

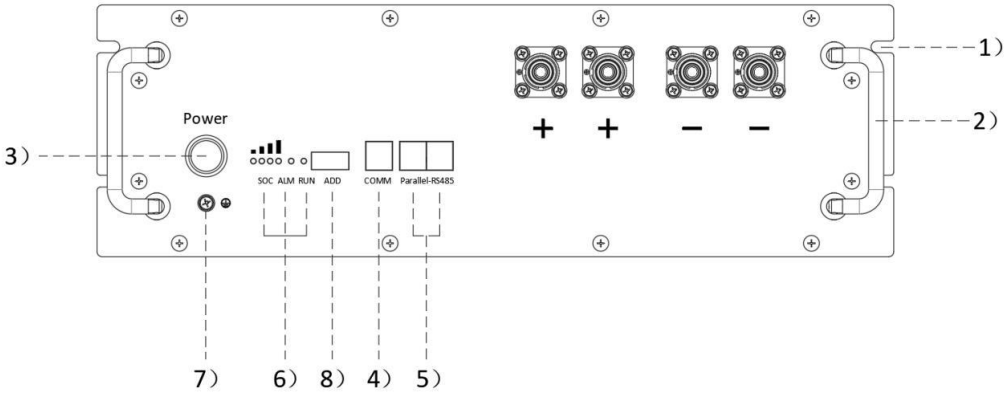


Installation Manual

VERSION 1.0

For
LFP Rack IEC Series / LFP Rack Series

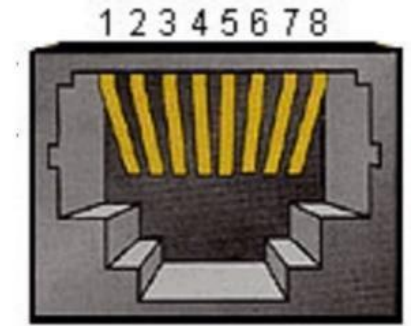
1. Front panel introduction



- 1) Chassis mounting ears:** For product installation and fixation, it can be installed in a 19-inch standard cabinet or an anti-vibration iron frame.
- 2) Chassis handle:** easy to carry, move and install.
- 3) Switch:** BMS switch, when it is turned off, the BMS can be put to sleep and the charge and discharge MOS transistors will be turned off at the same time; normal operation will be restored after it is turned on. Note: Please do not turn on the system switch when the product is not in use to avoid self-consuming the lithium battery.
- 4) CAN2.0B COMM to inverter BMS has battery pack upload CAN communicate function, Baud Rate 500K. CAN communicate interface adopt 8P8C network cable interface. CAN communicate with the inverter or CAN TEST through the CAN interface. When the battery string is connected, RS485 communication is used to connect the battery string. Finally, the data, status and information of the battery string are uploaded to the PCS through CAN communication. The BMS has the battery string upload RM485 communication function and the baud rate is 9600bps. The RM485 communication port adopt the 8P8C network cable port. When the battery string is connected, the battery string is connected through RS485 communication. Finally, the battery string data, status, and information are uploaded to the PCS or inverter through RM485 communication.**

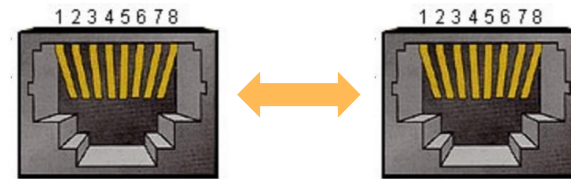
CAN and RS485 communication interface definition:

Pins	Definition
1、 8	RS485-B
2、 7	RS485-A
4	CAN-H
5	CAN-L
3、 6	GND



- 5) RS485 COMM to parallel battery**
The BMS has RS485 communication for multiple battery pack collections, and the baud rate is 19200bps. RS485 communication interface adopts 8P8C network cable interface.

