

Single-phase Hybrid Inverter (Low Voltage)



Ei.H008KL-A1.23-P1NV-L; Ei.H008KL-A2.23-P1NV-L;
Ei.H010KL-A1.23-P1NV-L; Ei.H010KL-A2.23-P1NV-L;
Ei.H012KL-A1.34-P1NV-L; Ei.H012KL-A2.34-P1NV-L;



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8.350.00002.00 V1.0
Information might be subject to change without notice during product improving.

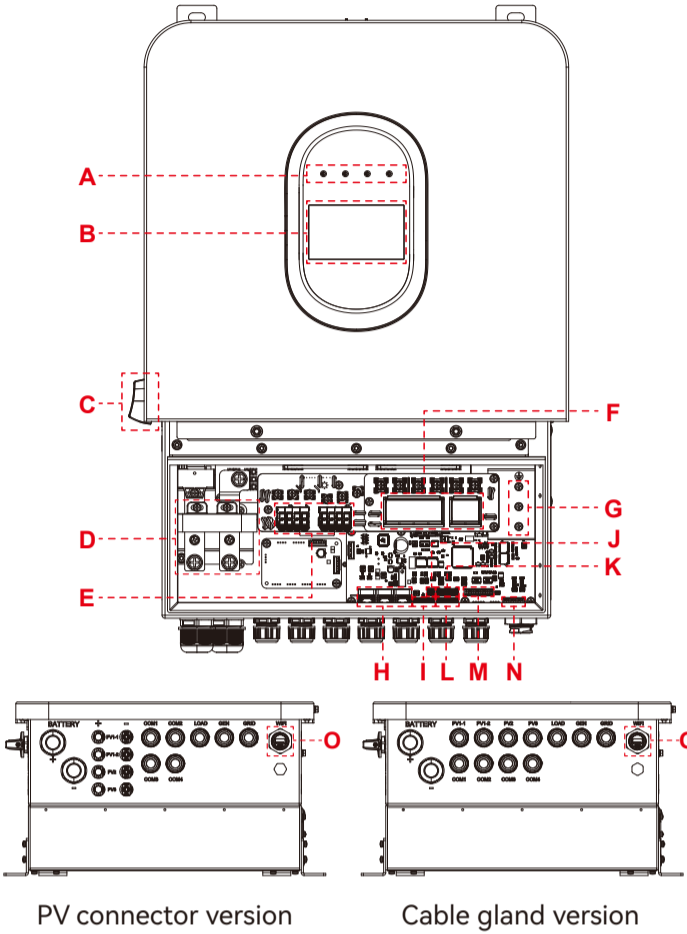
High-tech Zone, Suzhou, Jiangsu, China
3rd Floor, Building 4, No. 187 Jinshan East Road,
www.lt-ess.com
info@lt-ess.com
Jiangsu LT Technology Co., Ltd.

⚠ Note:

This guide provides quick installation instructions for the LT hybrid inverter. It is intended to assist qualified personnel in completing installation efficiently. Installation must be performed by certified electrical professionals.

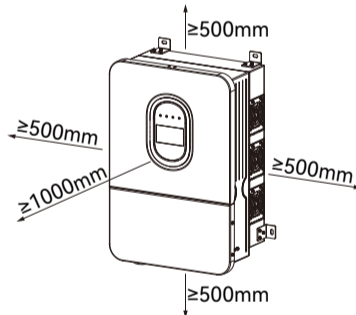
For detailed installation procedures and safety information, please refer to the User Manual on the official website.

1. Product Overview

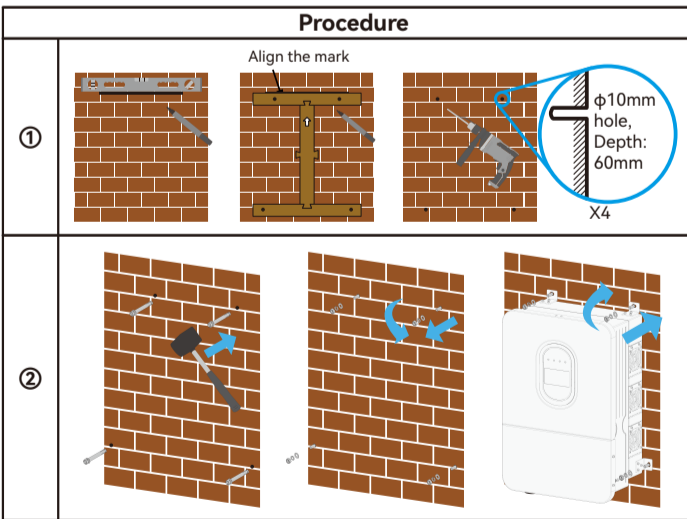


A: Inverter indicators	F: AC output	K: RS485/Temperature detection of lead-acid battery
B: LCD display	G: Earth Connection	L: RS485
C: DC Switch	H: BMS/PAL CAN	M: DRED/RCR
D: Battery input connectors	I: Gen	N: CT
E: PV input	J: RSD_P	O: WiFi Interface

