

USER MANUAL

LV48100 Lithium Battery



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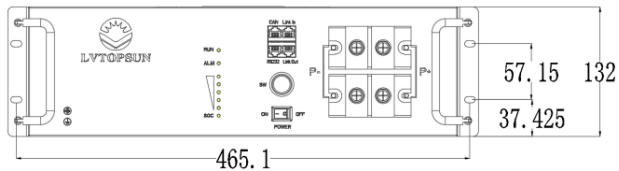
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1 Product Overview

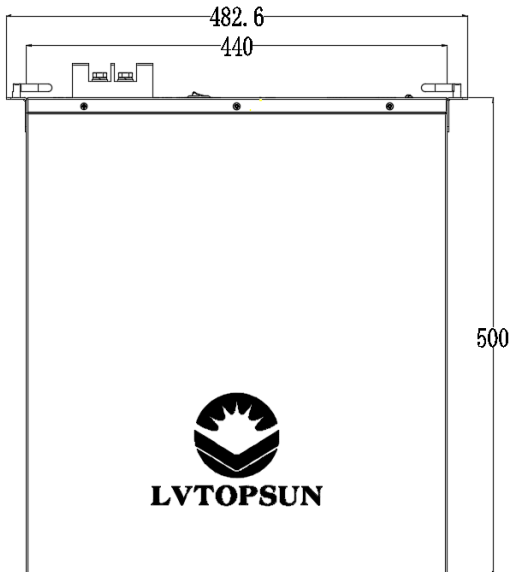
LV48100 is a 48V 100Ah Lithium battery that can be rack mounted or wall mounted, **LV48100 is not suitable for life-sustaining medical devices.**

1.1 Appearance

1.1.1 Rack mounted LV48100



1.1.2 Wall mounted LV48100



1.2 Button, LED & Communication Port

1.2.1 Switch ON/OFF

1、Switch ON

For 1 pc LV48100, switch ON POWER button, then long press (3 sec) SW button.
For multiple LV48100 connected in parallel, switch ON POWER buttons of all batteries, then long press (3 sec) SW button of master battery.

2、Switch OFF

Switch OFF all POWER button(s).

1.2.2 LED Definition

Note: Flash 1 - 0.25s ON / 3.75s OFF

Flash 2 - 0.5s ON / 0.5s OFF

Flash 3 - 0.5s ON / 1.5s OFF

SOC Status while charging

STATUS		CHARGE							
		L8 ●	L7 ●	L6 ●	L5 ●	L4 ●	L3 ●	L2 ●	L1 ●
SOC (%)	0~17	ON	OFF	OFF	OFF	OFF	OFF	OFF	Flash 2
	18~33			OFF	OFF	OFF	OFF	Flash 2	ON
	34~50			OFF	OFF	OFF	Flash 2	ON	ON
	51~66			OFF	OFF	Flash 2	ON	ON	ON
	67~83			OFF	Flash 2	ON	ON	ON	ON
	84~100			Flash 2	ON	ON	ON	ON	ON

SOC Status while discharging

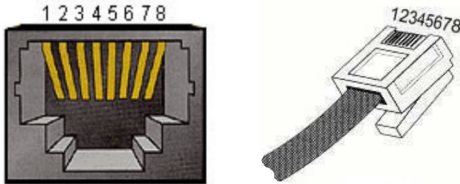
STATUS		DISCHARGE							
		L8 ●	L7 ●	L6 ●	L5 ●	L4 ●	L3 ●	L2 ●	L1 ●
SOC (%)	0~17	Flash 3	OFF	OFF	OFF	OFF	OFF	OFF	ON
	18~33			OFF	OFF	OFF	OFF	ON	ON
	34~50			OFF	OFF	OFF	ON	ON	ON
	51~66			OFF	OFF	ON	ON	ON	ON
	67~83			OFF	ON	ON	ON	ON	ON
	84~100			ON	ON	ON	ON	ON	ON

