锂跃新能源
LiYue New Energy

48100/200/300/400/500-CD01

Product Features

- Applied to home energy storage, communication base station, back-up power.
- CAN interface for communication with inverter.
- Double RS485 interface, support parallel communication.
- Automatic pre-charge circuit.
- Intelligent electricity calculation, data storage, protection of over-current, over-charge, over-discharge over-temp,   short circuit and insufficient electricity.
- Compatible with battery protocols (eg. PYLON) and leading inverters (eg. Goodwe、Sunyink、Growatt).
- The 8-bit dial switch can distinguish the master and slave addresses. The master monitors up to 15 slave batteries.
- Excellent current limiting design, support battery parallel for higher capacity requirements.
- Long cycle life, wide working temp range, can replace lead-acid battery.
- Single module can continuously discharge 100A.
- LCD display (Options,If necessary, remarks shall be made when placing an order)
- Capacity is optional from 100Ah to 500Ah

Technical Specifications

GENERAL INFORMATION					
Specifications	LD-48100-CD01	LD-48100-CD02	LD-48100-CD03	LD-48100-CD04	LD-48100-CD05
Battery Type	LiFePO4				
Nominal Voltage	48 VDC				
Capacity（Ah）	100	200	300	400	500
Usable Capacity@C2, 25°C（Wh）	4800	9600	14400	19200	24000
Operating Voltage Range	39VDC – 54 V DC				
Charge Temperature	0℃ to 60℃@65±20% Relative Humidity				
Discharge Temperature	-20℃ to 60℃@65±20% Relative Humidity				
Cycle Life @ 100% DoD	> 3500 cycles (4800Wh @C2, 25℃)				
Cycle Life @ 80% DoD	> 5000 cycles (3840Wh @C2, 25℃)				
Cycle Life @ 70% DoD	> 7000 cycles (3360Wh @C2, 25℃)				

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Dimensions (mm) (W x D x H)	550*450*283	550*450*465	550*450*647	550*450*829	550*450*1011
Weight (kg)	56	106	156	206	256
Max Charge Current (A)(25℃)	50	100	150	200	
Max Discharge Current (A)(25℃)	100	200			

Protection board parameters

Over-charge protection	3.65V
Over-charge release	3.40V
Under-discharge protection	2.60V
Under-discharge release	2.80V
Over-current protection	110A
Over-current delay	10 S
Charging over-temperature protection	55℃
Charging under-temperature protection	0℃
Discharge over-temperature protection	60℃
Discharge under-temperature protection	-20℃
Balance current	≤200mA
Balance Condition	≥3.35V, voltage difference 50mV

Other parameters

Self-discharge Rate	< 3% per month
IP-Protection	IP51
Safety certification	UN38.3
Communication port with inverter	CAN or RS485

Note: The product parameters in the above table will be upgraded and optimized in the future, and will not be notified separately
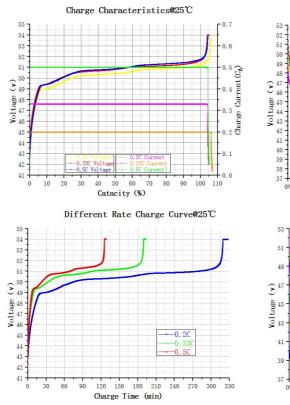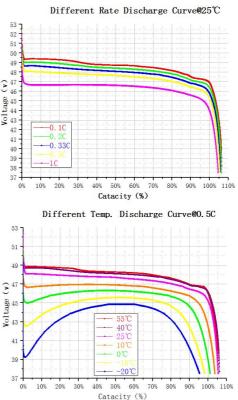
Appearance diagram：

Performance Curve

Charge Characteristics@25℃

Different Rate Discharge Curve@25℃

Different Rate Charge Curve@25℃

Different Temp. Discharge Curve@0.5C

Precautions for use

- Before using the product, please read the product specification carefully to understand the use parameters and application scope of the product; the company does not assume any responsibility for product damage or indirect losses caused by improper use of the product, over-range use, etc.

- The battery pack can only be connected in parallel, not in series；

- Do not short-circuit battery；

- Forbid to reverse the positive and negative pole；

- Prohibit use beyond the current range；

- Forbid to use battery pack over 60℃,otherwise, the battery pack will overheat, which will affect battery performance and shorten battery life；

- Long-term storage,check the power in time at least every 3 months. When the battery power is less than 10%, please charge it to more than 30%(soc≥30%）in time；

- 15~40℃ charging temperature is suggested, which is beneficial to have better battery performance；

- Forbid to throw the battery pack into fire or heat it；

- It is forbidden to directly immerse,the battery in water, and it is forbidden to wash the outside；

- If there is a problem, please contact the manufacturer in time, and it is forbidden to disassemble the battery pack without permission；

- Manufacturer reserve the right to alter or amend the design, model and specification without prior notice.