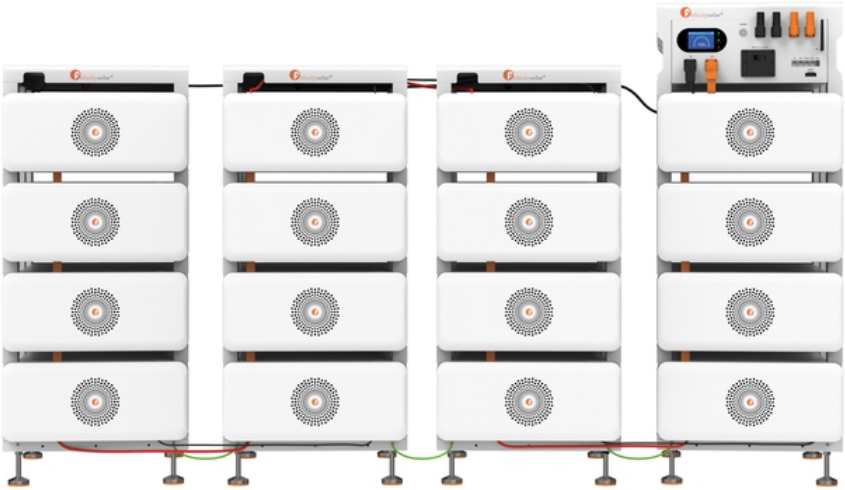
felicitysolar®

Make life full of hope

Quick Installation Guide

LiFePO4 Battery System



Model

FLH48314UG1

www.felicitysolar.com

Revision History

Revision No.	Revision Date
V00	2026.09.09
V01A	2026.09.24

NOTE: Due to the inherent update cycle of printed manuals, please refer to the latest electronic version available through official channels for the most up-to-date information.

1.Disclaimer

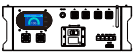
- Please read the user's manual carefully before performing all operations; this installation guide does not supersede the use of the product's user's manual;
- Product information is subject to change without notice. This manual is frequently updated, please contact your salesperson for the latest version.
- After unpacking, please check the product for damages and missing parts.
- Do not open the battery to repair or disassemble. Only Felicitysolar is allowed to carry out any such repairs. Only qualified personnel can install this device with battery.
- In case of fire, use only dry powder fire extinguisher. Liquid extinguishers should not be used.
- Before using the battery, please read the instructions and warning signs of the battery and corresponding sections in the instruction manual. Improper reassembly may result in electric shock or fire.
- To reduce risk of electric shock, disconnect all wires before attempting any maintenance or cleaning. Turning off the unit will not reduce this risk.
- Never charge a frozen battery.
- Be very cautious when working with metal tools on or around batteries. Dropping a tool may cause a spark or short circuit in batteries or other electrical parts, even cause an explosion.
- Install the battery away from children or pets.
- Do not use battery in high static environment where the protection device might be damaged.
- Battery should be installed indoor and kept away from water, high temperature mechanical force and flames.
- Do not install the battery in any environment of temperature below 0°C or over 55°C, and humidity over 80%.

2.Installation Video&User Manual

You can scan the QR code on the right to watch the installation video and view the user manual.

3.Packing List

FLH48314UCG1

 Battery ×1	 B+ Power Cable ×1	 User Manual ×1	 Quick Installation Guide ×1
 Warranty Card ×1	 Termination Resistor Connector ×1	 B+ Flexible Busbar ×1	 RJ45 Connector ×1
 B- Power Cable ×1	 Communication Cable ×1	 Multi-Protocol Communication Cable ×3	 Grounding Wire ×1
 PCS Positive Power Cable×2	 PCS Negative Power Cable×2	 Master Controller Top Cover ×1	Battery Pack Base ×1	 M6 Screw ×6



