R51100
Residential Energy Storage Battery Series

[R51100]

Widely Compatibility: support major leading inverter brands and conventional VRLA powered system.

Superior Safety: build-in BMS——eliminates the risk of explosion or combustion due to high impact, overcharging or short circuit situation with safe lithium iron phosphate chemist.

Flexible Configuration: racked design easy to be installed. Optional HMI, max. 16 sets in parallel supported.

High Performance: support 1C or 100A charge/discharge, widely working temperature. Cells comply with CE, UL and IEC standards.

⬂ Technical Parameters

Nominal Voltage (V)	51.2
Nominal Capacity (Ah)	100
Total Energy (Wh)	5120
Operating Voltage Range (V)	43.2 ~ 58.4
Standard Charge/Discharge Current (A)	50 CH / 50 DCH
Max. Charge/Discharge Current (A)	100 CH / 100 DCH
Peak Output Current (A)	150@10s
Lithium Chemistry	$LiFePO_4$
Cycle Life	6000 @ 0.5C 80% DOD
Design Life	20 years
Scalability	Max 16P (less than 8P need no external setup)
Installation	Rack type

⬂ Mechinical Specifications

Dimension (mm)	W442 * D450 * H177
Weight (kg)	Approx. 44
Communication	RS485, CAN
Ingress Rating	IP 54
Safety Standards	UN38.3, CE

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↘ Environmental Specifications

Storage Temperature (℃)	−20 ~ 55
Operating Temperature Charge (℃)	0 ~ 55
Operating Temperature Discharge (℃)	−20 ~ 60
Operating Relative Humidity	5 ~ 95%

↘ Operating Performance

Different Temperature Self Discharge Curve

Legend: 10℃, 25℃, 30℃, 40℃, 50℃
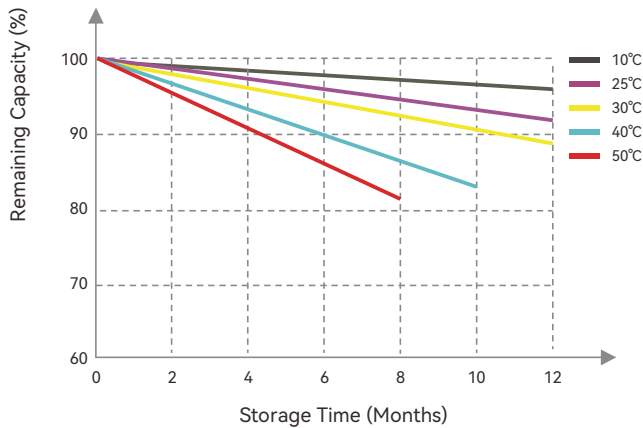
Different DOD Discharge Cycle Life Curve (0.5C)

Legend: 30%, 50%, 80%, 100%
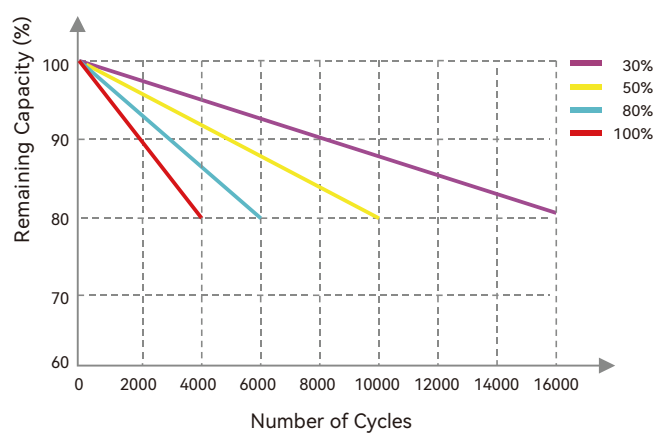
Notes:

Battery should be kept in a dry and ventilated place , avoid direct contact with corrosive substances, also away from sources of fire and heat. Keep the SOC of the battery above 50% if you need to store it for an extended long period. It should be refresh charged every 3 months regularly and SOC should be maintained at about 50% if battery will be stored for a long term.

↘ Compatible Inverters

Deye 德業   Growatt powering tomorrow   MUST 美世乐   固德威 GOODWE

LUXPOWER TEK   BLUESUN SOLAR BRASIL   felicity   SRNE 硕日

Schneider Electric   victron energy BLUE POWER   Voltronic Power Advancing Power

SMA   MEGAREVO   SUMRY   SMK SOLAR

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