



Ei.H003KL-A1.11-P1NV-L; Ei.H003KL-A2.11-P1NV-L;  
 Ei.H3.6KL-A1.22-P1NV-L; Ei.H3.6KL-A2.22-P1NV-L;  
 Ei.H004KL-A1.22-P1NV-L; Ei.H004KL-A2.22-P1NV-L;  
 Ei.H005KL-A1.22-P1NV-L; Ei.H005KL-A2.22-P1NV-L;  
 Ei.H006KL-A1.22-P1NV-L; Ei.H006KL-A2.22-P1NV-L



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8.350.00020.00  
 Information might be subject to change without notice during product improving.

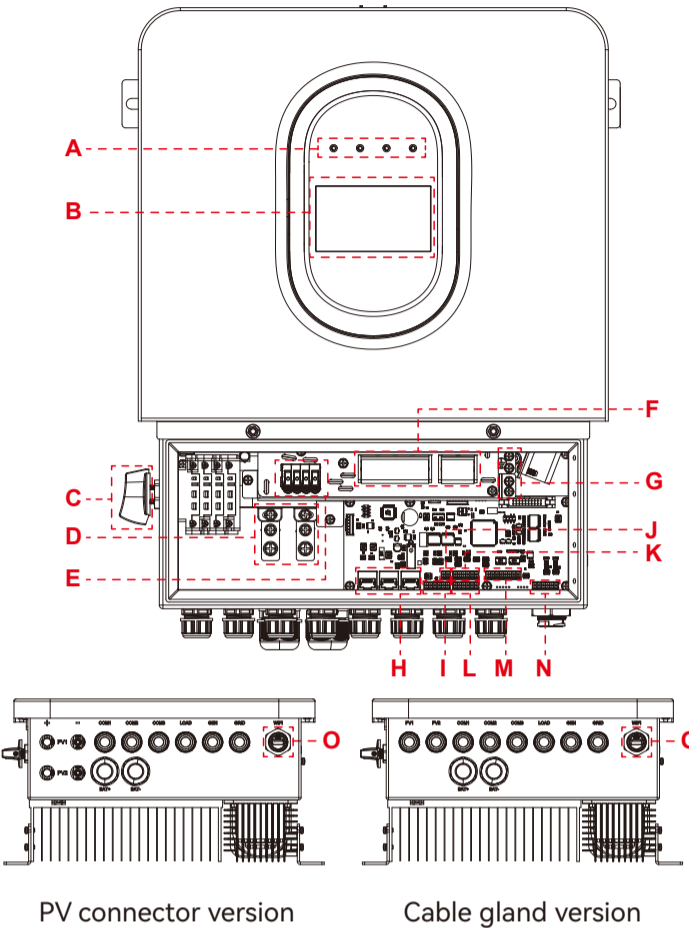
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 Jiangsu LT Technology Co., Ltd.

#### ⚠ 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.

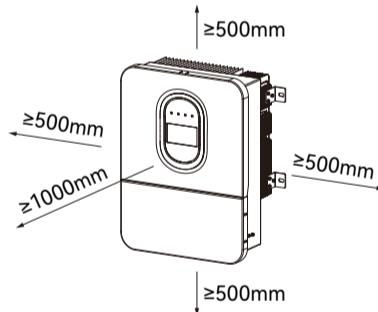
For detailed installation procedures and safety information, please refer to the User Manual on the official website.

## 1. Product Overview

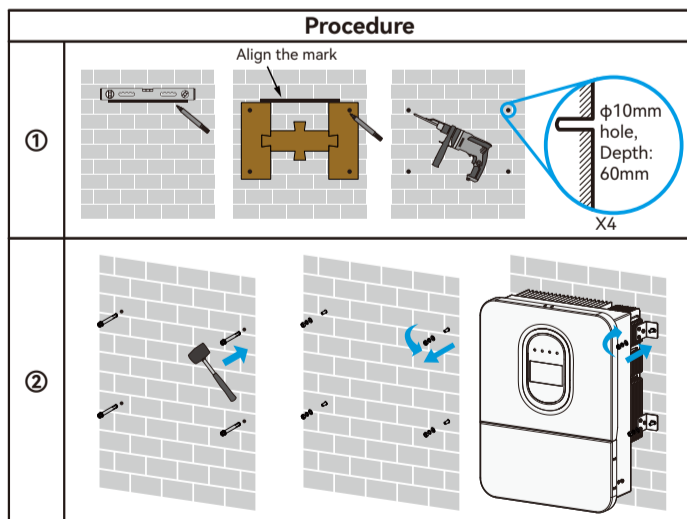


A: Inverter indicators	F: AC output	K: RS485/Temperature detection of lead-acid battery
B: LCD display	G: Earth Connection	L: RS485
C: DC Switch	H: BMS/PAL CAN	M: DRED/RCR
D: Battery input connectors	I: Gen	N: CT
E: PV input	J: RSD_P	O: WiFi Interface

