

### SPF12V100-DLB LOW TEMPERATURE + BLUETOOTH 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	<15.6 V (3.9V/Cell)	
Reconnect Voltage	>14.4V (3.6V/Cell)	
Balancing Voltage	<14.4V (3.6V/Cell)	
Maximum Batteries in Series	Single use	

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DISCHARGE PERFORMANCE		
Maximum Continuous Discharge Current	100A	
Peak Discharge Current	200 A (3s)	
BMS Discharge Cut-Off Current	450A ± 10 A (31 ms)	
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)	

250 ~ 500 µs

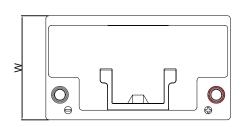
MECHANICAL PERFORMANCE	
Dimension (L x W x H)	318 x 175 x 190 mm 12.5 x 6.9 x 7.5"
Approx. Weight	27.8 lbs (12.6 kg)
Terminal Type	DIN
Terminal Torque	80 - 100 in-lbs (9 - 11 N-m)
Case Material	ABS
Enclosure Protection	IP65

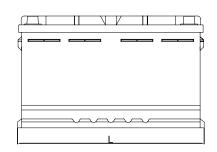
TEMPERATURE PERFORMANCE	
Discharge Temperature	-4 ~ 140 °F (-20 ~ 60 °C)
Charge Temperature	-4 ~ 113 °F (-20 ~ 45 °C)
Storage Temperature	23 ~ 95 °F (-5 ~ 35 °C)
BMS High Temperature Cut-Off	149 °F (65 °C)
Reconnect Temperature	131 °F (55 °C)

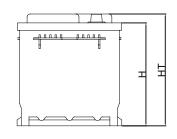
HEATING FOIL PERFORMANCE	
Heating Temperature Range	-4 to 41 °F (-20 to 5 °C)
Heating Time	Approximately 1 hour @ 10A
BMS Heating Foil Cut-Off	158 °F (70 °C)

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

## **OUTLINE DIMENSION**



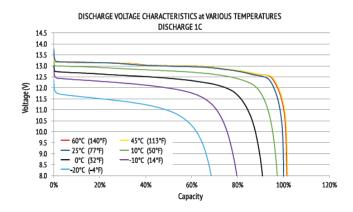


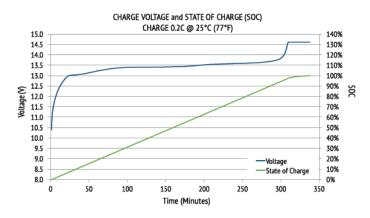


L mm(")	W mm(")	H mm(")	HT mm(")
318 (12.5)	175(6.9)	170(6.7)	190 (7.5)

Short Circuit Protection

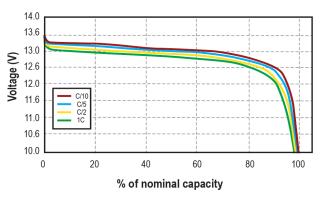
### PERFORMANCE CHARACTERISTICS





#### CYCLE LIFE vs. DEPTH OF DISCHARGE (DOD) DISCHARGE 0.5C/CHARGE 0.5C @ 25°C (77°F) 100% 95% 90% 85% 80% 75% 70% 65% -50% DOD 60% -80% DOD 55% -100% DOD 50% 3000 Cycles 1000 0 2000 4000 5000 6000 7000





## **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.