BOT Foot Cup×4



Socket Wrench×1



Bubble Level ×1

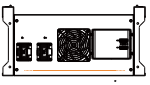


USB Flash Drive ×1



Black Push-Mount Nylon Cable Tie×5

FLH48314UMG1



Battery ×1



Inter-Slave Communication Cable×1



Series Connection Busbar ×1



Warranty Card ×1

Slave Unit Front Cover ×1



M6 Screw ×6

Accessory Kit A



Inter-Cluster Series Power Cable ×2



Chassis Grounding Wire ×2



Inter-Cluster Communication Cable ×2



Battery Pack Base ×2

Slave Controller Top Cover ×2



BOT Foot Cup×8



Black Push-Mount Nylon Cable Tie×5



Bubble Level ×1

Accessory Kit B



Inter-Cluster Series Power Cable ×1



Chassis Grounding Wire ×1



Inter-Cluster Communication Cable ×1



Battery Pack Base ×1

Slave Controller Top Cover ×1



BOT Foot Cup×4



Black Push-Mount Nylon Cable Tie×5



Bubble Level ×1

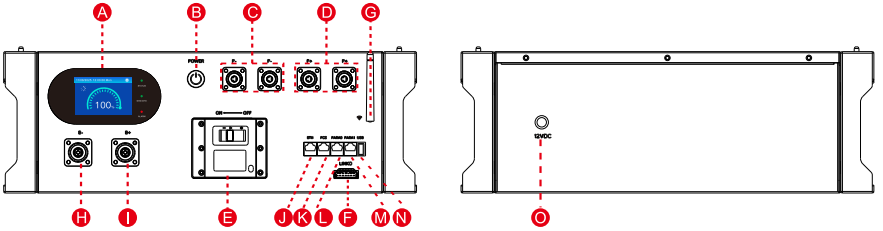
When the number of battery modules exceeds five, different module quantities require different accessory kits. Please select the appropriate accessory kit according to your actual requirements and refer to the table below.

Number of Battery Modules	FLH48314UG1 Accessory Kit A Quantity (Sets)	FLH48314UG1 Accessory Kit B Quantity (Sets)
5	/	/
6-10	/	1
11-15	1	/
16(5+6+5)	1	/
16(4*4)	1	1

4.Explanation of the Symbols

	Danger! Serious physical injury or even death may occur if not follow the relative requirements.		Install the product out of reach of children
	Caution, risk of electric shock.		Do not place nor install near flammable or explosive materials
	In case of electrolyte leakage, keep leaked electrolyte away from eyes or skin.		Disconnect the equipment before carrying out maintenance or repair
	Do not connect the Pack's positive(+) and negative(-)terminal reversely.		EU WEEE mark: Product should not be disposed as household waste.
	Observe precautions for handling electrostatic discharge sensitive devices.		Instruction manual: Read the instruction manual before starting installation and operation.
	Caution, risk of electric shock, energy storage timed discharge		CE mark: The inverter complies with the CE directive.
	Recyclable.	NOTE	Note: The procedures taken for ensuring proper operation.
	Do not use the Pack beyond specified conditions		Earth terminal: The inverter must be reliably grounded.
	Take care! This Pack is heavy enough to cause serious injury.		

5.Product Overview



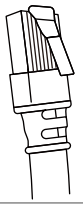
Code	Name	Code	Name
A	LCD Display	I	BAT+
B	Power Switch	J	Ethernet
C	PCS-	K	PCS
D	PCS+	L	PARA0
E	MCCB	M	PARA1
F	LINK0	N	USB
G	Antenna	O	12VDC
H	BAT-		

Definition of ETH		Definition of PCS		Definition of PARA0		Definition of PARA1	
1	TX+	1	485B_PCS	1	485A_SYSTEM	1	/
2	TX-	2	485A_PCS	2	485B_SYSTEM	2	/
3	RX+	3	GND	3	/	3	/
4	CT1	4	CANH_PCS	4	/	4	/
5	CT2	5	CANL_PCS	5	/	5	/
6	RX-	6	GND	6	/	6	/
7	CT3	7	485A_PCS	7	CANL_BCU	7	CANL_BCU
8	CT4	8	485B_PCS	8	CANH_BCU	8	CANH_BCU

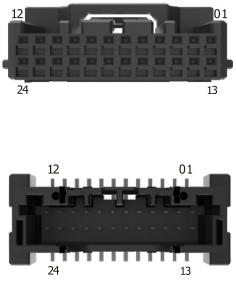
P1.....P8

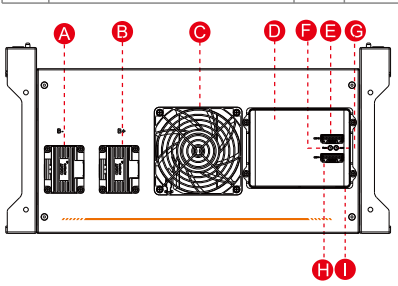


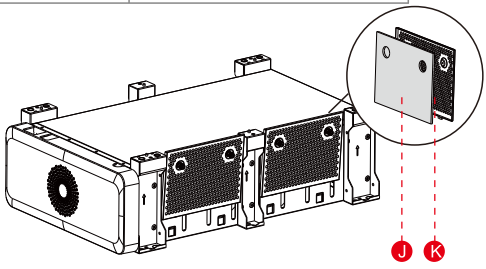
8.....1



Definition of LINK0				Picture
1	12V0_COMISO	13	COM-GND	
2	12V0_COMISO	14	COM-GND	
3	BMU-ADD-OUT	15	CANL_BMU	
4	BMU-ADD-OUT	16	CANH_BMU	
5	DRY1A	17	DRY1B	
6	24V_FANPWR_OUT	18	FAN_GND	
7	24V_FANPWR_OUT	19	FAN_GND	
8	24V_FANPWR_OUT	20	FAN_GND	
9	24V_FANPWR_OUT	21	FAN_GND	
10	24V_FANPWR_OUT	22	FAN_GND	
11	24V_FANPWR_OUT	23	FAN_GND	
12	24V_FANPWR_OUT	24	FAN_GND	