RS485 pin interface definition (RJ45-8P8C)



Pins	Definition
1、 8	RS485-B
2、 7	RS485-A
4	CAN-H
5	CAN-L



6) LED indicators

System	Status	RUN	ALM	SOC				Definition
		•	•	•	•	•	•	
switch on	sleeping	off	off	off	off	off	off	All off
standby	normal	on	off	SOC indicators				standby
Charging	normal	on	off	SOC indicators				Flashing
	OC ALM	on	Flashing	SOC indicators				Flashing
	OV ALM	on	off	SOC indicators				
	OT ALM	on	Flashing	SOC indicators				
Discharging	normal	Flashing	off	SOC indicators				SOC indicators
	alarm	Flashing	Flashing					
	All Protections	off	on	off	off	off	off	Fully discharged or 48 hours no instructions, going into sleep mode
	UV Protections	off	off	off	off	off	off	Stop discharge

Red alarm indicator, normally off. And always on under fault conditions with beep.

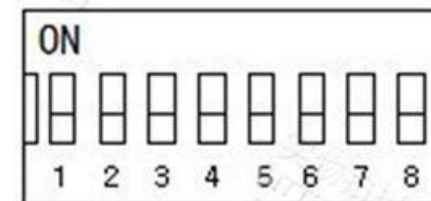
SOC indicator, four green LED lights to display the real-time SOC capacity of the lithium battery pack.

Status	charge				discharge			
SOC	L4•	L3•	L2•	L1•	L4•	L3•	L2•	L1•
0 ~ 25%	off	off	off	flashing	off	off	off	on
25 ~ 50%	off	off	flashing	on	off	off	on	on
50 ~ 75%	off	flashing	on	on	off	on	on	on
≥75%	flashing	on	on	on	on	on	on	on
RUN•	on				flashing			

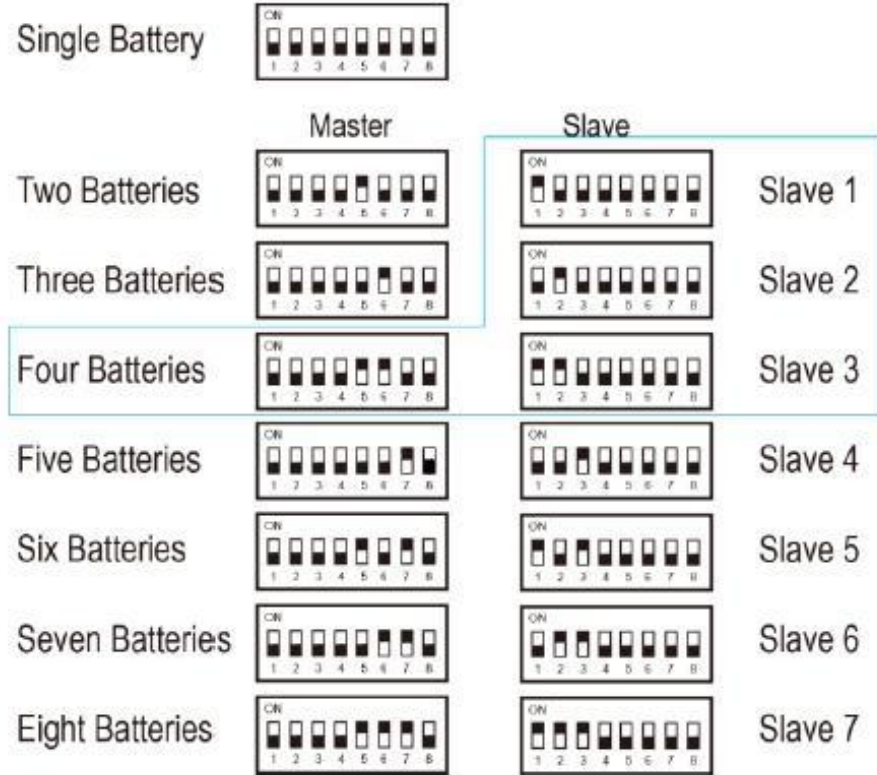
7) Grounding point.

