

**Best Solution of Battery** 

# SPF12V300-ST Standard Type 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	≤8 mΩ @ 50% SOC		
Self Discharge	<3% / Month		
Cells	IFR26650EC		

### **CHARGE PERFORMANCE**

Recommended Charge Current	60 A	
Maximum Charge Current	150 A	
Recommended Charge Voltage	14.6 V	
BMS Charge Cut-Off Voltage	<15.6 V (3.9V/Cell)	
Reconnect Voltage	>14.0 V (3.5V/Cell)	
Balancing Voltage	<14.4 V (3.6V/Cell)	
Maximum Batteries in Series	4	

# **DISCHARGE PERFORMANCE**

Maximum Continuous Discharge Current	150 A	
Peak Discharge Current	300 A (3s)	
BMS Discharge Cut-Off Current	450A ±20 A (31 ms)	
Recommended Low Voltage Disconnect	11 V (2.75V/Cell)	
BMS Discharge Cut-Off Voltage	>8.0 V (3s) (2.0V/Cell)	
Reconnect Voltage	>10.8 V (2.7V/Cell)	
Short Circuit Protection	250 ~ 500 µs	



#### **MECHANICAL PERFORMANCE**

Dimension (L x W x H)	H) 520 x 268x 229 mm 20.5 x 10.6 x 9.0"	
Approx. Weight	78.7 lbs (35.7 kg)	
Terminal Type	T11	
Terminal Torque	80 ~ 100 in-lbs (9 ~ 11 N-m)	
Case Material	ABS	
Enclosure Protection	IP65	

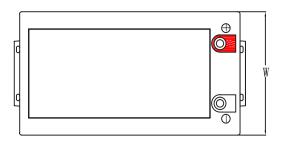
## **TEMPERATURE PERFORMANCE**

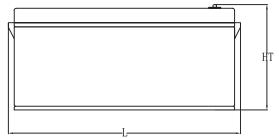
Discharge Temperature	-4 ~ 140 °F (-20 ~ 60 °C)
sharge Temperature $32 \sim 113 \text{ °F} (0 \sim 45 \text{ °C})$	
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)
BMS High Temperature Cut-Off	167 °F (75 °C)
Reconnect Temperature	149 °F (65 °C)

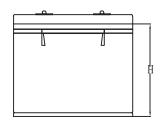
#### COMPLIANCE

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)	229 (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.



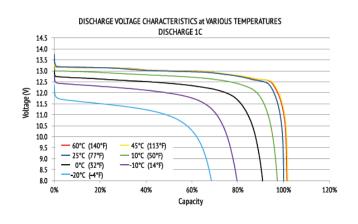


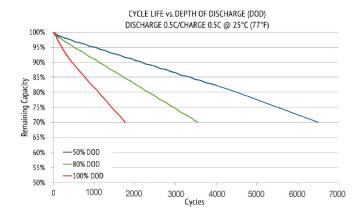


# SPF12V300-ST Standard Type Battery

# Group: 8D

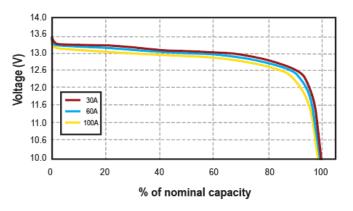
# **PERFORMANCE CHARACTERISTICS**





#### CHARGE VOLTAGE and STATE OF CHARGE (SOC) CHARGE 0.2C @ 25°C (77°F) 15.0 140% 14.5 130% 14.0 120% 13.5 110% 13.0 100% 12.5 90% Voltage (V) S 12.0 80% 11.5 11.0 70% 60% 50% 10.5 40% 10.0 9.5 30% 9.0 20% Voltage 10% 8.5 State of Charo 8.0 0% 50 100 150 200 250 300 350 Time (Minutes)

Discharge characteristic at different rate at room temperature



# **FEATURES & BENEFITS**

High cycle life

of ownership.

# Rever Martin

# Longer service life

Low maintenance batteries with stable chemistry.

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

# BMS

# 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.

#### 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, 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. For clarification and updated information, please contact us.





