



DATA SHEET

12V 100Ah Lithium
SP-12V100-SRVC1

12V 100AH (LifePO4)
SUPER SLIM Deep Cycle Battery

Battery: Deep cycle lithium iron phosphate

BMS Solution: MosFets / IC.

Color: Black or customized.

Cycle Life: >3000 cycles @ 70%DOD

Very low self discharge: (<3 % per month)

Certification: CE, RoHS, UN 38.3

Flexible deployment: up to 16 packs in parallel.

Deep discharge: allowed up to 100 %

Excellent temperature range: (-20 °C up to +60 °C)

Bluetooth Monitoring: Included

Discharge/Charge Specifications

Max Continuous Discharge current	100A
Peak Current	300A (10s)
Discharge Pulse Current	500A±50A (31±10ms)
Discharge Cut-off Voltage	8.8V (2.2V±0.05v) pc
Max Charge Current	100A
Recommended Charge Current	5A-50A
End of Charge voltage	14.4V±0.2V
BMS Over Charge Voltage Cut-off	15V(3.75V±0.05v pc)
Balancing Voltage	3.6V±0.05v pc
Cell Balancing current	116±10mA

Mechanical Specifications

Terminal Type	2*M8 Bolts
Weight	13kg
Case Dimension (L*W*H)	L600*W275*T65mm
Case Material	Stainless steel case
Enclosure Protection	IP65
Cell Type/Chemistry	Prismatic-LiFePO4 battery
BMS Functions: Low voltage, high voltage, over temp, over current, short-circuit protection, passive balance function, etc.	

Electrical Specifications

Nominal Voltage	12.8V
Rated Capacity	100Ah
Energy	1280Wh
Operation Voltage	8.8V-14.4V
Self Discharge	3% / per month
Efficiency	99%
Max Module In Series	4 pcs
Max Module In Parallel	20pcs
Short Circuit Protection	200-800µs Auto recover or charge release

Temperature Specifications

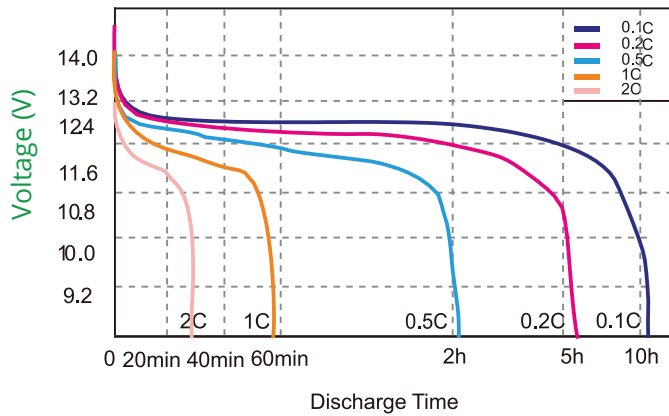
Discharge Temperature	-20~+65°C
Charge Temperature	-20~+45°C
Storage Temperature Range	-20~+45°C
Battery High Temperature Protection	60-65°C
BMS Temperature Protection	90°C
Self-heating	0°C to 10°C
Self-heating mode	During charging