8) DIP Switches

Parallel DIP switch definition: For multi-battery communication when the battery packs are connected in parallel, use the DIP switch to distinguish different pack addresses, and the hardware address can be set by the DIP switch on the panel below.



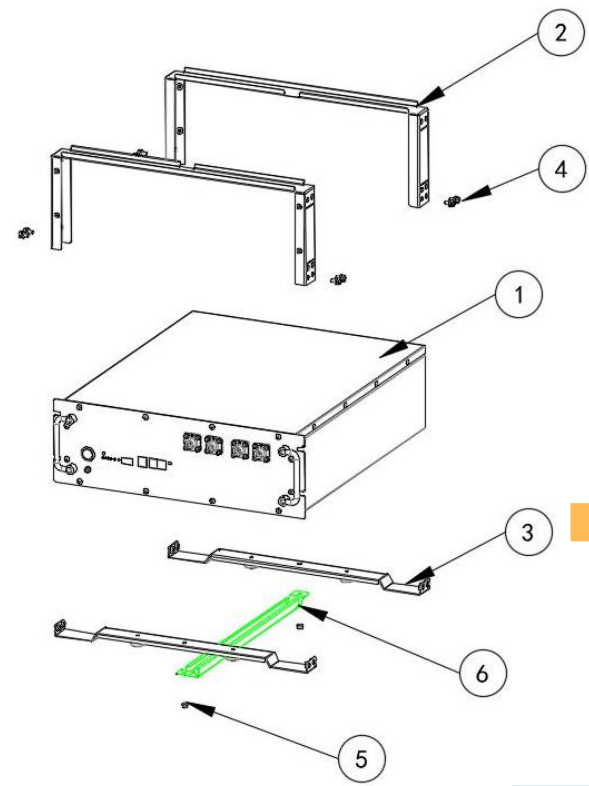
For details about dip switch Settings, see the following section.



For Example, blue frame is the settings for 4 batteries.

