

**Best Solution of Battery** 

#### SPF12V300-LT Low Temperature Battery

# Group: 8D

# LITHIUM IRON PHOSPHATE BATTERY

ELECTRICAL PERFORMANCE		
Nominal Voltage	12.8 V	
Nominal Capacity	300 Ah	
Capacity @ 60A	300 min	
Energy	3840 Wh	
Resistance         <30 mΩ @ 50% S		
Self Discharge	<3% / Month	
Cells Cylindrical		

### **CHARGE PERFORMANCE**

Recommended Charge Current	>60 A	
Maximum Charge Current	100 A	
Recommended Charge Voltage	14.6 V	
PCM 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 1 (Single-Use)		

### **DISCHARGE PERFORMANCE**

Maximum Continuous Discharge Current	100 A	
Peak Discharge Current	200 A (5~10s)	
PCM Discharge Cut-Off Current	300A ±50 A (31 ms)	
Recommended Low Voltage Disconnect	11 V	
PCM Discharge Cut-Off Voltage	>8.0 V (2~ 3 ms) (2.0V/Cell)	
Reconnect Voltage	>9.2 V (2.3V/Cell)	
Short Circuit Protection 200 ~ 800 µs		



<b>MECHANICAL</b>	PERFORMANCE
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Dimension (L x W x H)	520 x 268x 228 mm 20.5 x 10.6 x 9"		
Approx. Weight	77.8 lbs (35.4 kg)		
Terminal Type M8			
Terminal Torque	80 ~ 100 in-lbs (9 ~ 11 N-m)		
Case Material	ABS		
Enclosure Protection	IP65		
TEMPERATURE PERFORMANCE			
Discharge Temperature $-4 \sim 167 \text{ °F} (-20 \sim 75 \text{ °C})$			
Charge Temperature	-4 ~ 149 °F (-20 ~ 65 °C)		
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)		
PCM High Temperature Cut-Off	149 °F (65 °C)		

#### HEATING ELEMENT PERFORMANCE

Heating Temperature Range	-4 to 50 °F (-20 to 10 °C)	
Heating Time	Approximately 1 hr @ 10 A	
PCM Heating Element Cut-Off	185 °F (85 °C)	

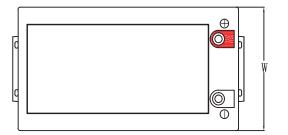
140 °F (60 °C)

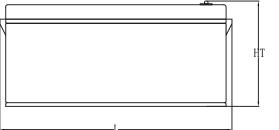
### COMPLIANCE

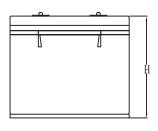
Reconnect Temperature

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)	267 (10.5)	221 (8.7)	228 (9.0)

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.



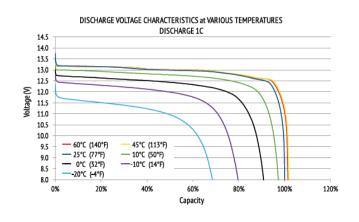
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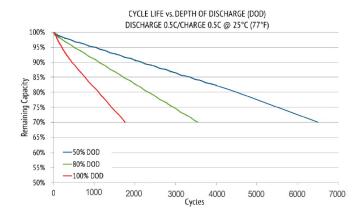


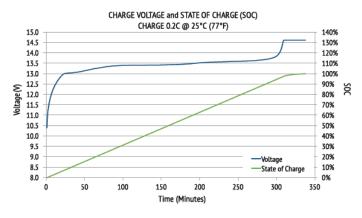
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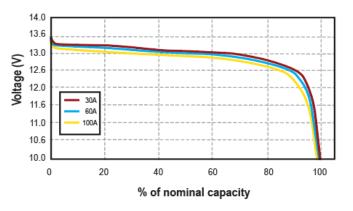
## **PERFORMANCE CHARACTERISTICS**







Discharge characteristic at different rate at room temperature



## **FEATURES & BENEFITS**

High cycle life

of ownership.

# RANGE MARK

# Longer service life

Low maintenance batteries with stable chemistry.

# PCM

## Built in circuit protection

Protection Circuit Module (PCM) is incorporated against abuse.

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

### 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:

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

## CAUTIONS

- · Do NOT short circuit, 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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