Work Status

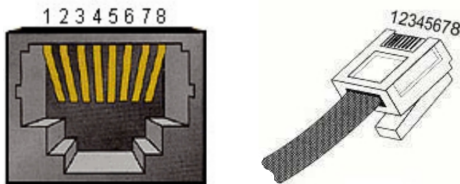
STATUS		RUN	ALM	SOC						DESCRIPTION
		L8 ●	L7 ●	L6 ●	L5 ●	L4 ●	L3 ●	L2 ●	L1 ●	
Shutdown		OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	
Standby		Flash 1	OFF	According to SOC						
Charge	Normal	ON	OFF	According to SOC						
	Over volt	ON	OFF	ON	ON	ON	ON	ON	ON	Switch to standby mode
	Protection	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Stop charging
Discharge	Normal	Flash 3	OFF	According to SOC						
	Under volt	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	Stop discharging
	Protection	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Stop discharging
Faulty		OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	Stop charging and discharging

1.2.3 Communication Port Pin Definition

1.2.3.1 CAN/RS485 to PCS

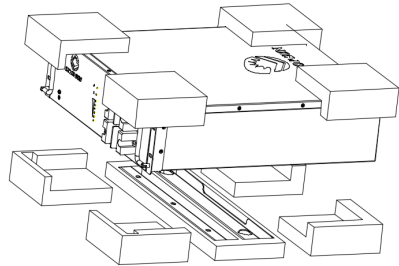
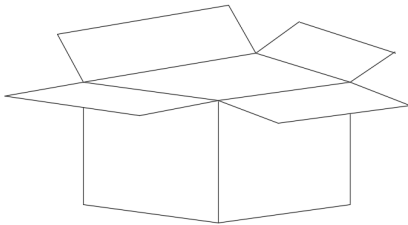
Port definitions	RJ45 Pin	Function
	1	RS485-B
	2	RS485-A
	3	GND
	4	CAN-H
	5	CAN-L
	6	NC
	7	RS485-A
	8	RS485-B

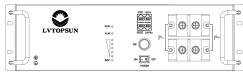




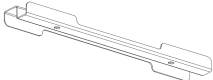
1.2.3.2 RS232 to PC



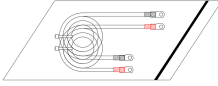
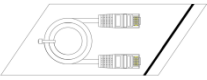
Port definitions	RJ45 Pin	Function
	1	RS232-TX
	2	GND
	3	RS232-RX
	4	NC
	5	NC
	6	NC
	7	NC
	8	NC

2 Installation Guide

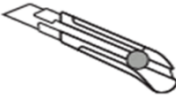
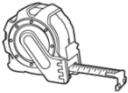
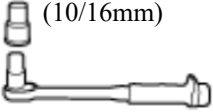






2.1 Checking Deliverables



NO.	Pictures	Quantity	Description
1		1 pc	Battery
2		4 pcs	Battery hanging bolt
3		4 pcs	Battery hanger
4		1 pc	Drill hole cardboard
5		1 pc	Top Wall Bracket
6		1 pc	Bottom Wall Bracket