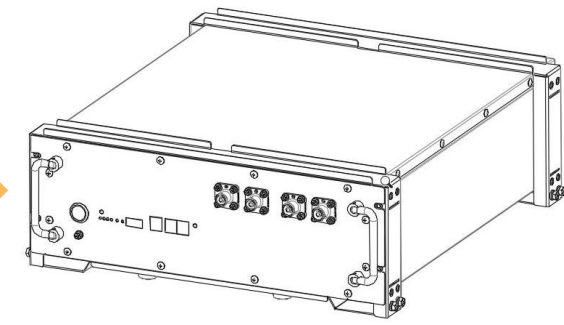
2. Installation procedure

2.1 ONE PACK



Exploded Views

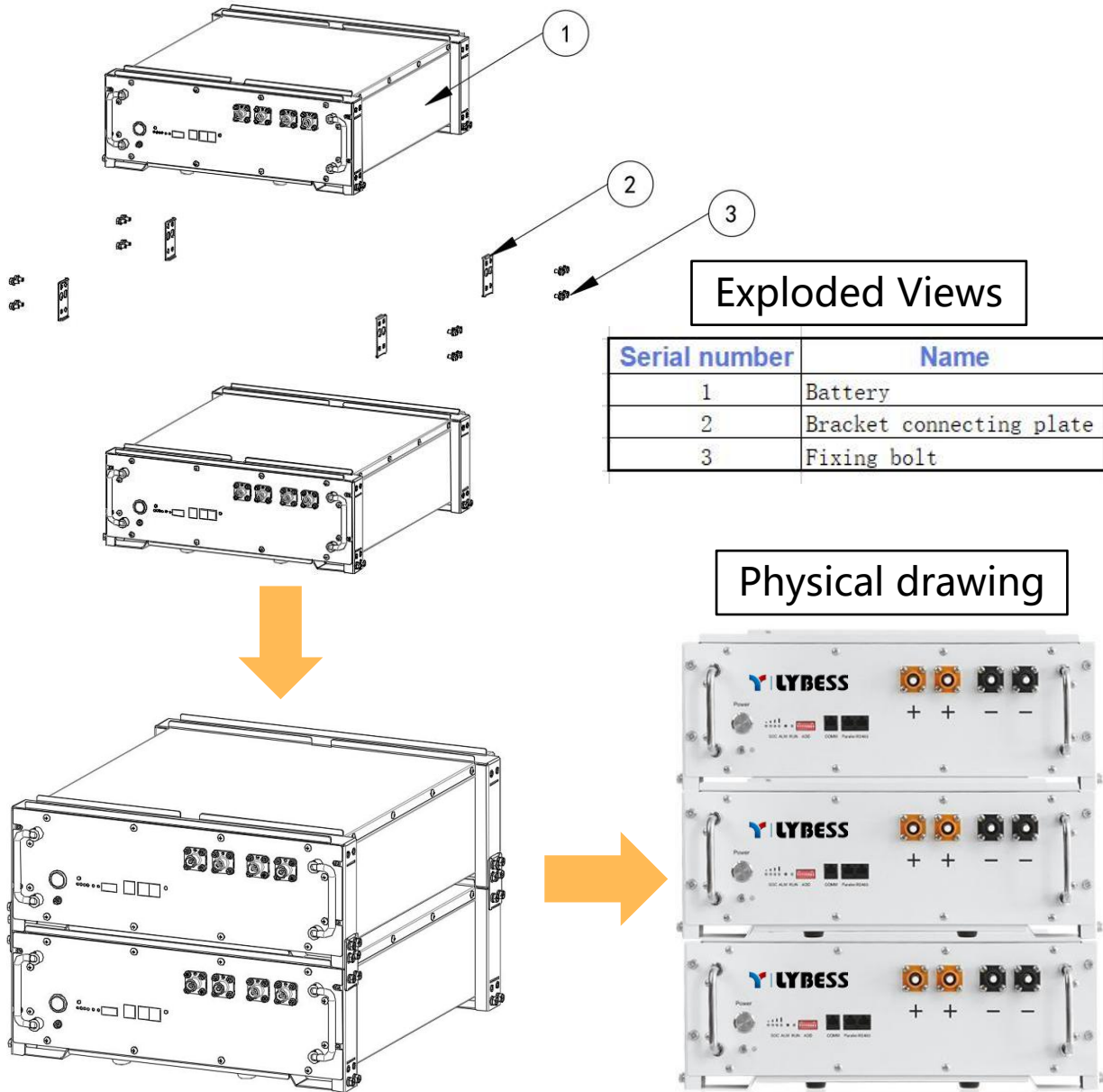
Serial number	Name
1	Battery
2	fixed mount 1
3	fixed mount 2
4	Fixing bolt
5	hexagon nuts with flange
6	Bracket connection rod