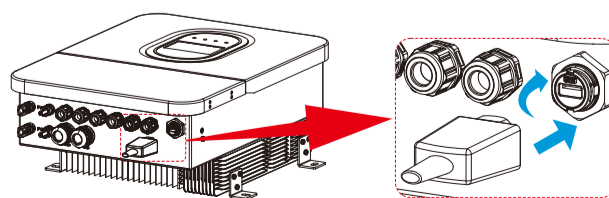
## 2. Installation Clearance



### 2.1 Mounting



### 2.2 Monitoring device installation



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

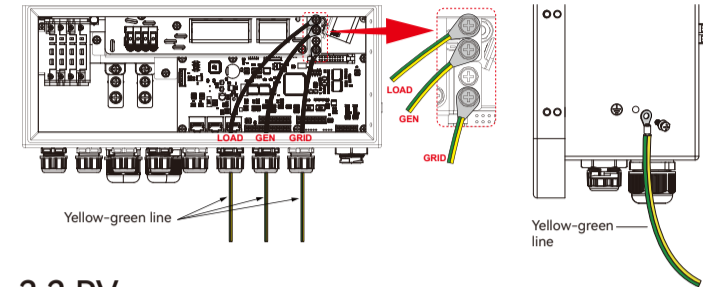
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## 3. Electrical Connections

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	6mm <sup>2</sup> OR 10AWG
②	Battery connection	65mm <sup>2</sup> OR 2/0AWG
③	PV connection	4mm <sup>2</sup> OR 12AWG
④	AC connection-Grid; Load; Gen	6mm <sup>2</sup> OR 10AWG

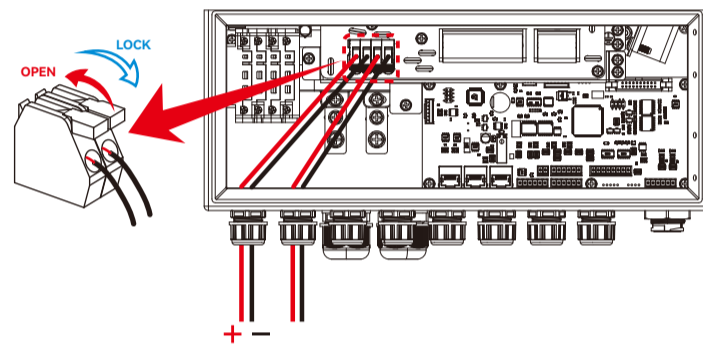
### 3.1 Grounding Connection



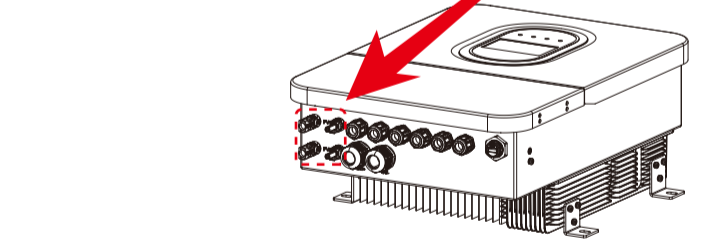
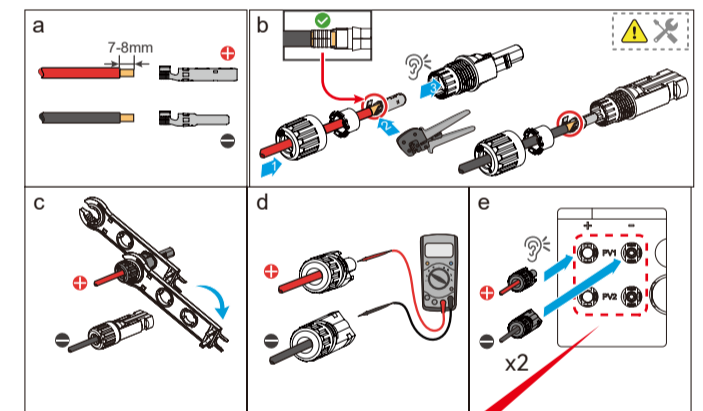
### 3.2 PV

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

① Cable gland version (Ei.H003KL-A2.11-P1NV-L; Ei.H3.6KL-A2.22-P1NV-L; Ei.H004KL-A2.22-P1NV-L; Ei.H005KL-A2.22-P1NV-L; Ei.H006KL-A2.22-P1NV-L):

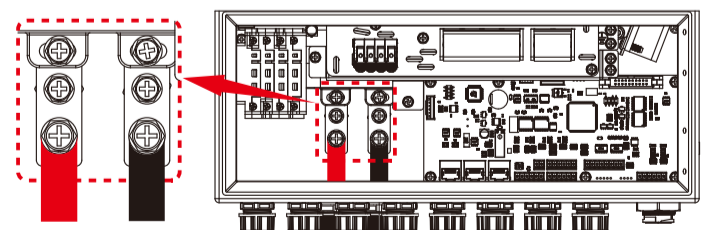


② PV connector version (Ei.H003KL-A1.11-P1NV-L; Ei.H3.6KL-A1.22-P1NV-L; Ei.H004KL-A1.22-P1NV-L; Ei.H005KL-A1.22-P1NV-L; Ei.H006KL-A1.22-P1NV-L):



