

SPF12V10-ST Standard Type Battery

LITHIUM IRON PHOSPHATE BATTERY

ELECTRICAL PERFORMANCE

| | |
|------------------|------------------|
| Nominal Voltage | 12.8 V |
| Nominal Capacity | 10 Ah |
| Capacity @ 2A | 300 min |
| Energy | 138 Wh |
| Resistance | ≤40 mΩ @ 50% SOC |
| Self Discharge | <3% / Month |
| Cells | IFR26650EC |

CHARGE PERFORMANCE

| | |
|-----------------------------|---------------------|
| Recommended Charge Current | 2.0 A |
| Maximum Charge Current | 10 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 | 6 |

DISCHARGE PERFORMANCE

| | |
|--------------------------------------|-------------------------|
| Maximum Continuous Discharge Current | 15 A |
| Peak Discharge Current | 30 A (3s) |
| BMS Discharge Cut-Off Current | 45 A ± 5 A (31 ms) |
| Recommended Low Voltage Disconnect | 11.0 V (2.75V/Cell) |
| BMS Discharge Cut-Off Voltage | >8.0 V (2s) (2.0V/Cell) |
| Reconnect Voltage | >10.0 V (2.5V/Cell) |
| Short Circuit Protection | 250 ~ 500 μs |



MECHANICAL PERFORMANCE

| | |
|-----------------------|---------------------------------------|
| Dimension (L x W x H) | 151 x 99 x 101 mm 5.9 x 3.9 x 4.0" |
| Approx. Weight | 2.9 lbs (1.3 kg) |
| Terminal Type | F2 |
| Case Material | ABS |
| Enclosure Protection | IP65 |

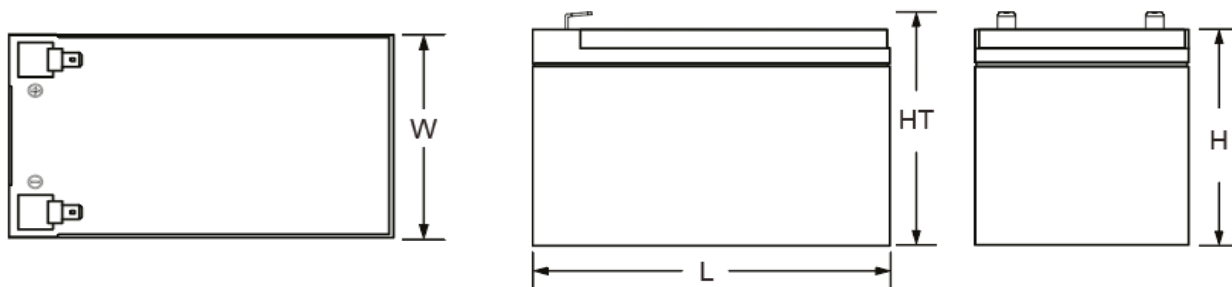
TEMPERATURE PERFORMANCE

| | |
|------------------------------|---------------------------|
| 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

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

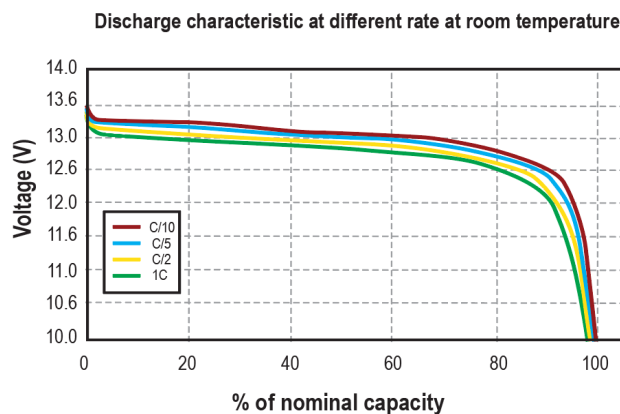
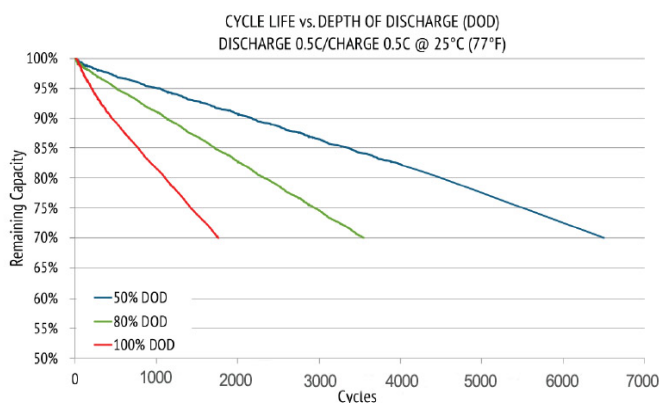
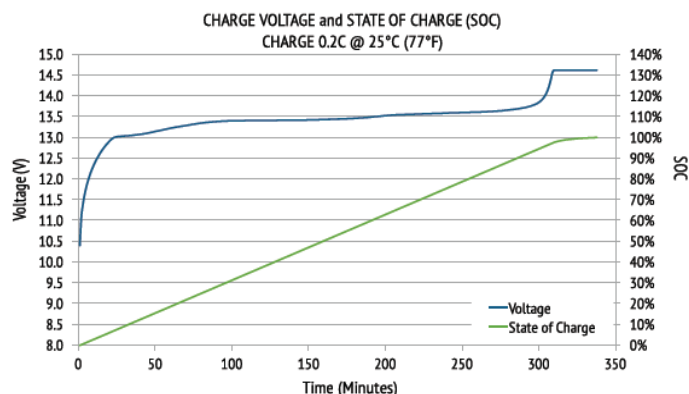
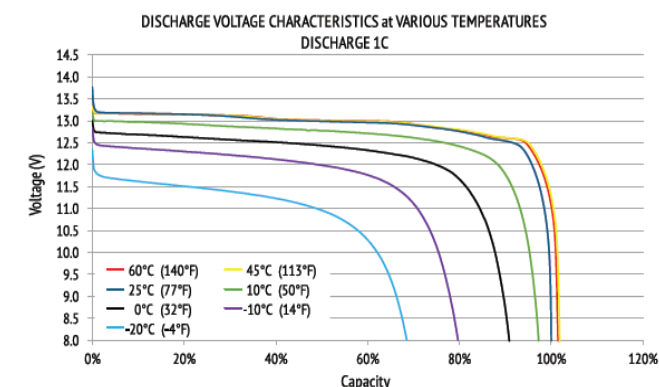
OUTLINE DIMENSION



| L mm(") | W mm(") | H mm(") | HT mm(") |
|-----------|----------|----------|-----------|
| 151 (5.9) | 98 (3.9) | 96 (3.8) | 101 (4.0) |

SPF12V10-ST Standard Type Battery

PERFORMANCE CHARACTERISTICS



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.



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:

- Fishing sonar
- Electrical devices
- Toys
- Emergency light
- Digital camera
- 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.

