

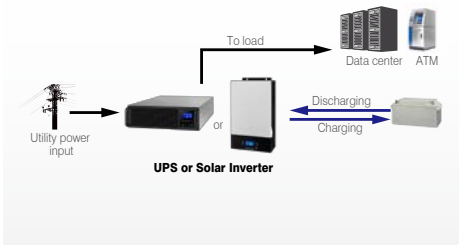
48V 50Ah & 100Ah Lithium battery rack & system



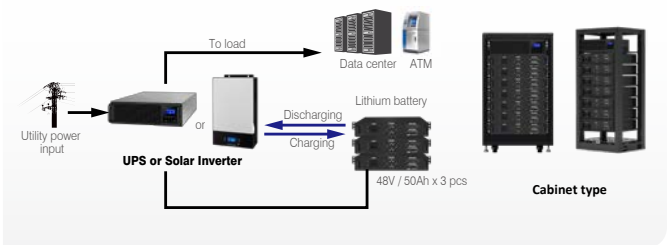
Front & back access are both available.

- Modular design
- Life cycle : 8000 cycles at 25°C, 60% DoD
- 1.5C continuous discharging current
- High surge discharging current up to 2C
- Wide operating voltage range from 34.5 to 52.5Vdc
- Flexible front and Rear installation
- Communication protocols: RS485
- Easy capacity extension by paralleled
- Aluminum case LiFeO4 for cells, more safety and stable

Operation with Lead acid Battery



Operation with Lithium Battery



• Comparison to others

	Other Brands	LIO 4805 Battery	Remark
Rating	48V / 50AH	48V / 50AH	
Cell Category	Pouch LFP	Aluminum case LFP cell	Aluminum case cell use laser welding, airtightness, heat dissipation and calendar life better than pouch cell
Charge Voltage	52.5~53.5V	52.5~53.5V	
Discharge Voltage	45~53.5V	37.5~53.5V	Wider operating voltage range
Charge Current	1C max	1C max	
Discharge Current	50A Continuous 100A for 15s	75A Continuous 150A for 15s	LIO 4805 even can support continuous 150A current in special case
Operation temperature	0~50°C charge, -10~50°C discharge	0~50°C charge, -10~50°C discharge	
Power Switch	1P power switch	2P air switch to cut off positive and negative connection	LIO 4805 use 2P switch to cut off the connection of positive and negative cell to BMS. It would not product electric arc which is more safely and meet the latest UL1973 requirment
Wake up Switch	Include	Include	
ID Switch	Include	Include	
LED display	Include	Include	
Parallel function	Include	Include	LIO 4805 can parallel with different SOC and balancing the Batteries
Cycle Life (60% DoD)	6000 cycles in 25°C	8000 cycles in 25°C	

• Fast Charging

2 hours for LIO4810 vs 8 hours for 100Ah lead acid battery

• Save Foot Print

LIO4810 is half size than lead acid battery 100Ah x 4 pcs

• High Reliability

LiFePO4 Lithium-ion cell made by NASDAQ listed tier 1 manufacturer

Wide range Inverter & UPS compatible with LIO 4805 & LIO 4810:



Rack Mounted Lithium Battery Pack Selection Guide

MODEL	LIO 4805	LIO 4810
CAPACITY	2400Wh	4800Wh
PARAMETERS		
Nominal Voltage	48 VDC	
Full Charge Voltage (FC)	52.5V	
Full Discharge Voltage (FD)	34.5V	
Typical Capacity	50Ah	100Ah
Max Continuous Discharging Current	75A	150A
Max Peak Discharging Current	100A	180A
Battery Connector Max current	75A	75A+75A
Protection	BMS, Breaker	
Charge Voltage	52.5 ± 0.1V	
Maximum Charge Current	50A (1C)	100 A (1C)
Standard Charge Method	0.2C CC (Constant current) charge to FC, CV (Constant voltage FC) charge till charge current decline to <0.05C	
Inner Resistance	<20m ohm	
PHYSICAL		
Dimension, D x W x H (mm)	676 x 438 x 86	676 x 438 x 133
Net Weight (kgs)	30	57
INDICATORS		
LED	Battery Status, Battery level, Battery fault, Alarm	
ENVIRONMENT		
Operating Environment	Charge : 0°C~50 °C	
	Discharge: 0°C~50 °C	
Storage Temperature Range °C (At 50% SOC and specified temp, recoverable capacity in % vs time / 50%)	< 18 months: -20°C~25 °C	
	< 3 months: 25°C~45 °C	
	< 1 months: 45°C~60 °C	
	20°C ± 5 °C is the recommended storage temperature	
MANAGEMENT		
Communication	RS485 port (RJ45), extension port (RJ11)	
Certifications	UL1973, UN38.3, IEC 62619	
Design Life	>10 years @ 25 °c	
Lifecycle	> 4500 @ 25 °C	

Product specifications are subject to change without further notice