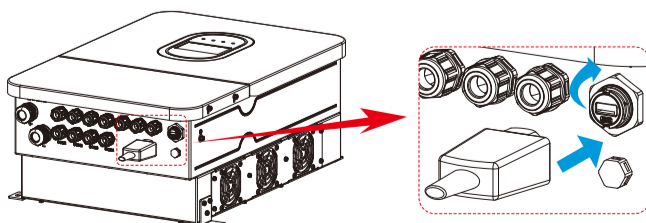
2. Installation Clearance



2.1 Mounting



2.2 Monitoring device installation



Remove the WiFi port waterproof cover, insert the data stick, and tighten it securely.

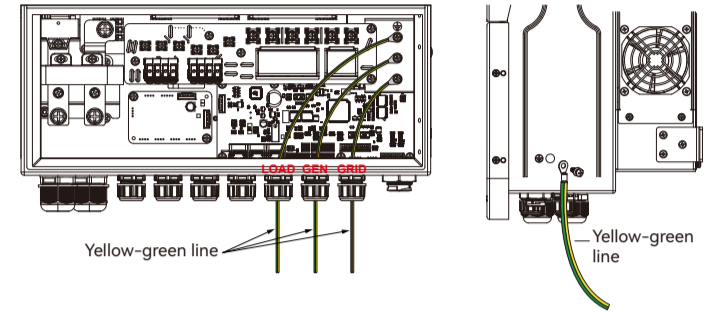
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3. Electrical Connections

Before installation, please prepare the necessary cables. The following specifications are only recommended values. All cables must comply with local regulations and electrical standards.

No.	Type	Recommend Cable
①	Grounding connection	10mm ² OR 6AWG
②	Battery connection	70mm ² OR 3/0AWG
③	PV connection	4mm ² OR 12AWG
④	AC connection-Grid; Load	16mm ² OR 4AWG
⑤	AC connection-Gen	10mm ² OR 6AWG

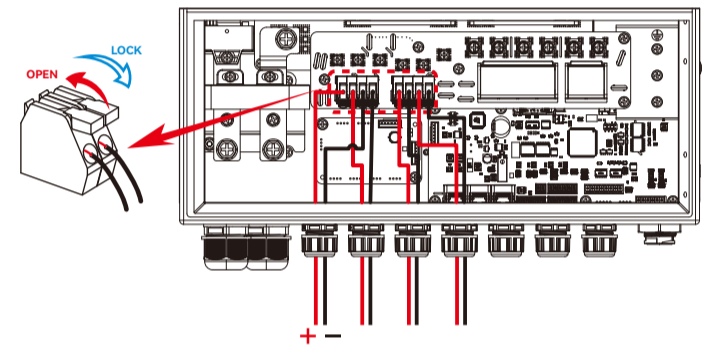
3.1 Grounding Connection



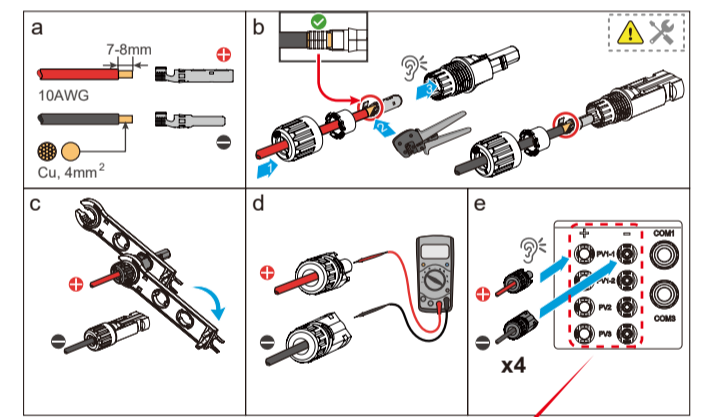
3.2 PV

Please check whether the PV wiring is unreversed and not loose.