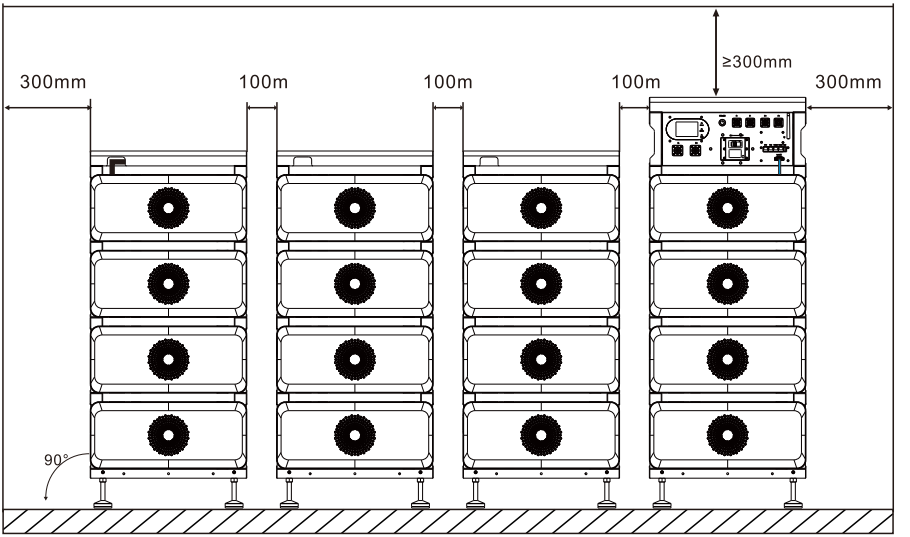


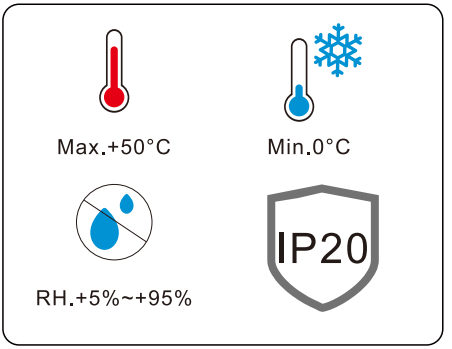


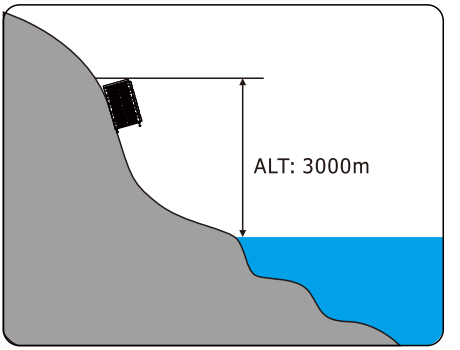
Code	Name	Code	Name
A	BAT-	G	ALM
B	BAT+	H	COM1
C	FAN	I	Fan Control
D	BMU Panel	J	Dust-proof Cotton
E	COM0	K	Dust Filter
F	RUN		

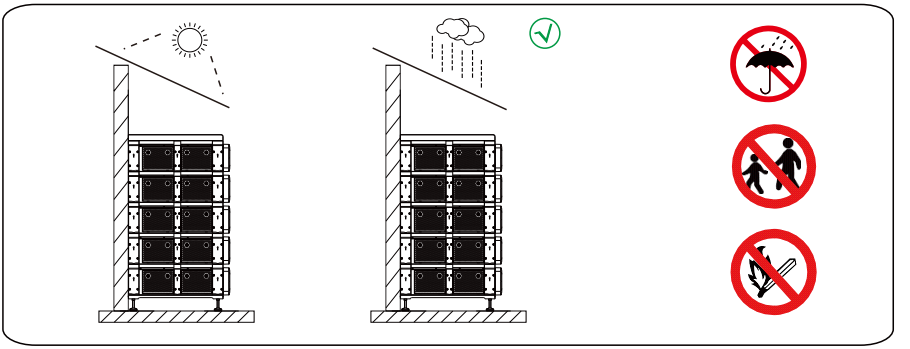
To ensure proper airflow to the fans and effective heat dissipation, remove and clean both the dust-proof cotton and dust filter every six months. Before removing and cleaning them, make sure the equipment is powered off and has stopped operating. Use a soft-bristled brush or compressed air to remove dust from the surface. After cleaning, place both items in a well-ventilated area and allow them to air-dry naturally. Ensure they are completely dry before reinstalling. If either component cannot be cleaned properly or is damaged, replace it promptly.

