



# Lithium Battery Series

## LFP12-100(12V100Ah)



VOZ lithium series batteries provide superior performance, capacities and reliability. Using state of high power cell technology, the lithium series is designed for environmentally sensitive areas that require enhanced cycle life capabilities in commercial.

VOZ lithium batteries are widely used in industrial, residential, commercial and private applications. The maintenance free construction and advanced design features makes the lithium series the definitive choice for a wide variety of markets. Like solar and renewable energy storage, electric vehicle, golf cart and industrial equipment, floor machines, forklifts, aerial lifts, and robotics; marine, RV, and no-idle solution; Mobility and Medical Equipment; Telecom, Broadband and Cable TV; UPS systems



### Applications



### BATTERY SPECIFICATIONS

Battery type-Chemistry	LiFePO4
Nominal Voltage	12.8 V
Nominal Capacity	100 Ah
Energy Density	1280 Wh
Dimensions(LxWxH)	330*171*215 mm
Weight	12.5 KGS
Terminal Type	T16
Terminal Torque	8.5 NM
Case Material	ABS
BMS build-in	Yes
Internal Resistance	<35 mΩ
Efficiency – round trip	>99.5 %
Self Discharge per Month	<3 %
Max parallel connectors	10 Pcs
Series connections	Max 4 pcs
Cycle life (1C, 25°C@80% DOD)	>4000 Cycles
Discharge Temperature	(- 23 to 65) °C
Charge Temperature	(- 3 to 65) °C
Storage Temperature	(- 20 to 45) °C
Bluetooth(App)	Optional
LCD Screen	Optional
Heating function	Optional

Voltage Window	10.8-14.6 V
Recommend Charge Voltage	14.6 ±0.20V
Max Charge Voltage	14.6 ±0.20V
Recommend Charge current	25 A
Max Continuous Current	50 A
Recommend Discharge voltage	11.2 ±0.20V
Max Discharging Voltage	10.8 ±0.20V
Max Continuous Discharge current	100 A
Peak Discharge Current	120 A±3S

### BMS CHARACTERISTICS

Primary Charging Protection	Current :80A	Delay Time: 1000ms
Second Charging Protection	Current :100A	Delay Time: 500ms
Primary Discharging Protection	Current :110A	Delay Time: 5s ±2s
Second Discharging Protection	Current :120A	Delay Time: 5s ±2s
Over charge Voltage protection	Voltage :14.6-14.8V	Delay Time: 500ms
Over Discharge Voltage protection	Voltage :10.8V	Delay Time: 500ms
Temperature Protection	PCB temperature≥95 °C	
	Recover≤85 °C	
Communication Port	Major RS485/Bluetooth	



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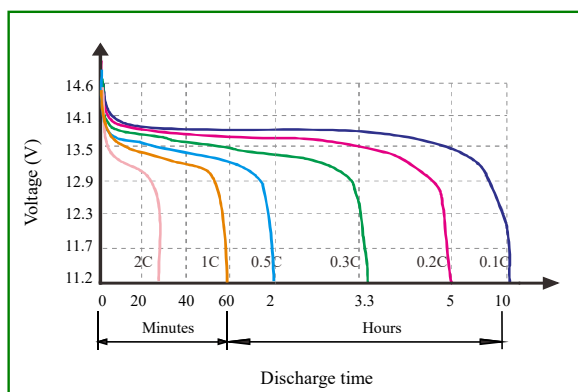
### Constant Current Discharge Data (Amperes @ 25°C)

Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut off voltage (42.0V)	100A	50A	33.4A	25A	20A	10A	5A

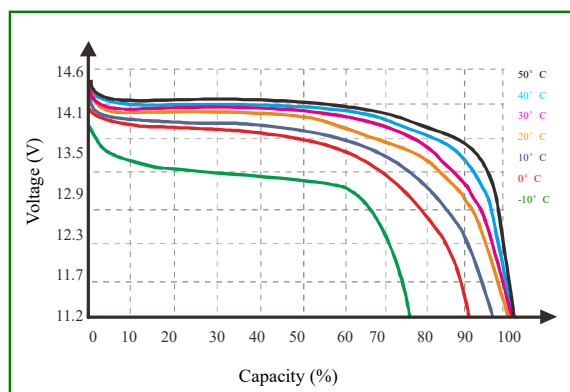
### Constant Power Discharge Data (Watts @ 25°C)

Discharge Time	1h	2h	3h	4h	5h	10h	20h
Cut off voltage (42.0V)	1280W	640W	426W	320W	256W	128W	64W

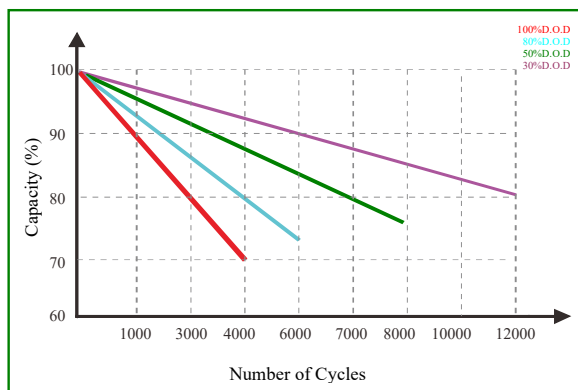
Discharge characteristics (25°C)



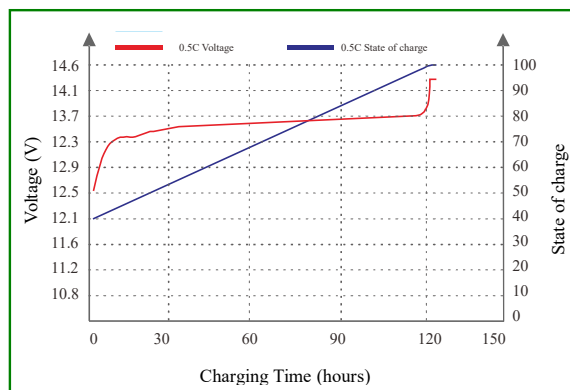
State of Charge Curve (0.5C, 25°C)



Different DOD Discharge cycle life Curve 0.2C 25°C



Different Temperature Discharge Curve (0.5C)



Note 1: Please always refer to the latest edition of our technical manual that published on our website to ensure safe and efficient operation.

Note 2: When make parallel connection, please full discharge batteries, then recharge after parallel connected; when series connect, please keep batteries with same remain capacity/

Note 3: Parallel connection is only for longer backup time, not for larger output power.