Dimensional Specifications



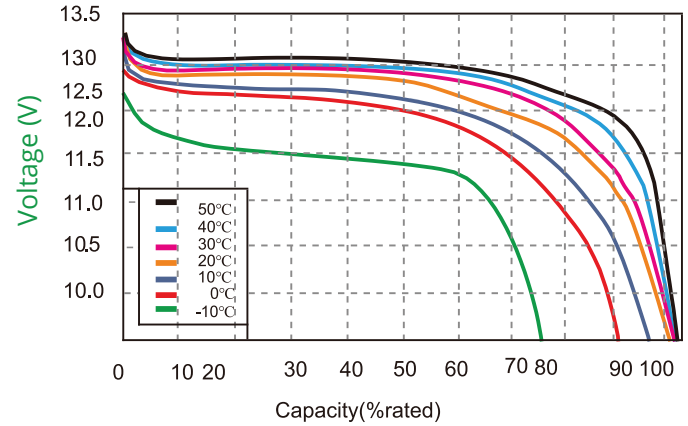
Different Rate Discharge Curve

Different Rate Discharge Curve @25°C



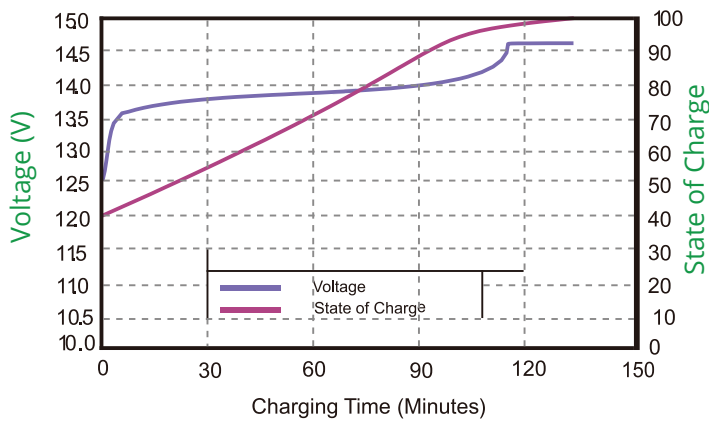
Different Temperature Discharge Curve

Different Rate Temperature Discharge Curve @0.5C



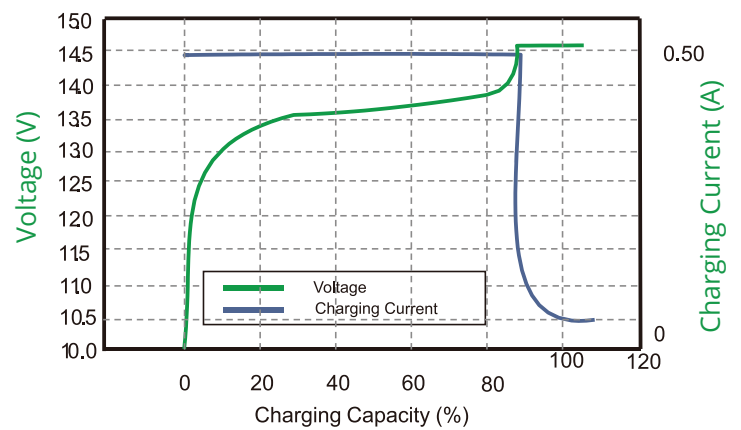
State of Charge Curve

State Charge Curve @0.5C 25°C



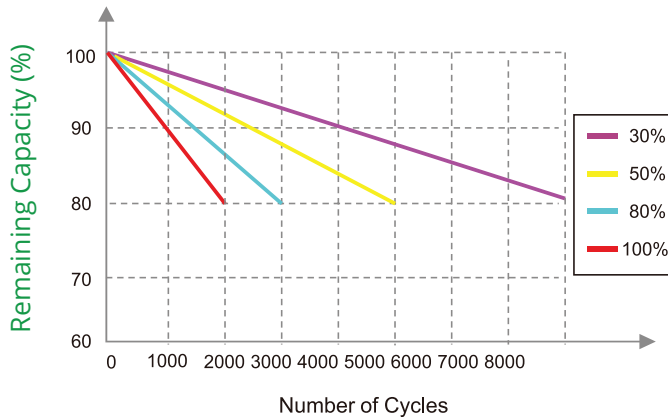
Charging Characteristics

Charging Characteristics @0.5C 25°C



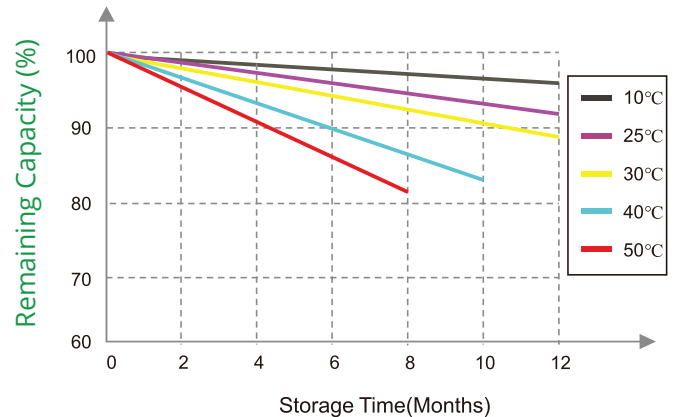
Cycle Life Curve

Different DOD Discharge Cycle Life Curve @1C



Self Discharge Characteristics Curve

Different Temperature Self Discharge Curve



MSDS UN38.3