Physical drawing



2.2 MORE PACKS

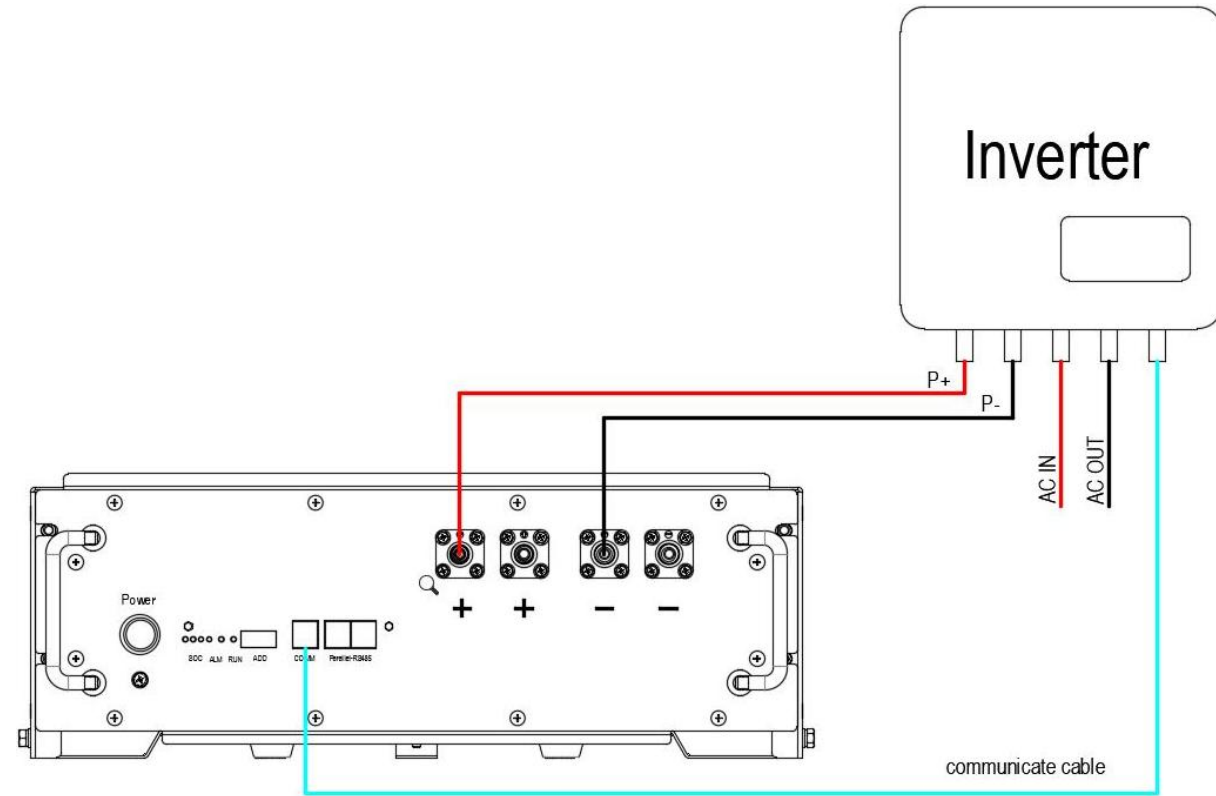


3. Connect to the inverter

Before connecting cables to the system, ensure that the DIP switch number is set according to the preceding section.

