

# SPF12V100-ST STANDARD TYPE 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	4	

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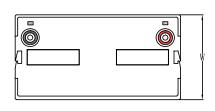
Dimension (L x W x H)	307x 168 x 221 mm 12.1 x 6.6x8.7"
Approx. Weight	26.7 lbs (12.2 kg)
Terminal Type	T11
Terminal Torque	80 - 100 in-lbs (9 - 11 N-m)
Case Material	ABS
Enclosure Protection	IP65

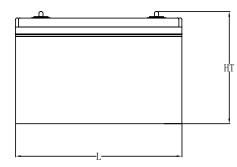
DISCHARGE PERFORMANCE		
Maximum Continuous Discharge Current	100A	
Peak Discharge Current	200A (3s)	
BMS Discharge Cut-Off Current	300A ± 10 A (31 ms)	
Recommended Low Voltage Disconnect	11.0V (2.75V/Cell)	
BMS Discharge Cut-Off Voltage	>10.0V (2s) (2.V/Cell)	
Reconnect Voltage (by charging)	>11.2V(2.8V/Cell)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

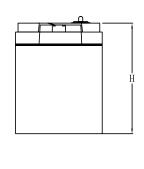
TEMPERATURE PERFORMANCE	
Discharge Temperature	-4 ~ 140 °F (-20 ~ 60 °C)
Charge Temperature	32 ~ 113 °F (0 ~ 45 °C)
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)
BMS High Temperature Cut-Off	149 °F (65 °C)
Reconnect Temperature	131 °F (55 °C)

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

# **OUTLINE DIMENSION**

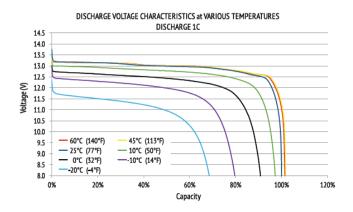


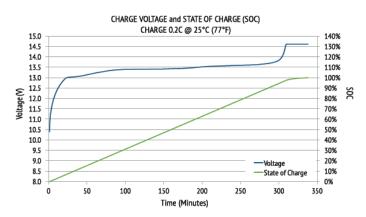


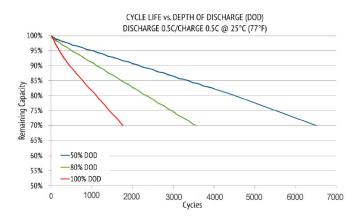


L mm(")	W mm(")	H mm(")	HT mm(")
307 (12.1)	168 (6.6)	211(8.3)	221 (8.7)

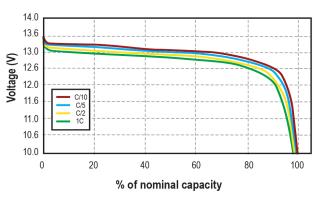
### PERFORMANCE CHARACTERISTICS







#### 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.



#### 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.



