

## SPF12V200-LT LOW TEMPERATURE BATTERY

ELECTRICAL PERFORMANCE			
Nominal Voltage	12.8 V		
Nominal Capacity	200Ah		
Capacity @ 40A	300 min		
Energy	2560Wh		
Resistance	≤8mΩ @ 50% SOC		
Self Discharge	<3% / Month		
Cells	Cylindrical		



CHARGE PERFORMANCE	
Recommended Charge Current	40A
Maximum Charge Current	100A
Recommended Charge Voltage	14.6V
BMS Charge Cut-Off Voltage	<15.6V (3.9V/Cell)
Reconnect Voltage	>14.0V(3.5V/Cell)
Balancing Voltage	<14.4V (3.6V/Cell)
Maximum Batteries in Series	Single use
DISCHARGE PERFORMANCE	
Maximum Continuous Discharge Current	150A
Peak Discharge Current	300A (3s)
BMS Discharge Cut-Off Current	450A ± 20A (31 ms)
Recommended Low Voltage Disconnect	11.0V (2.75V/Cell)
BMS Discharge Cut-Off Voltage	>8.0V (2s) (2.0V/Cell

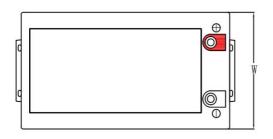
MECHANICAL PERFORMANCE			
Dimension (L x W x H)	520 x 268 x 228 mm 20.5 x 10.6 x 9.0"		
Approx. Weight	53.9 lbs (24.5 kg)		
Terminal Type	T11 (M8)		
Terminal Torque	80 - 100 in-lbs (9 - 11 N-m)		
Case Material	ABS		
Enclosure Protection	IP65		

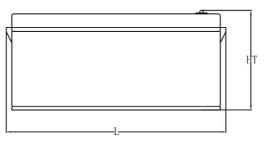
TEMPERATURE PERFORMANCE		
Discharge Temperature	-4 ~ 140 °F (-20 ~ 60 °C)	
Charge Temperature	-4 ~ 113 °F (-20 ~ 45 °C)	
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)	
BMS High Temperature Cut-Off	167 °F (75 °C)	
Reconnect Temperature	149 °F (65 °C)	

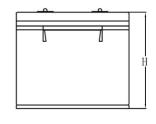
HEATING FOIL PERFORMANCE			
Heating Temperature Range	-4 to 41 °F (-20 to 5 °C)		
Heating Time	Approximately 1 hour @ 17 A		
BMS Heating Foil Cut-Off	158 °F (70 °C)		

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(")
520 (20.5)	268 (10.6)	221(8.7)	228 (9.0)

>10.8V(2.7V/Cell)

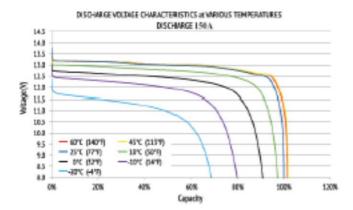
250 ~ 500 µs

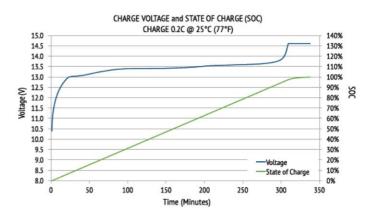
Reconnect Voltage

Short Circuit Protection



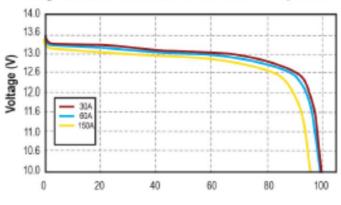
## PERFORMANCE CHARACTERISTICS





#### CYCLE LIFE vs. DEPTH OF DISCHARGE (DOD) DISCHARGE 0.5C/CHARGE 0.5C @ 25°C (77°F) 100% 95% 90% 85% 80% 75% 70% 65% -50% DOD 60% -80% DOD 55% -100% DOD 50% 3000 Cycles 1000 0 2000 4000 5000 6000 7000

#### 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.



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

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

Suitable applications include:

**APPLICATIONS** 

- 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.



