

## SPF12V80-ST STANDARD TYPE BATTERY

ELECTRICAL PERFORMANCE		
Nominal Voltage	12.8 V	
Nominal Capacity	80Ah	
Capacity @ 16A	300 min	
Energy	1024Wh	
Resistance	≤15mΩ @ 50% SOC	
Self Discharge	<3% / Month	
Cells	Cylindrical	



CHARGE PERFORMANCE		
Recommended Charge Current	16A	
Maximum Charge Current	80A	
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	4	

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DISCHARGE PERFORMANCE			

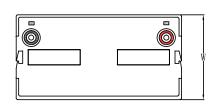
Dimension (L x W x H)	307x 168 x 221 mm 12.1 x 6.6x8.7"
Approx. Weight	22.9 lbs (10.4 kg)
Terminal Type	T11
Terminal Torque	80 - 100 in-lbs (9 - 11
Case Material	ABS
Enclosure Protection	IP65

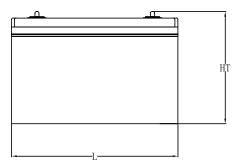
SCHARGE PERFORMANCE	
Maximum Continuous Discharge Current	80A
Peak Discharge Current	160A (3s)
BMS Discharge Cut-Off Current	240A ± 5 A (31 ms)
Recommended Low Voltage Disconnect	11.0V (2.75V/Cell)
BMS Discharge Cut-Off Voltage	>10.0V (2s) (2.5V/Cell)
Reconnect Voltage (by charging)	>11.2V(2.8V/Cell)
Short Circuit Protection	250 ~ 500 μs

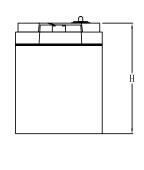
TEMPERATURE PERFORMANCE		
Discharge Temperature	-4 ~ 140 °F (-20 ~ 60 °C)	
Charge Temperature	32 ~ 113 °F (0 ~ 45 °C)	
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)	
BMS High Temperature Cut-Off	149 °F (65 °C)	
Reconnect Temperature	131 °F (55 °C)	

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

## **OUTLINE DIMENSION**



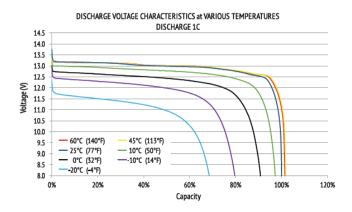


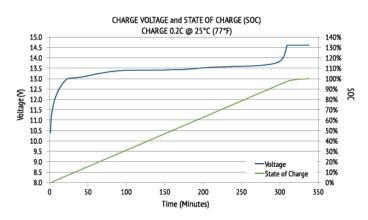


11 N-m)

L mm(")	W mm(")	H mm(")	HT mm(")
307 (12.1)	168 (6.6)	211(8.3)	221 (8.7)

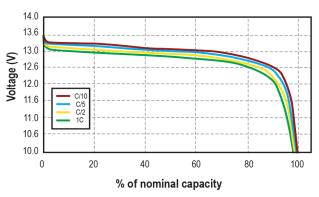
### PERFORMANCE CHARACTERISTICS





#### 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





### **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.



#### Light weight

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 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.