6.Installation Environment



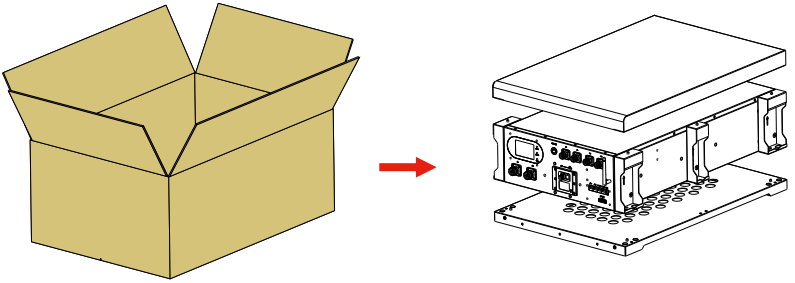




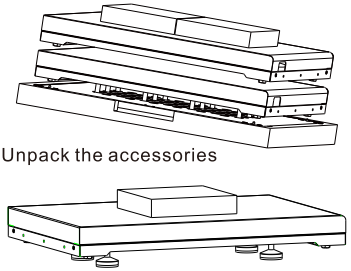


7.Installation Procedure

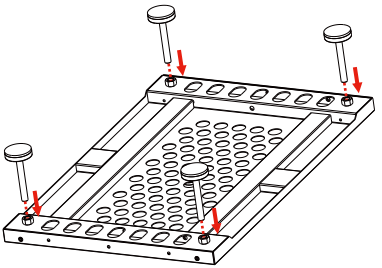
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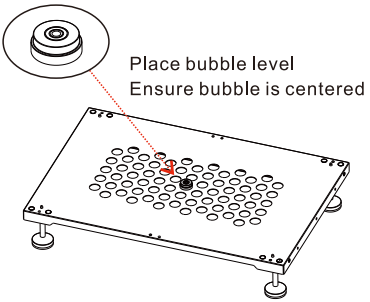
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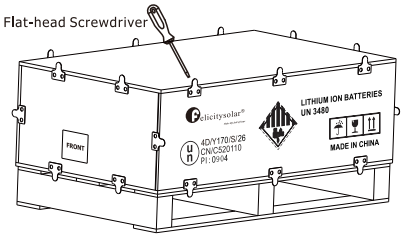
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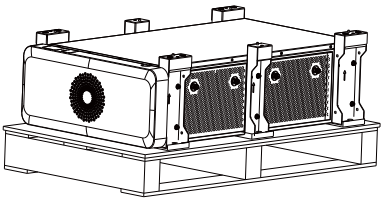
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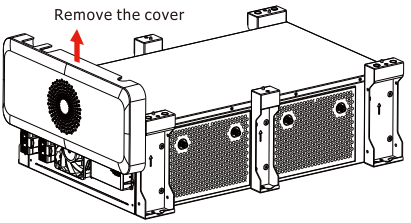
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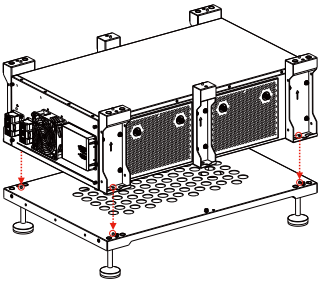
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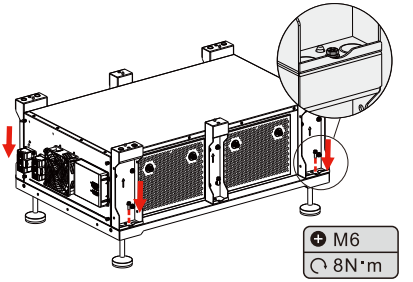
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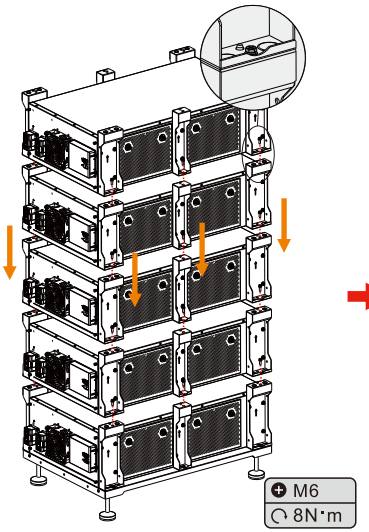
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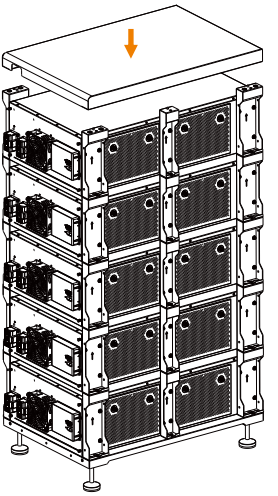


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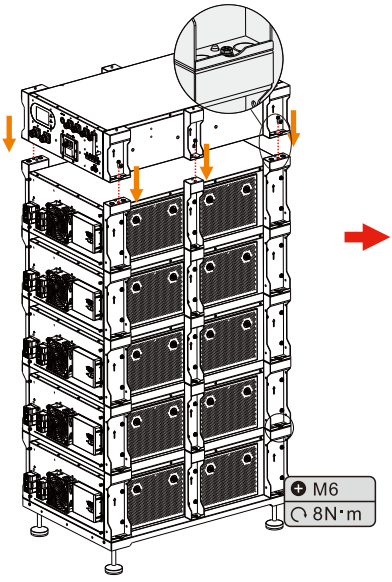


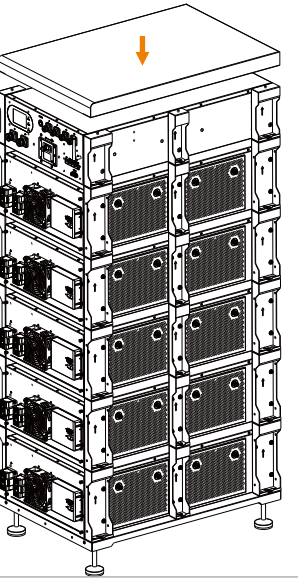
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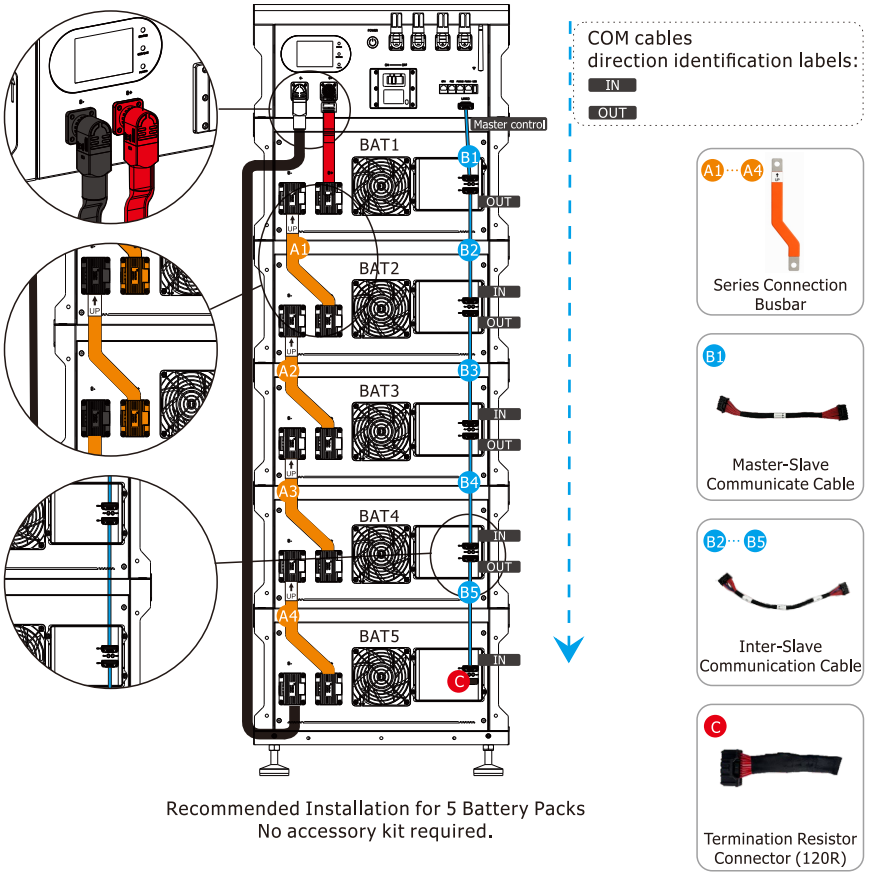