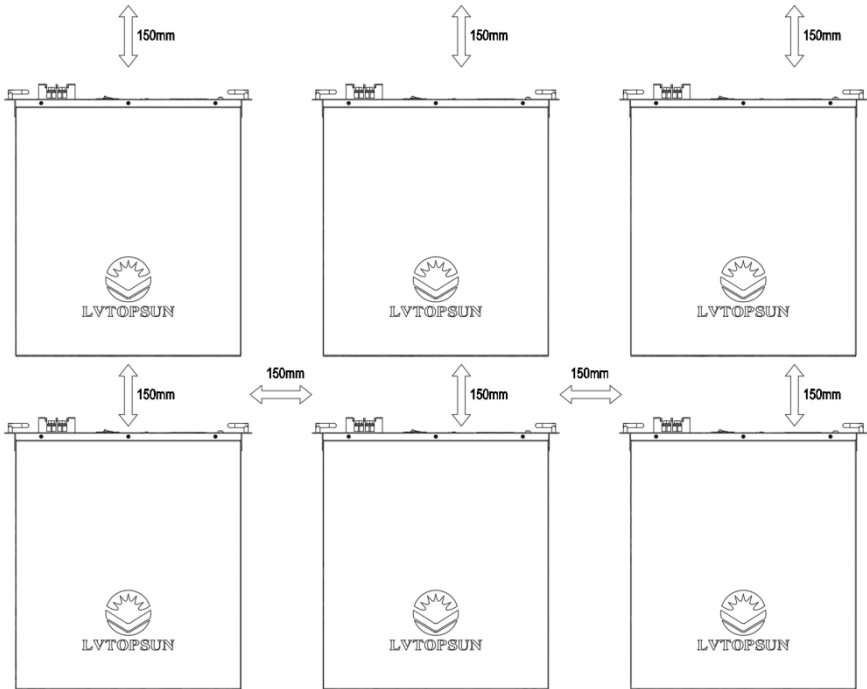
7		4 pcs	Expansion Bolt
8		2 pcs	Bottom Bracket Bolt
9		1 pair	Power cable
10		1 pc	Comm cable

2.2 Tools

Tools			
Installation	Knife 	Measuring tape 	Socket wrench (10/16mm) 
	Hammer 	Cross Screwdriver 	Hammer drill 
Protection	ESD gloves 	Safety goggles 	Safety Shoes 

2.3 Installation Instructions

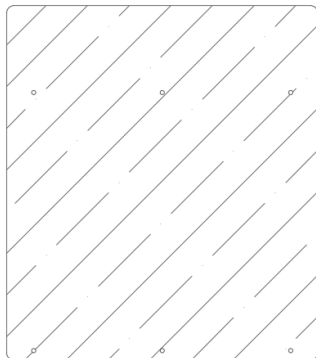
Minimum mounting distance requirement: (Wall Mounted)



2.3.1 Installation Step

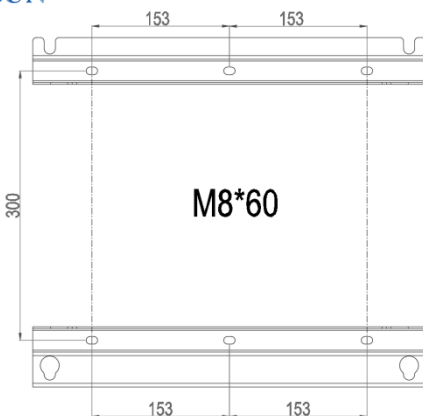
Step 1

Drill holes in the wall according to cardboard.

