

Group: 31

SPF12V100-ST Standard Type Battery

LITHIUM IRON PHOSPHATE BATTERY

ELECTRICAL PERFORMANCE				
Nominal Voltage	12.8 V			
Nominal Capacity	100Ah			
Capacity @ 25A	300 min			
Energy	1280 Wh ≤10 mΩ @ 50% SOC <3% / Month			
Resistance				
Self Discharge				
Cells Cylindrical				

CHARGE PERFORMANCE				
Recommended Charge Current	20 A			
Maximum Charge Current	100 A			
Recommended Charge Voltage	14.6 V			
BMS Charge Cut-Off Voltage	<15.6 V (3.9V/Cell)			
Reconnect Voltage	>14.4 V (3.6V/Cell)			
Balancing Voltage	<14.4 V (3.6V/Cell)			
Maximum Batteries in Series	4			

DISCHARGE PERFORMANCEMaximum Continuous Discharge Current100 APeak Discharge Current200 A (3s)BMS Discharge Cut-Off Current300 A ±10 A (31ms)Recommended Low Voltage Disconnect11 V (2.75V/Cell)BMS Discharge Cut-Off Voltage>8.0 V (2s) (2.0V/Cell)

>10 V (2.5V/Cell)

250 ~ 500 µs



MECHANICAL PERFORMANCE

Dimension (L x W x H)	329 x 172 x 22 3 mm 13.0 x 6.8 x 8.8"	
Approx. Weight	27.8 lbs (12.6 kg)	
Terminal Type	T11 80 ~ 100 in-lbs (9 ~ 11 N-m)	
Terminal Torque		
Case Material	ABS	
Enclosure Protection	IP65	

TEMPERATURE PERFORMANCE

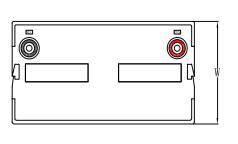
Discharge Temperature	-4 ~ 131 °F (-20 ~ 55 °C)	
Charge Temperature	32 ~ 113 °F (0 ~ 45 °C)	
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)	
BMS High Temperature Cut-Off	149 °F (65 °C)	
Reconnect Temperature	131 °F (55 °C)	

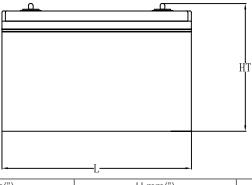
COMPLIANCE				
Certifications	CE (battery) UN38.3 (battery) UL1642 & IEC62133 (cells)			
Shipping Classification	UN 3480, CLASS 9			

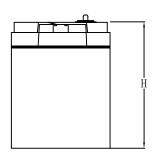
OUTLINE DIMENSION

Short Circuit Protection

Reconnect Voltage

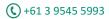






L mm(")	W mm(")	H mm(")	HT mm(")
329 (13.0)	172 (6.8)	213 (8.4)	223 (8.8)

Performance may vary depending on application. All specifications are 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.

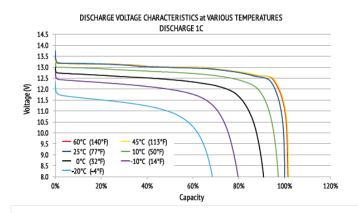


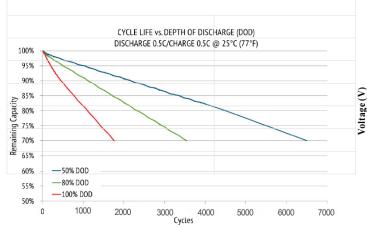


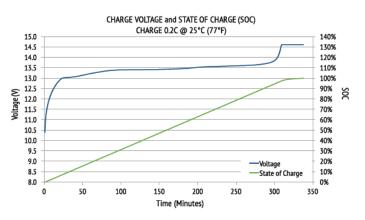
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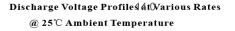
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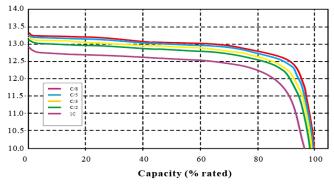
PERFORMANCE CHARACTERISTICS











FEATURES & BENEFITS

High Cycle Life

>4000 cycles @80% DoD for effectively lower total cost o ownership

Longer Service Life

Maintenance free batteries with safe and stable chemistry

BMS Technology

BMS protects battery from short circuit, high temperature, undervoltage, overloads & more.

Better Storage

High Efficiency

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

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Extreme Heat Tolerance

Charge & Discharge Efficiency @100%

Suitable for use in a wider range of applications and working temperature is from -25 $\rm C$ to 60 $\rm C$

Lightweight

Light Weight 50% - 60% less weight than lead-acid batteries

APPLICATIONS

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

- Caravan
- Marine
- 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.

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