① Cable gland version (Ei.H008KL-A2.23-P1NV-L; Ei.H010KL-A2.23-P1NV-L; Ei.H012KL-A2.34-P1NV-L):

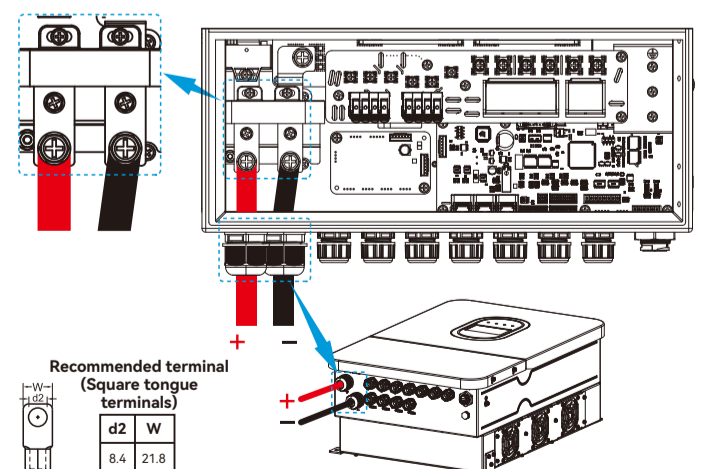


② PV connector version (Ei.H008KL-A1.23-P1NV-L; Ei.H010KL-A1.23-P1NV-L; Ei.H012KL-A1.34-P1NV-L):



3.3 Battery

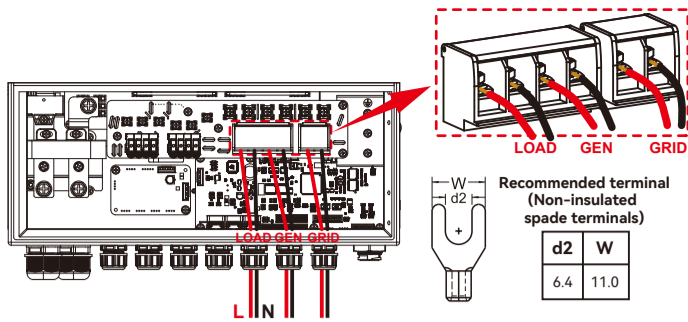
Please confirm battery type and voltage range are compatible with the inverter and observe correct polarity (positive to positive, negative to negative).



3.4 AC Connection

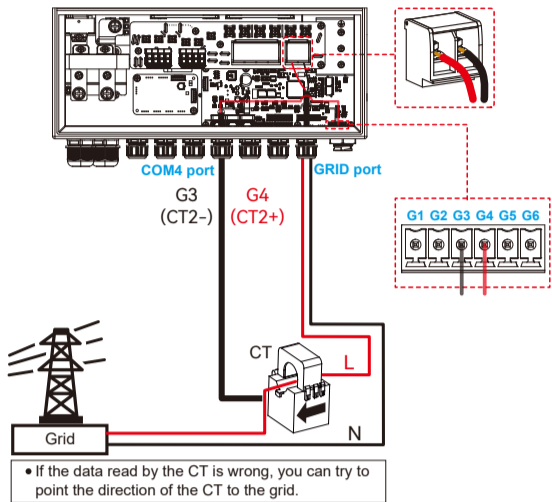
Before installing the AC connections, please check the ac breakers are turned off to make sure the installers safe.

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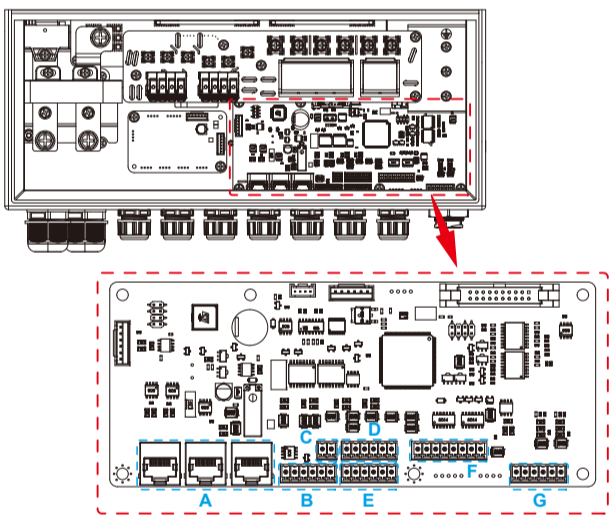
3.5 CT Connection

To enable export limitation and energy monitoring functions, the inverter supports connection of a **Current Transformer (CT)**.



- CT must be installed on the **grid side** of the AC input.
- Ensure the direction of measurement follows the current flow from the inverter to the grid.
- Connect the communication wires between the inverter and CT according to terminal labels.
- Keep communication cables as short as possible (recommended < 10 m for CT).
- Use shielded twisted pair cable and avoid them parallel to AC power lines.

