

Group: 24

# SPF12V75-ST Standard Type Battery

# **LITHIUM IRON PHOSPHATE BATTERY**

ELECTRICAL PERFORMANCE	
Nominal Voltage	12.8 V
Nominal Capacity	75 Ah
Capacity @ 15A	300 min
Energy	960 Wh
Resistance	≤18 mΩ @ 50% SOC
Self Discharge	<3% / Month
Cells	Cylindrical

CHARGE PERFORMANCE	
Recommended Charge Current	15 A
Maximum Charge Current	75 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 PERFORMANCE

Maximum Continuous Discharge Current	75 A
Peak Discharge Current	160 A (3 s)
BMS Discharge Cut-Off Current	240 A ± 5 A (31 ms)
Recommended Low Voltage Disconnect	11 V (2.75V/Cell)
BMS Discharge Cut-Off Voltage	>8.0 V (2s) (2.0V/Cell)
Reconnect Voltage	>10 V (2.5V/Cell)
Short Circuit Protection	250 ~ 500 µs



#### MECHANICAL PERFORMANCE

Dimension (L x W x H)	260 x 168 x 218 mm 10.2 x 6.6 x 8.6"
Approx. Weight	20.5 lbs (9.3 kg)
Terminal Type	T11
Terminal Torque	80 - 100 in-lbs (9 - 11 N-m)
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**





210 (8.3)



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.

168 (6.6)



260 (10.2)

HT mm(")

218 (8.6)



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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 BMS

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.

# A A A



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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 % to 60 %

#### Lightweight

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



Discharge characteristic at different rate at room temperature



# **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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