### 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).

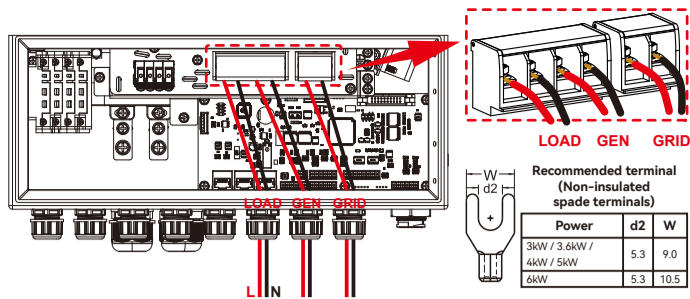


Power	d2	W
3kW	6.4	12.5
3.6kW / 4kW / 5kW	6.4	13.2
6kW	6.4	16.0

### 3.4 AC Connection

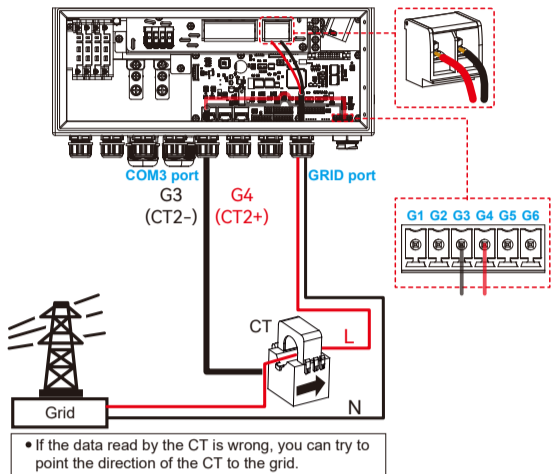
Before installing the AC connections, please check the ac breakers are turned off to make sure the installers safe.

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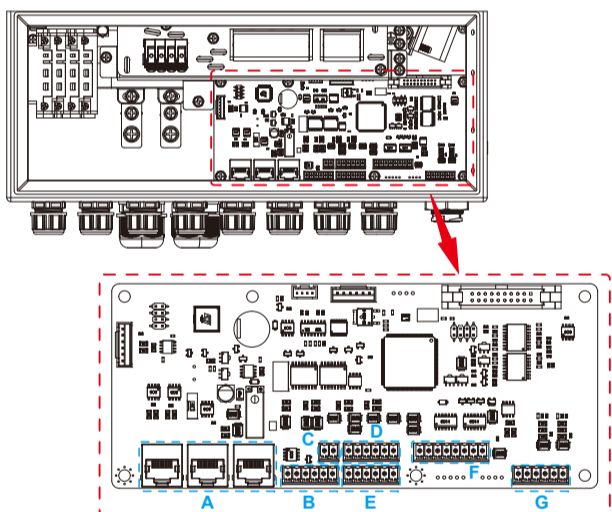
### 3.5 CT Connection

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 (Battery Side).
3. Switch off the DC breaker (PV Side).
4. Turn off the DC switch.
5. There is residual voltage existing in the inverter after powering off, which needs 5 minutes 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 setting menu, 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.



⑤ 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.



### 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**.

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**Table 4.1**

Block No.	Block name	Picture	Port No.	Port	Terminal type																																								
A	BMS/Parallel CAN	<table border="1"> <thead> <tr> <th>Port No.</th> <th>Pin</th> <th>8</th> <th>7</th> <th>6</th> <th>5</th> <th>4</th> <th>3</th> <th>2</th> <th>1</th> </tr> </thead> <tbody> <tr> <td>A1</td> <td>/</td> <td>/</td> <td>/</td> <td>BMS_CANL1</td> <td>BMS_CANH1</td> <td>/</td> <td>/</td> <td>/</td> <td>/</td> </tr> <tr> <td>A2</td> <td>SYN_BUS_2</td> <td>SYN_BUS_1</td> <td>GND_S</td> <td>PAL_CANL</td> <td>PAL_CANH</td> <td>/</td> <td>/</td> <td>/</td> <td>/</td> </tr> <tr> <td>A3</td> <td>SYN_BUS_2</td> <td>SYN_BUS_1</td> <td>GND_S</td> <td>PAL_CANL</td> <td>PAL_CANH</td> <td>/</td> <td>/</td> <td>/</td> <td>/</td> </tr> </tbody> </table>	Port No.	Pin	8	7	6	5	4	3	2	1	A1	/	/	/	BMS_CANL1	BMS_CANH1	/	/	/	/	A2	SYN_BUS_2	SYN_BUS_1	GND_S	PAL_CANL	PAL_CANH	/	/	/	/	A3	SYN_BUS_2	SYN_BUS_1	GND_S	PAL_CANL	PAL_CANH	/	/	/	/	A1	BMS_CAN1&CAN2	
			Port No.	Pin	8	7	6	5	4	3	2	1																																	
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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	/																																									
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			G5	/																																									
			G6	/																																									