4. Communication Terminals



Some devices and functions require communication with the inverter, such as **the battery, CT, GEN, and parallel operation**. Please connect these communication interfaces to the inverter according to the **Table 4.1**.

5. Quick Setting

5.1 Power ON/OFF

After completing all the steps above, then follow the instructions below to power ON.

Power ON:

1. Before powering on the inverter, verify that all wiring mentioned above is correct.
2. Switch on the DC breaker (Battery Side).
3. Switch on the DC breaker (PV Side).
4. Switch on the AC breaker.
5. Turn on the DC switch of the inverter and wait for the power to start.
6. After startup, the inverter will perform an initial self-check.
7. When the self-check is finished, proceed with the configuration steps described below.

Power OFF:

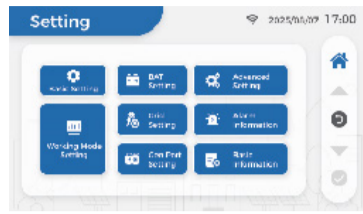
1. If you need to power off the inverter, first switch off the AC breaker.
2. Switch off the DC breaker.
3. Turn off the DC switch.
4. There is residual voltage existing in the inverter after powering off, which needs 5 min to discharge. Wait at least 5 minutes before you make any operations.

5.2 LCD Setting

① Open the **Settings** menu in the upper-left corner.



② Open **Basic Setting**.



③ Set the inverter time. Before accessing any settings, you must first unlock the system by entering the password.

Steps:

1. Set **Unlock all settings** to **ON**.
2. Tap the ✓ button on the right side of the screen.
3. Enter the password **12345678**.
4. Tap **OK**.

After returning to the home screen, settings will be available for configuration.



④ Set the **battery type**.

When your system doesn't include a battery, please select 'None' to avoid the alarm.

When using the lithium battery or lead-acid battery, select the correct battery type and complete the settings according to the battery specifications.

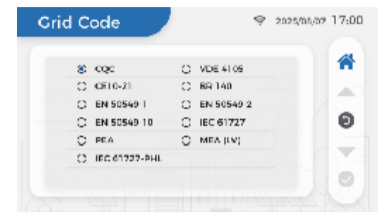


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⑥ Set the **grid code**.

Under normal circumstances, the inverter is factory-configured with grid protection settings that comply with the requirements of your local region. Therefore, this setting usually does not require any additional adjustment.

If the power grid in your area experiences significant fluctuations and manual configuration is required, please make the necessary adjustments under the Safety Settings.



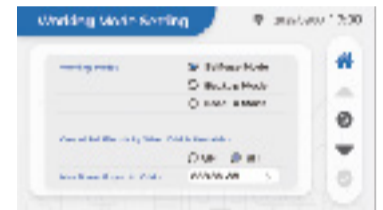
⑥ Set the **work mode**.

You can choose any one of the following three modes according to your application scenario.

- **Self-use Mode:** Prioritizes local consumption of PV energy. Excess energy is stored in the battery or exported to the grid.
- **Backup Mode:** Prioritizes battery charging to ensure backup power availability.
- **Feed-in Mode:** Prioritizes exporting PV energy to the grid.

Cancel Sell Electricity When Grid is Unstable: Whether to continue exporting power to the grid when instability is detected.

Max Power Export to Grid (kW): Defines the maximum power that can be exported to the grid.



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6. Completion

At this point, you have completed the initial installation of the inverter. You can now use the app to further configure the operating parameters.

Additionally, connect the **datalogger** to the inverter; please refer to the **datalogger installation manual**.

Table 4.1

Block No.	Block name	Picture	Port No.	Port	Terminal type
A	BMS/Parallel CAN		A1	BMS_CAN1&CAN2	
			A2	PAL_A	
			A3	PAL_B	
B	Gen		B1	Gen-	
			B2	Gen+	
			B3	GNDS	
			B4	IOin2	
			B5	IOin1	
			B6	GNDS	
C	RSD_P		C1	GNDS	
			C2	12VS1	
D	RS485/Temperature detection of lead-acid battery		D1	GNDS	
			D2	La_Temp	
			D3	EMS-	
			D4	EMS+	
			D5	METER-	
			D6	METER+	
E	RS485		E1	GNDS	
			E2	NC	
			E3	BMS2-	
			E4	BMS2+	
			E5	BMS1-	
			E6	BMS1+	
F	DRED/RCR		F	F	
G	CT		G1	/	
			G2	/	
			G3	/	
			G4	/	
			G5	CT1-	
			G6	CT1+	