

SPF12V100-LT LOW TEMPERATURE BATTERY

ELECTRICAL PERFORMANCE		
Nominal Voltage	12.8 V	
Nominal Capacity	100Ah	
Capacity @ 20A	300 min	
Energy	1280Wh	
Resistance	≤10mΩ @ 50% SOC	
Self Discharge	<3% / Month	
Cells	Cylindrical	



CHARGE PERFORMANCE		
Recommended Charge Current	20A	
Maximum Charge Current 100A		
Recommended Charge Voltage	14.6V	
BMS Charge Cut-Off Voltage	<15.6V (3.9V/Cell)	
Reconnect Voltage	>14.4V(3.6V/Cell)	
Balancing Voltage	<14.4V (3.6V/Cell)	
Maximum Batteries in Series	Single use	

Maximum Batteries in Series Single use DISCHARGE PERFORMANCE 100A Maximum Continuous Discharge Current 100A Peak Discharge Current 200A (3s) BMS Discharge Cut-Off Current 300 A ±10 A (31ms) Recommended Low Voltage Disconnect 11.0V (2.75V/Cell) BMS Discharge Cut-Off Voltage >10.0V (2s) (2.5V/Cell) Reconnect Voltage (by charging) >11.2V(2.8V/Cell) Short Circuit Protection 250 ~ 500 μs	Balancing Voltage	<14.4V (3.6V/Cell)	
Maximum Continuous Discharge Current Peak Discharge Current 200A (3s) BMS Discharge Cut-Off Current 300 A ±10 A (31ms) Recommended Low Voltage Disconnect 11.0V (2.75V/Cell) BMS Discharge Cut-Off Voltage >10.0V (2s) (2.5V/Cell) Reconnect Voltage (by charging)	Maximum Batteries in Series	Single use	
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	BMS Discharge Cut-Off Voltage	>10.0V (2s) (2.5V/Cell)	
Short Circuit Protection 250 ~ 500 μs	Reconnect Voltage (by charging)	>11.2V(2.8V/Cell)	
	Short Circuit Protection	250 ~ 500 μs	

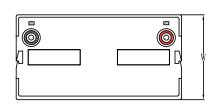
MECHANICAL PERFORMANCE		
Dimension (L x W x H)	329 x 172 x 223mm 13.0 x 6.8 x 8.8"	
Approx. Weight	27.8 lbs (12.6 kg)	
Terminal Type	T11 (M8)	
Terminal Torque	80 - 100 in-lbs (9 - 11 N-m)	
Case Material	ABS	
Enclosure Protection	IP65	

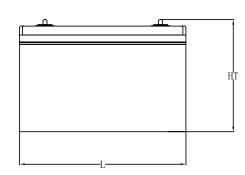
TEMPERATURE PERFORMANCE		
Discharge Temperature	-4 ~ 140 °F (-20 ~ 60 °C)	
Charge Temperature	-4 ~ 113 °F (-20 ~ 45 °C)	
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)	
BMS High Temperature Cut-Off	149 °F (65 °C)	
Reconnect Temperature	131 °F (55 °C)	

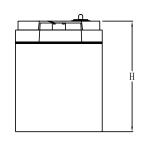
HEATING FOIL PERFORMANCE	
Heating Temperature Range	-4 to 41 °F (-20 to 5 °C)
Heating Time	Approximately 1 hour @ 10A
BMS Heating Foil Cut-Off	158 °F (70 °C)

COMPLIANCE	
Certifications	CE (battery) UN38.3 (battery) UL1642 & IEC62133 (cells)
Shipping Classification	UN 3480, CLASS 9

OUTLINE DIMENSION

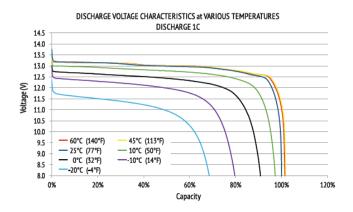


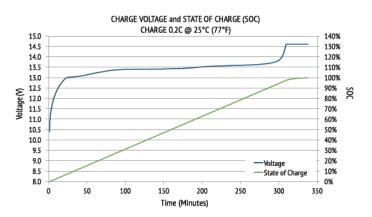


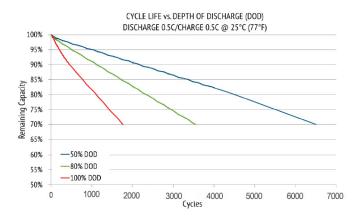


L mm(")	W mm(")	H mm(")	HT mm(")
329 (13.0)	172 (6.8)	213(8.4)	223 (8.8)

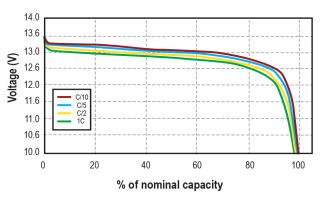
PERFORMANCE CHARACTERISTICS







Discharge characteristic at different rate at room temperature



FEATURES & BENEFITS



High cycle life

>2000 cycles @80% DoD for effectively lower total cost of ownership.



Longer service life

Low maintenance batteries with stable chemistry.



Built in circuit protection

Battery Management System (BMS) is incorporated against abuse.



Better storage

up to 6 months thanks to its extremely low self discharge (LSD) rate and no risk of sulphation



Quickly recharge

Save time and increase productivity with less down time thanks to superior charge/discharge efficiency.



Extreme heat tolerance

Suitable for use in a wider range of applications where ambient temperature is unusually high: up to +60°C.



Lightweight

Lithium batteries provide more Wh/Kg while also being up to 1/3 the weight of its SLA equivalent.

APPLICATIONS

Lithium Iron Phosphate can be used in most applications that use Lead Acid, GEL or AGM type batteries.

Suitable applications include:

- Marine
- Caravan
- Golf car
- Buggies
- Solar Storage
- · Remote Monitoring
- · Switching applications and more

CAUTIONS

- Do NOT short circuit, reverse polarity, crush or disassemble.
- Do NOT heat or incinerate.
- Do NOT immerse in any liquid.
- Store at 30~50% SOC. Recharging every 3 months is recommended. The storage area should be clean, cool, dry and ventilated

Performance may vary depending on application. All specifications re subject to change without prior notice to the user. This data is for evaluation purposes only. No guarantee is intended or implied by this data. For clarification and updated information, please contact us.