11





8.Wiring Procedure

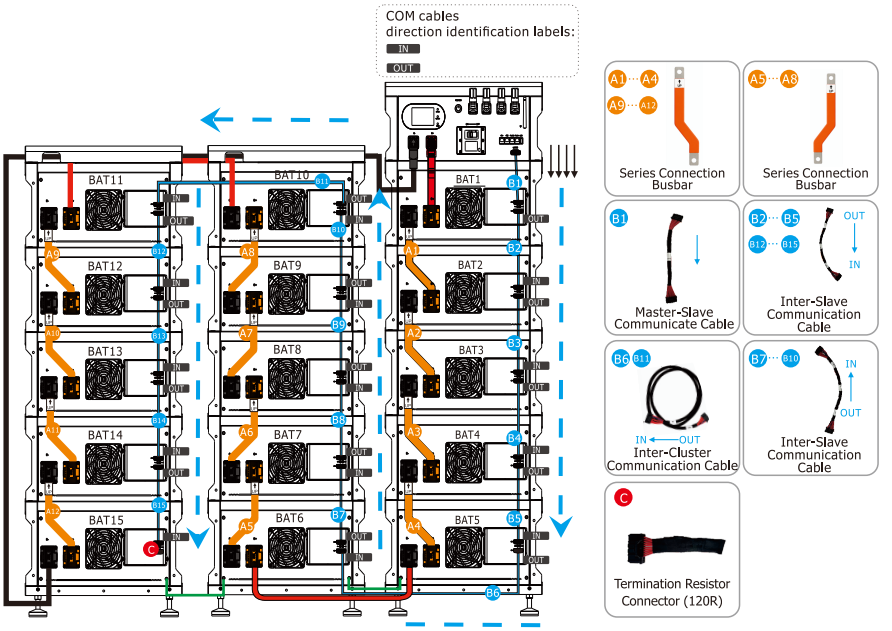


Recommended Installation for 5 Battery Packs
No accessory kit required.

9.LCD Display Icons

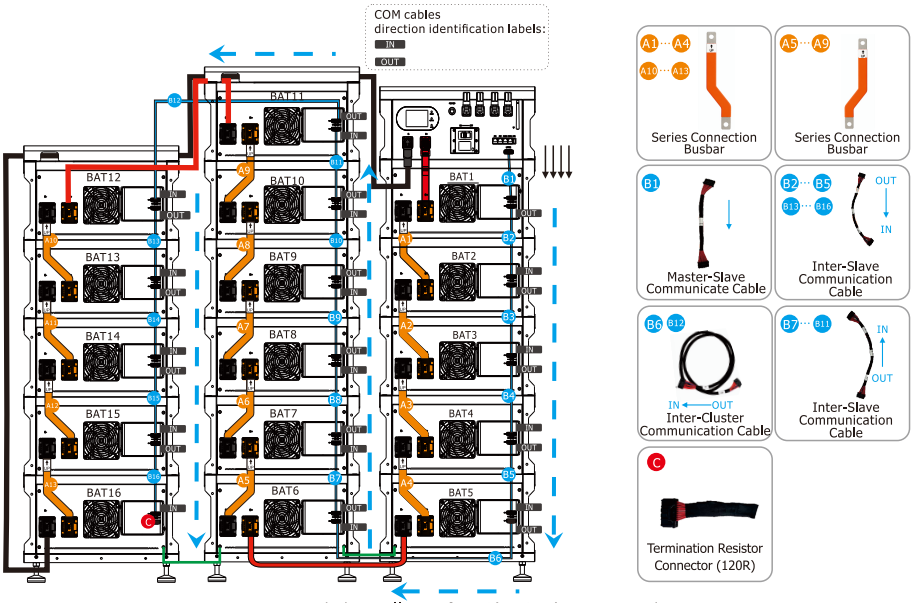
Object	Name	Description
LCD	LCD touch screen	Display the information of the battery.
STATUS	Status LED	Indicates the operating status of the battery, which is always on when running normally.
CHARGING	Charging LED	Indicates the charging status of the battery, flashing indicates charging.
ALARM	Alarm LED	Indicates the fault status of the battery, which lights up when the fault occurs.