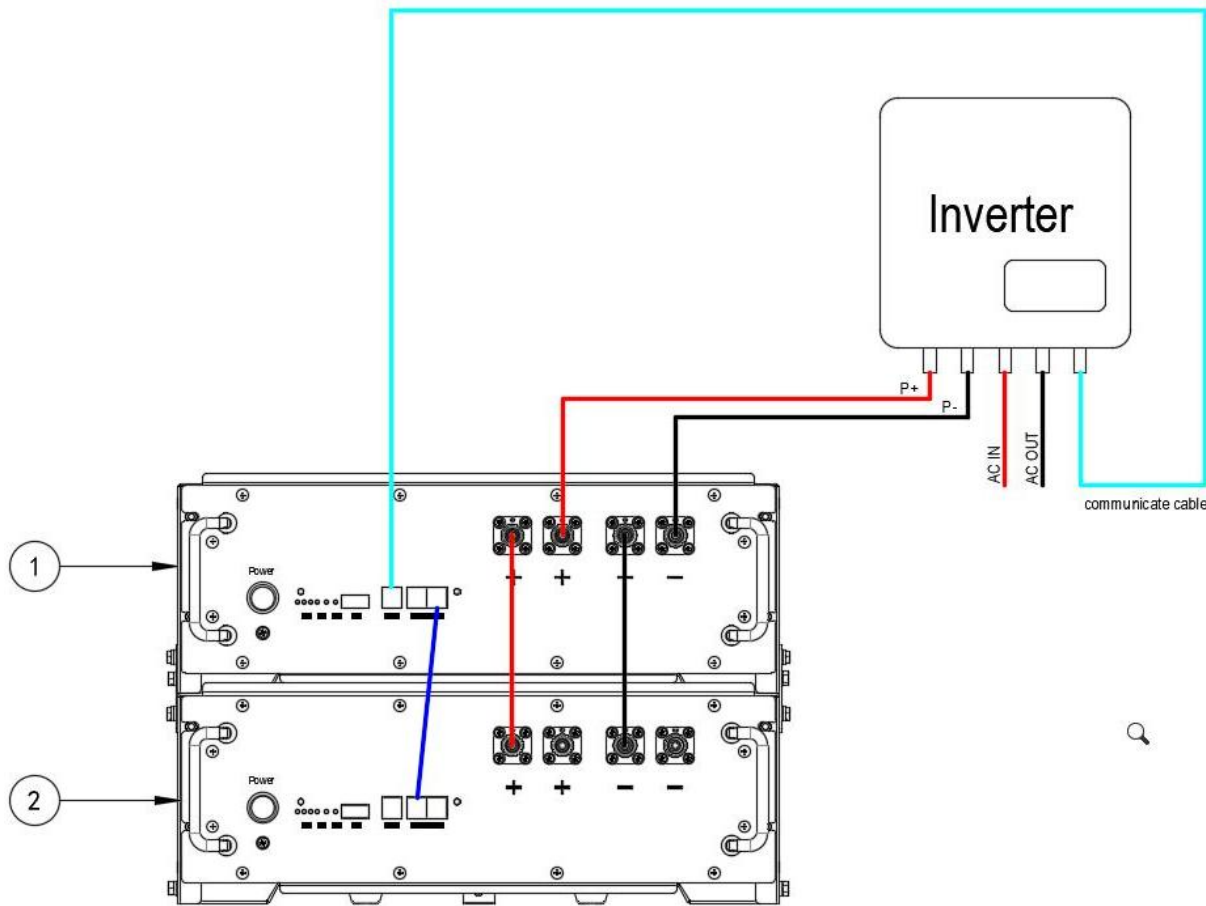
LFP Rack IEC Series

1pack---1 Inverter. Single mode



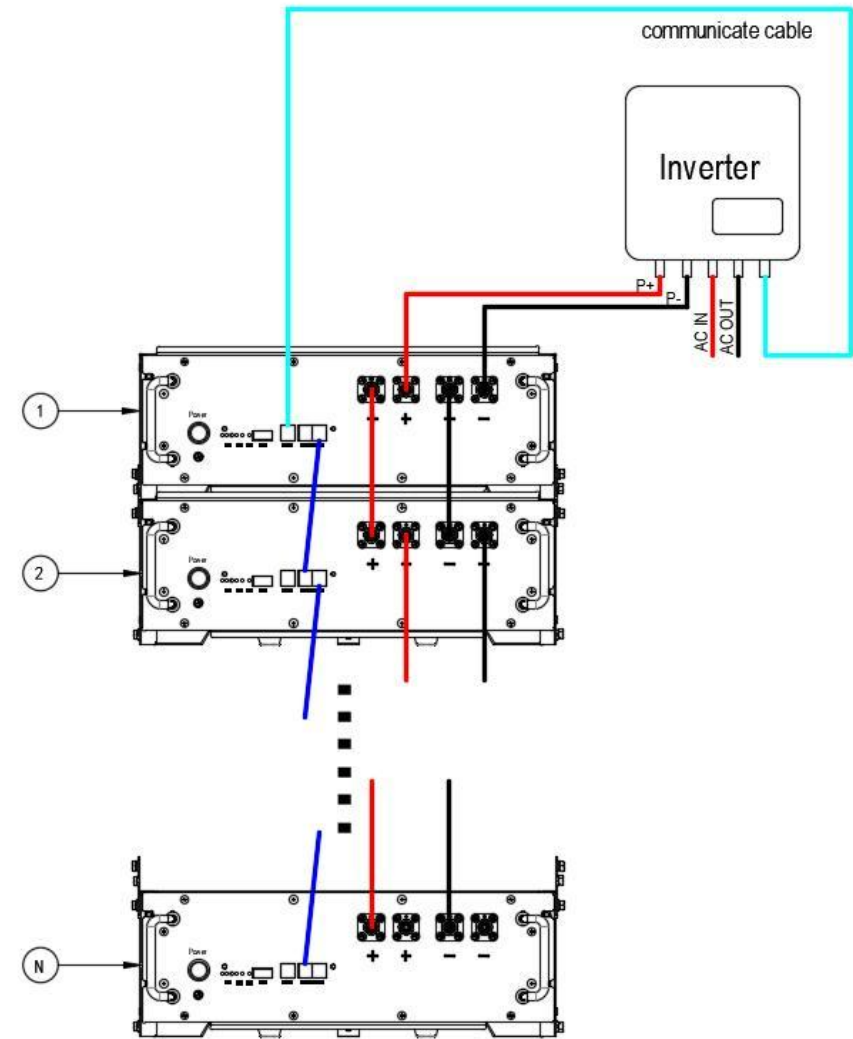
LFP Rack IEC Series

2pack---1 Inverter. Pack 1 is master ; pack 2 is slave



LFP Rack IEC Series

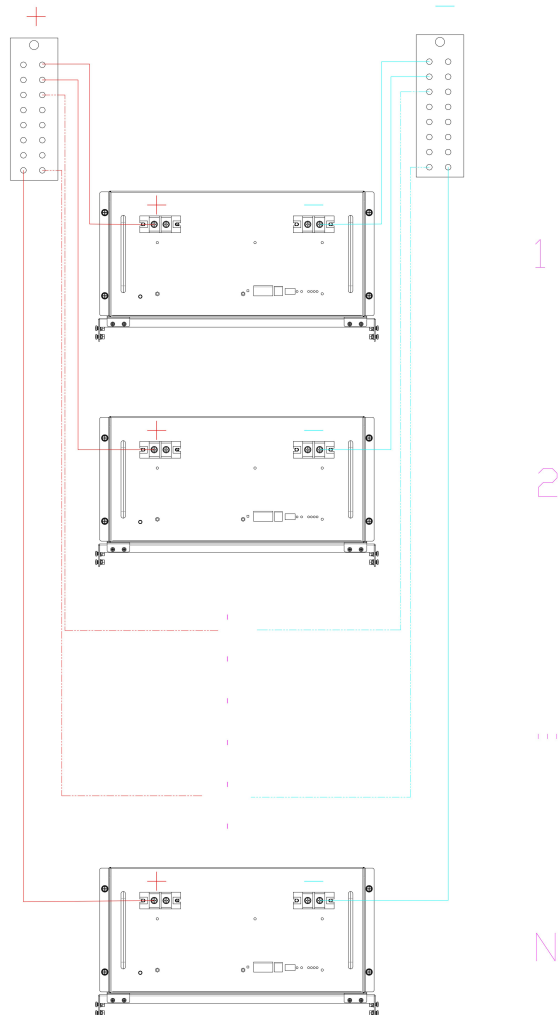
N(2 ≤ N ≤ 6) pack---1 Inverter. Pack 1 is master ; pack2-pack N is slave



LFP Rack Series

Npack---1 Inverter. Pack 1 is master ; pack2-pack N is slave

Please keep the parallel wiring harness consistent.



**For More Product Information,
Please Contact Us !**

E-mail: info@lybess.com

Website: www.lybess.com

Thank you for your reading. This Manual is only for the installation guide.
Please refer to the User Manual for the use and warning of the product.