

NLCD-10012 12V 100Ah

LiFePO₄ Lithium Battery

Longer Cycle Life: Offers up to 15 times longer cycle life and 5 times longer float/calendar life than lead acid battery.

Lighter Weight: About 40% weight of a comparable lead acid battery, save up to 60% in weight.

Quick Charge: Short charge time compared with lead acid battery.

Low Self-Discharge: Lower self-discharge compared with lead acid battery, longer storage time without recharging.

Superior Safety: Multi-protection methods built inside to protect the battery from overcharge, over discharge and short circuit situation.

High Efficient: Higher round-trip energy efficiency of the average (92%) than lead acid battery 80% (discharge from 100% to 0% and back to 100% charged).



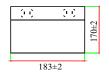
LCD

Specifications

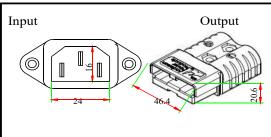
Nominal voltage		12V
Nominal capacity		100Ah 280±2mm
Dimensions	Length	(11.02inch) 183±2mm
	Width	(7.20inch) 170±2mm
	Height	(6.69inch)
	Total height	170±2mm (6.69inch)
Approx. weight		12.55kg (27.5lbs)±4%

Outer dimensions (mm)





Terminal type (mm)



Characteristics

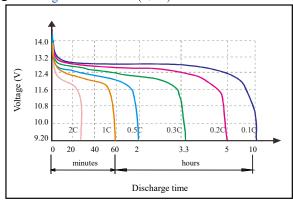
Characteristics			
(mm)	Rated Voltage	12.8V	
	Rated Capacity (C5)	100Ah@25°C	
Electrical Parameters (25°C)	Energy	1280Wh	
	Months Self Discharge	<3%	
	Charge Efficiency	99.5%@ 0.2C	
	Discharge Efficiency	96-99%@ 1C	
Terminal type		T16	
Internal resistance (Fully charged, 25°C)		≤14mΩ	
Cycle life		>3000 cycles @ 0.2C 100%D.O.D	
Capacity affected by temperature	40°C	101%	
	25°C	100%	
	0°C	90%	
	-10°C	75%	
Nominal operating temperature		25°C± 3°C (77°F± 5°F)	
Operating	Discharge	- 20°C~ 60°C (-4°F ~ 140°F)	
temperature range	Charge	0°C~ 45°C (32°F ~ 113°F)	
	Storage	0°C~ 40°C (32°F ~ 104°F)	
Water Dust Resistance		IP65	
Charge Voltage		14.6V	
Standard Charge Mode (25°C±2°C, <75%RH)		0.2CA Constant Current to 14.6V, then Constant Voltage 14.6V until the current drops to 0.02CA, before use, rest 30 minutes	
Charge Current		20A	
Maximum Charge Current		50A	
Charge Cut off Voltage		14.6V	
Continuous Discharge Current		50A	
Maximum Pulse Current		150A (<2s)	
Discharge Cut Off Voltage		11.2V	
Communicate Protocol (optional)		(default none)RS485	
SOC (optional)		(default none) Bluetooth	
Application connection		1 string 1 parallel	
Mechanical	Cells	4 Strings	
	Container	ABS	

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

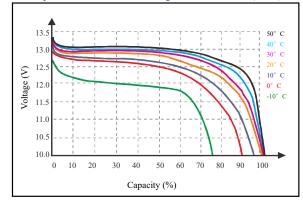


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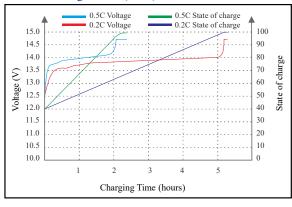
Discharge characteristics (25°C)



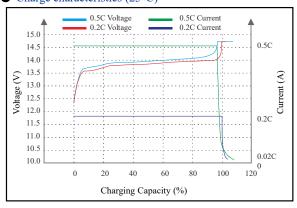
• Temperature affect on discharge characteristics (0.5C)



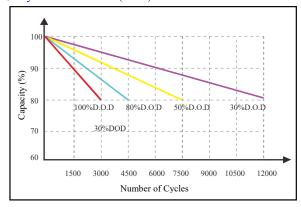
State of Charge Curve (25°C)



Charge characteristics (25°C)



• Cycle life on D.O.D (25°C)



Note 2: The above curves are based on laboratory testing data @ 25°C 40%RH.

Self Discharge Characteristics Curve