10.Recommended Installation for 15 Battery Packs



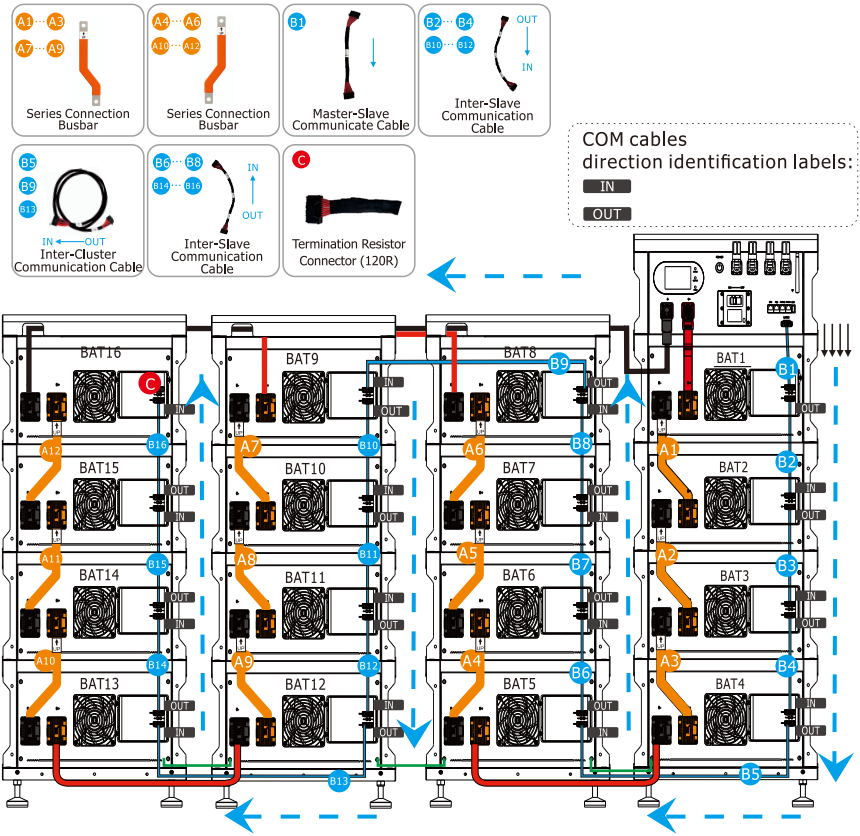
Recommended Installation for 15 Battery PacksRequires 1 Set of FLH48314UG1 Accessory Kit A

11.Recommended Installation for 16(5+6+5) Battery Packs



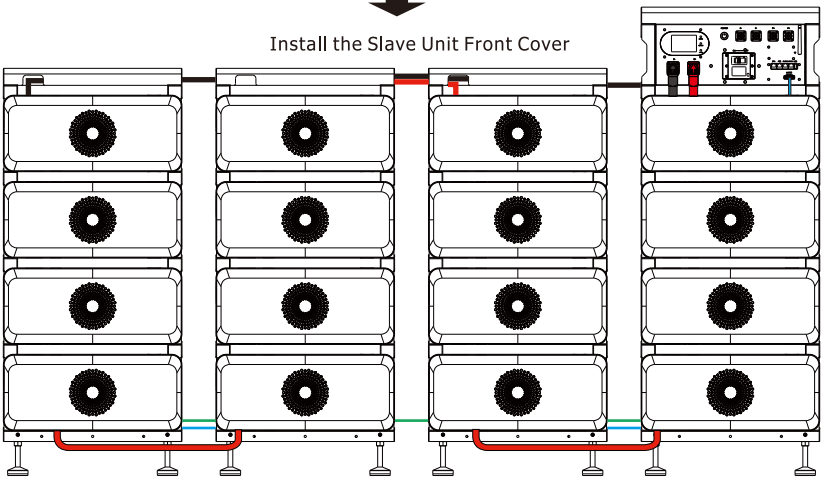
Recommended Installation for 16(5+6+5) Battery Packs
Generally it's not recommended to install more than 5 battery modules in a single cluster
Requires 1 Set of FLH48314UG1 Accessory Kit A