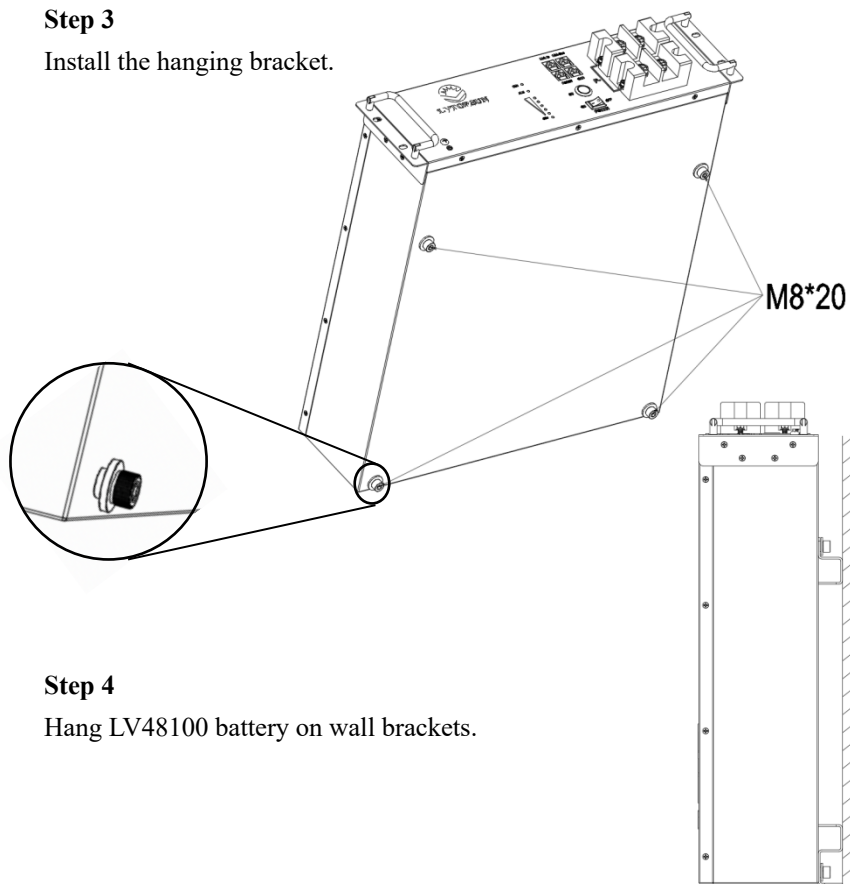


Step 2

Fix top & bottom wall brackets to the wall.

**Step 3**

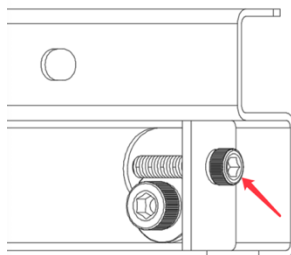
Install the hanging bracket.

**Step 4**

Hang LV48100 battery on wall brackets.

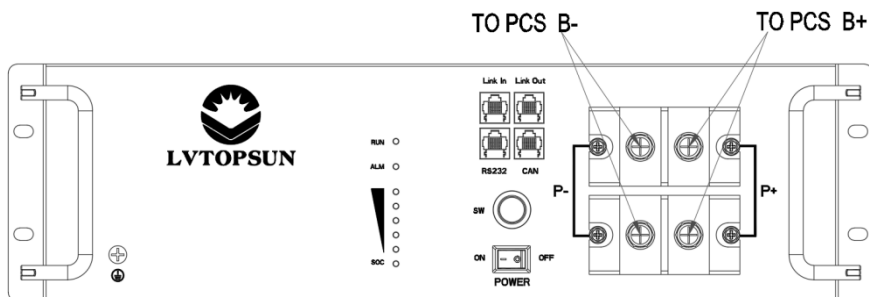
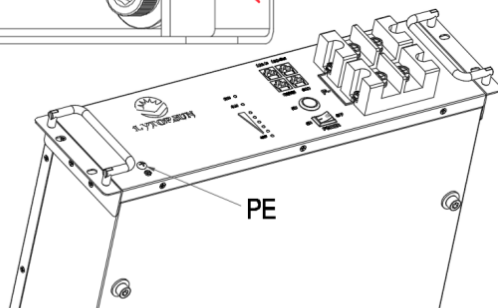
Step 5

Install 2 pcs bottom bracket bolt.



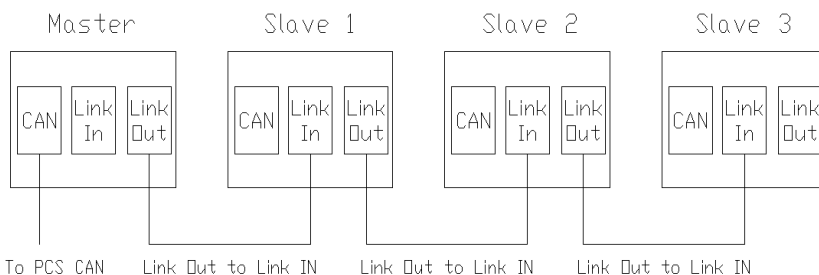
Step 6

Connect PE cable & power cable.



Step 7

Connect communication cable.



Step 8

Refer to the following diagram when multiple batteries are connected in parallel:

