

SPF12V100-DLT LOW TEMPERATURE 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	20 A
Maximum Charge Current	100A
Recommended Charge Voltage	14.6V
BMS Charge Cut-Off Voltage	<15.6 V (3.9V/Cell)
Reconnect Voltage	>14.4V (3.6V/Cell)
Balancing Voltage	<14.4V (3.6V/Cell)
Maximum Batteries in Series	Single use

DISCHARGE PERFORMANCE

Maximum Continuous Discharge Current	100A
Peak Discharge Current	200 A (3s)
BMS Discharge Cut-Off Current	300 A ±10 A (31ms)
Recommended Low Voltage Disconnect	11.0V (2.75V/Cell)
BMS Discharge Cut-Off Voltage	>10.0V (2s) (2.5V/Cell)
Reconnect Voltage (by charging)	>11.2 V (2.8V/Cell)
Short Circuit Protection	250 ~ 500 μs



MECHANICAL PERFORMANCE

Dimension (L x W x H)	355x 175x190mm 14.0 x 6.9x7.5"
Approx. Weight	28.2 lbs (12.8 kg)
Terminal Type	DIN
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)
Charge Temperature	-4 ~ 113 °F (-20 ~ 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)

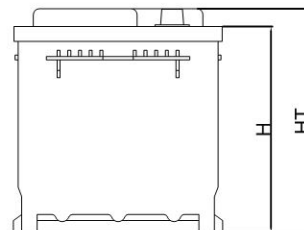
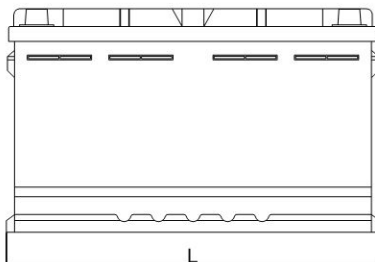
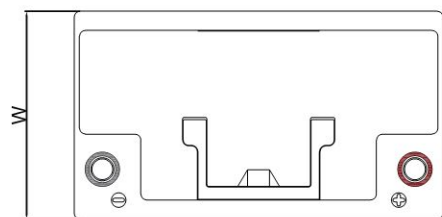
HEATING FOIL PERFORMANCE

Heating Temperature Range	-4 to 41 °F (-20 to 5 °C)
Heating Time	Approximately 1 hour @ 10A
BMS Heating Foil Cut-Off	158 °F (70 °C)

COMPLIANCE

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

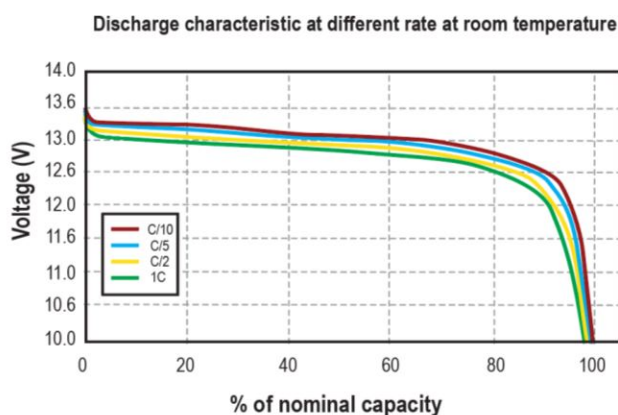
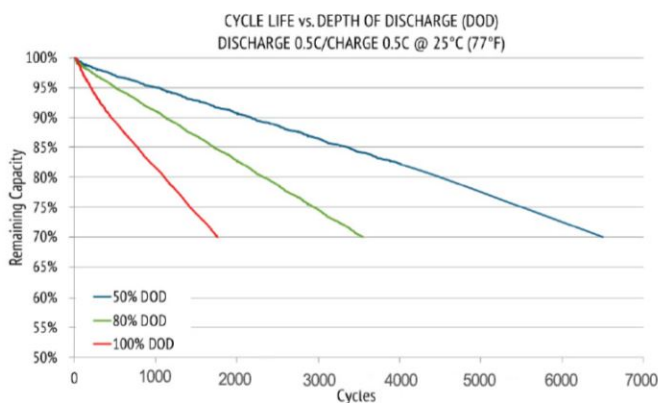
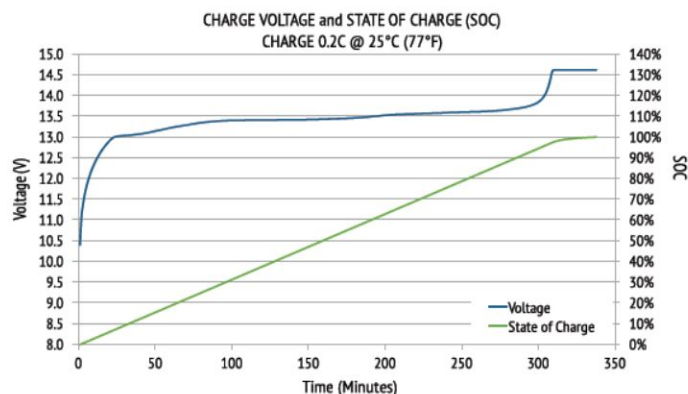
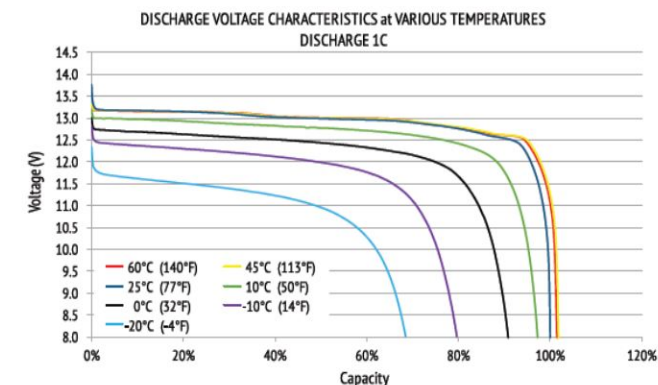
OUTLINE DIMENSION



L mm(")	W mm(")	H mm(")	HT mm(")
355 (14.0)	175(6.9)	170(6.7)	190(7.5)



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:

- 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