12.Recommended Installation for 16(4*4) Battery Packs

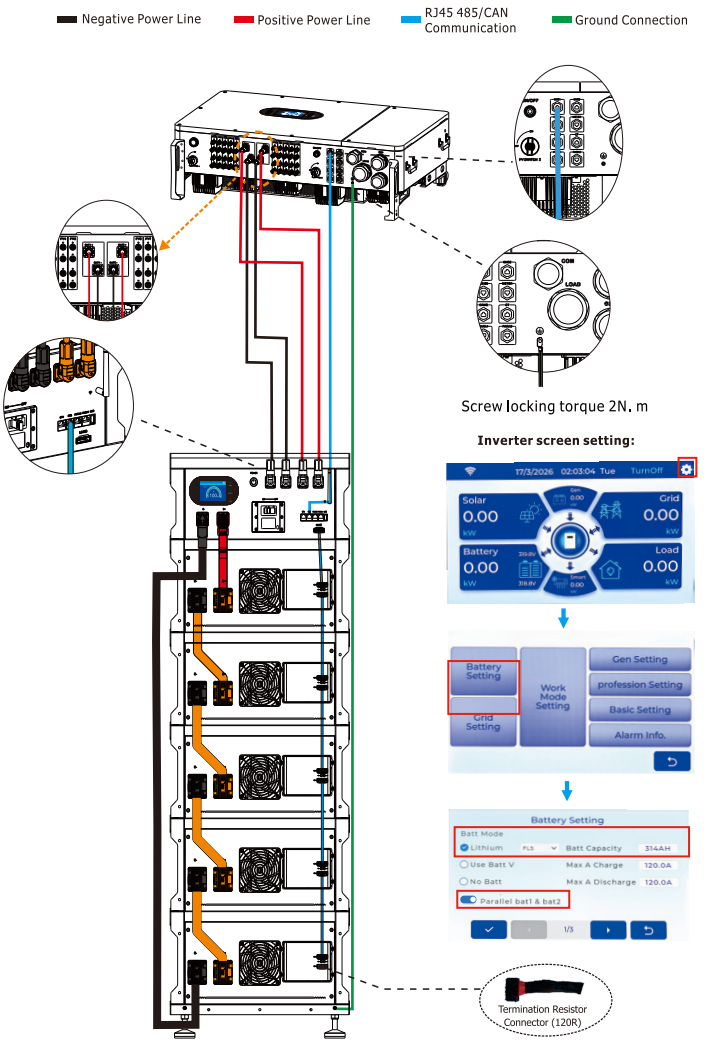


Recommended Installation for 16(4*4) Battery PacksRequires 1 Set of FLH48314UG1 Accessory Kit A+1 Set of FLH48314UG1 Accessory Kit B

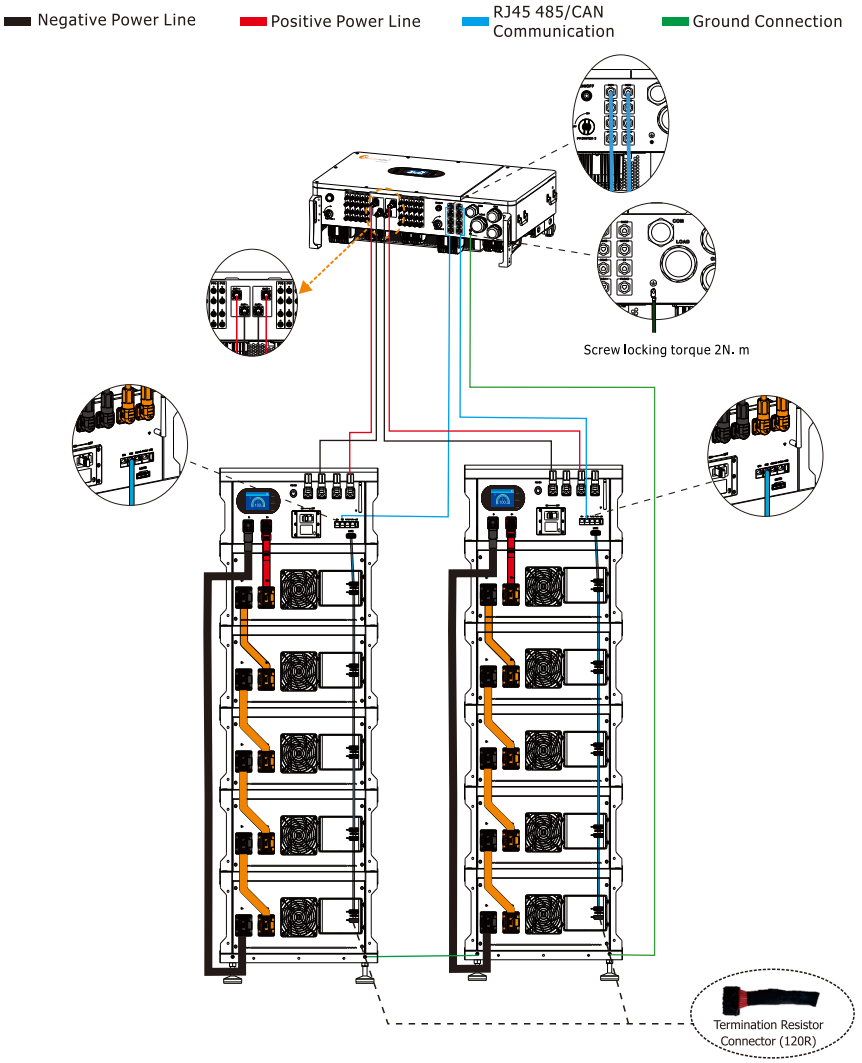
Install the Slave Unit Front Cover



13.System Wiring Schematic



Two-Cluster Connection to IVGM125KHP3G1





Three-Cluster Connection to IVGM125KHP3G1

Negative Power Line | Positive Power Line | RJ45 485/CAN Communication | Ground Connection

