



Electrical characteristics	Rated voltage	12.8V
	Rated capacity	100Ah
	Energy	1280Wh
	Life cycle management	> 2500 cycles @ 0.2C 85%DOD; >4500 cycles @ 50%DOD
	Month of self-discharge	< 3%
	Load efficiency	100% @0.5C
	Efficiency of the landfill	96-99% @1C
	Internal Resistance	≤200mΩ
Standard Charge	Charging voltage	14,6 ± 0,2 V
	Charge Mode	0.2C at 14.6V, then 14.6V, charging current at 0.02C (DC/DC)
	Charging current	50A
	Max. Charging current	100A
	Load break voltage	14,6 ± 0,2 V
Standard discharge	Direct current	100A
	Max. pulse current	300A (<2s)
	Discharge cut-off voltage	11V
	Depth of discharge	90% DOD
Environnement	Charge Temperature	0 °C to 55 (32F to 131F) @ 60 ± 25% relative humidity
	Discharge temperature	-20 °C to 60 (-4F to 140F) @ 60 ± 25% relative humidity
	Storage temperature	-20 °C to 45 (-4F to 113F) @ 60 ± 25% relative humidity
	IP Class	IP65
Mechanics	Plastic box	ABS + PC (top cover can be removed for maintenance)
	Weight	13.8 kg
	Dimensions	330mm x 173mm x 230mm
	Package size	410mm x 230mm x 280mm
Applications	Installation	Parallel and series connection
	Control	Integrated Battery Management System (BMS). Independent voltage/voltage display (4S).

• Advantages •



• *Longer service life*

Service life at 80% of the depth of discharge (DoD) \geq 3000
Lifetime at 50% of the depth of discharge (DoD) LiFePO₄ battery \geq 4500
The upper cover is removable, making it easy to maintain the battery.



• *Super-secure Lihtium technology (LifePO4)*

Stable chemical composition - LiFePO₄, no gas, no danger of explosion or fire.
An integrated battery management system (BMS) prevents any failure in advance
premature due to environmental influences or misuse.



• *Standard size design*

Perfect replacement of the AGM/GEL battery without changing the charging structure/
original unloading.



• *Light weight*

More than half the weight reduction compared to the AGM/GEL battery.



• *Larger useful capacity*

Depth of discharge up to 90% depth of discharge, about 40% more than the AGM/GEL battery.



• *Wider operating temperature range*

Range -20°C...+60°C.



• *Low self-discharge*

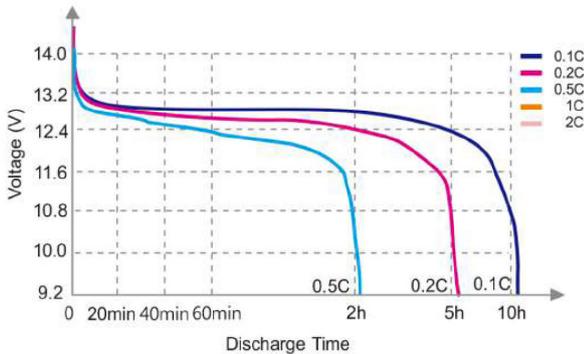
Only about 3% per month for storage / non-use.



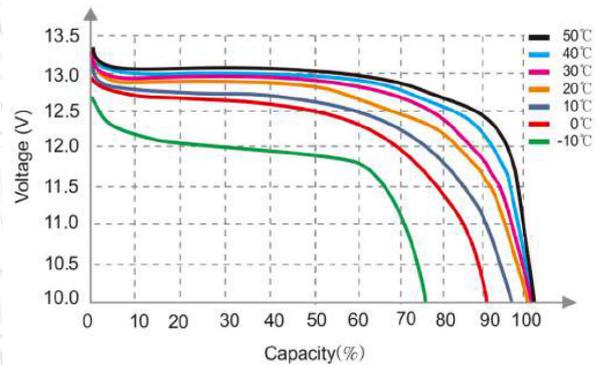
• *BMS protection*

Each W12V100Ah has a built-in battery management system that protects the battery from extreme cases.
It displays the overall voltage of the charge/discharge current and the battery temperature.

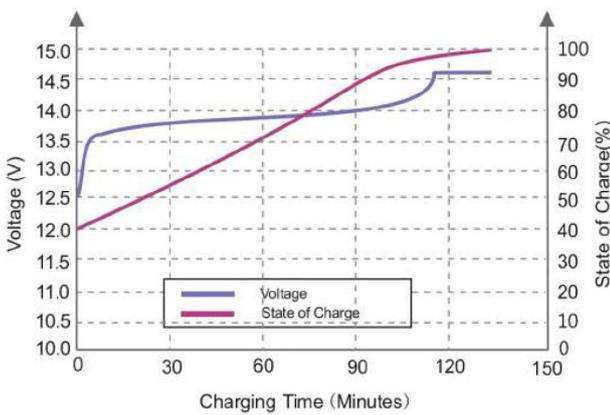
Different flow curve (25°C)



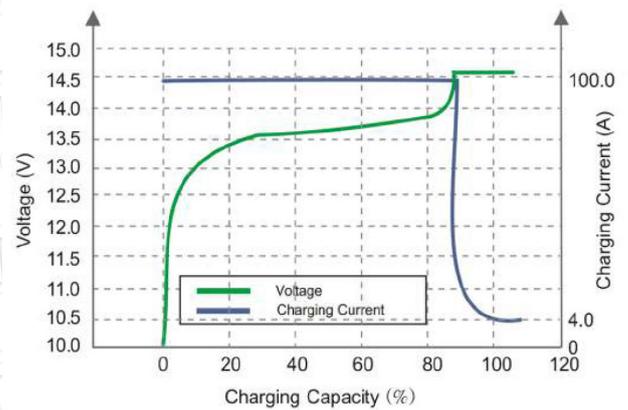
Different discharge temperature curve (0.5C)



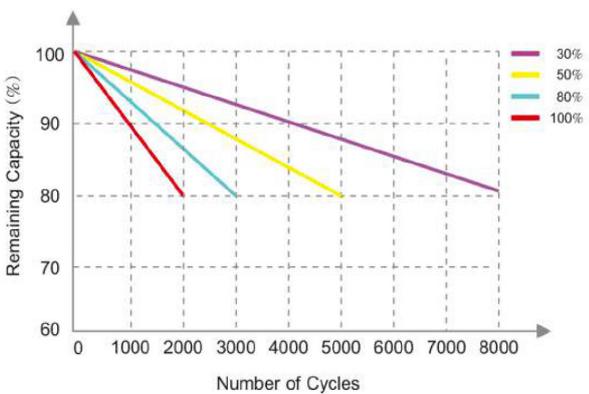
State of charge curve (0.5C, 25°C)



Load characteristics (0.5C, 25°C)



Life time curve different from the DOD discharge cycle (0.5C)



Self-discharge curve with different temperature

