free from damage, rust or paint loss. If the paint flakes off, please re-paint the spotted area. - Equipment labels are clear and damaged labels should be replaced in time.
2	Cable appearance	- The cable sheath is properly wrapped with no visible damage. - The cable conduits are intact.
3	Cable connection	- Cables are connected at the designate positions. - Wiring terminals are prepared as required and connected reliably. - Labels on both end of each cable is clear and facing toward the same direction.
4	Cable routing	- Electrical cables and extra low voltage cables are routed separately. - The cables are neat and tidy. - Cable tie joints are evenly cut without burs. - Leave the cable slack at bending points to avoid stress. - Cables are routed neatly without twists or crossovers in the cabinets.
5	Switch	- The switch of the distribution cabinet is OFF. - The switch of the high voltage box is OFF

6-2 Battery Cabinet Installation Inspection

Cabinet inspection

No.	Checking item	Acceptance criteria
1	Installation	- Installation complies with the design requirements. - The cabinet is level and each door opens properly.
2	Appearance	The surface of the cabinet is free from cracks, dents and scratches. If the paint flakes off, re-paint the spotted area.
3	Cabinet grounding	Each cabinet has at least two grounding points, and is grounded reliably. The resistance of a bond shall be less than or equal to 4Ω.
4	Label	Labels are correct, clear and complete.

6-3 Intra-Cabinet Inspection

No.	Checking item	Acceptance criteria
1	Circuit breaker	The circuit breakers are OFF.
2	Cable	The bolts for securing the cables have been tightened and no loose cable connections.
3	Cable routing hole sealing	The cable routing holes are sealed.
4	PACK	All PACKs are intact.
5	Foreign object	Foreign objects, e.g. tools and installation leftovers are removed from the cabinet.
6	Distribution area baffle	The distribution area baffle is free from cracks, dents, scratches, openings and looseness.
7	Subcomponents	All subcomponents are intact.
8	Cabinet grounding	The grounding conductor is reliably connected to the cabinet's grounding terminal board or copper bar.

7. Power On/Off the System

7-1 Power On Procedure

Note:

- Before powering on, please ensure that the PV voltage and current are within the RISE 261H specification range.
- Use a multimeter to measure the voltage between high voltage box BAT+ and BAT - at 728~936V

1	Turn on the Hybrid inverter PV Switch and power on the PV side of the system is
2	Close the QF11~QF13 AC circuit breakers in the AC distribution compartment according to the actual needs on site, and complete the system's AC side power on.
3	Close the QF1 DC circuit breaker of the battery cabinet, and the system battery side is powered on

7-2 Commissioning

Prerequisites:

- All onsite devices have been commissioned.
- The system has been powered on and no alarm/fault is reported.
- The commissioning tools are available on site.
- Wait until the air conditioner has adjusted the temperature of the cabinet and the cells in the battery packs to the pre-set range.

7-3 Power-Off Procedure

1	Power off preparation: Control the software to shut down the system.
2	Disconnect the QF1 DC circuit breaker from the battery cabinet, and the system battery side is powered off.
3	Disconnect the QF11~QF13 AC circuit breakers that are closed in the AC distribution compartment according to the power on demand, and complete the AC side power off of the system.
4	Disconnect the Hybrid inverter PV Switch and power off the PV side of the system.

8. Service and Contact

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