TECHNICAL DATA SHEET

LITHIUM IRON PHOSPHATE BATTERY D12-9K

FEATURES & BENEFITS

High cycle life
- > 3000 cycles @80% DoD for effectively lower total cost of ownership.

Longer service life
Low maintenance batteries with stable chemistry.
Easily monitor state of charge (SoC) of smart models.

Built in circuit protection
Battery Management Systems (BMS) are incorporated against abuse.

Longer service life
Up to 6 months thanks to its extremely low self discharge (LSD) rate and no risk of sulphation.

High cycle life
Save time and increase productivity with less down time thanks to superior charge/discharge efficiency.

Longer service life
Suitable for use in a wider range of applications where ambient temperature is unusually high: up to +60°C.

High cycle life
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, crush or disassemble.
- Do NOT heat or incinerate.
- Do NOT immerse in any liquid.
- Store at 50% capacity. Recharge every 3 months.
  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.

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ELECTRICAL PERFORMANCE

Nominal Voltage	12.8 V
Nominal Capacity	9 Ah
Capacity @ 1.8A	300 min
Energy	115.2 Wh
Resistance	≤ 30 mΩ @ 50% SOC
Self Discharge	< 3% / Month
Cells	LFP Cell 3.2V

MECHANICAL PERFORMANCE

Dimension (L x W x H)	151 x65 x94mm / 5.94 x2.56 x 3.7"
Approx. Weight	About1.05 kg
Terminal Type	T2
Terminal Torque	80 ~ 100 in-lbs (9 ~ 11 N-m)
Case Material	ABS
Enclosure Protection	IP65

CHARGE PERFORMANCE

Recommended Charge Current	1.8 A
Max Charge Current	4.5 A
Charge Cut-Off Voltage	14.6 V
Reconnect Voltage	> 14 V
Balancing Voltage	< 13.6 V
Maximum Batteries in Series	4 (Optional)
Bluetooth Test Window	Optional
LED display	Optional

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)
High Temperature Cut-Off	149 °F (65 °C)
Reconnect Temperature	118 °F (48 °C)

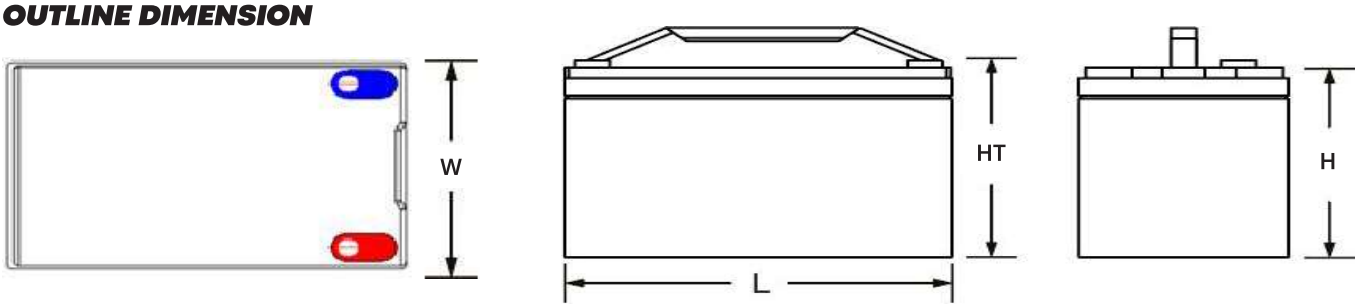
DISCHARGE PERFORMANCE

Continuous Discharge Current	4.5 A
Maximum continuous Discharge Current	9 A
Peak discharge Cut-Off Current	25 A (5 ~15 ms)
Discharge Cut-Off Voltage	> 10 V
Reconnect Voltage	> 11.2 V
Short Circuit Protection	80 ~ 200 µs

COMPLIANCE

Certifications	CE UN38.3 UL1973 & IEC62619
Shipping Classification	UN 3480, CLASS 9

OUTLINE DIMENSION



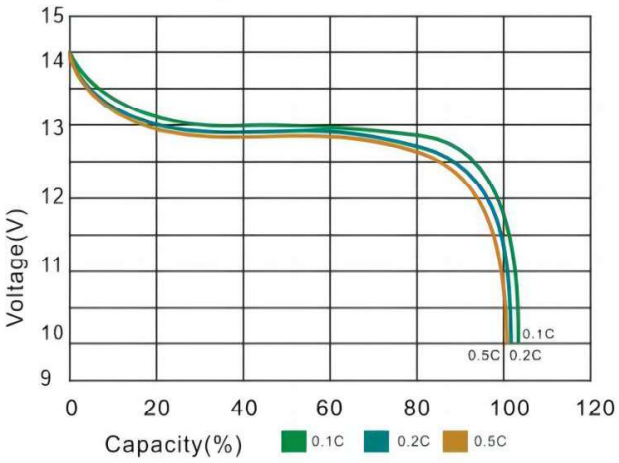
L mm(")	W mm(")	H mm(")	HT mm(")
151 (5.94)	65 (2.56)	94 (3.7)	

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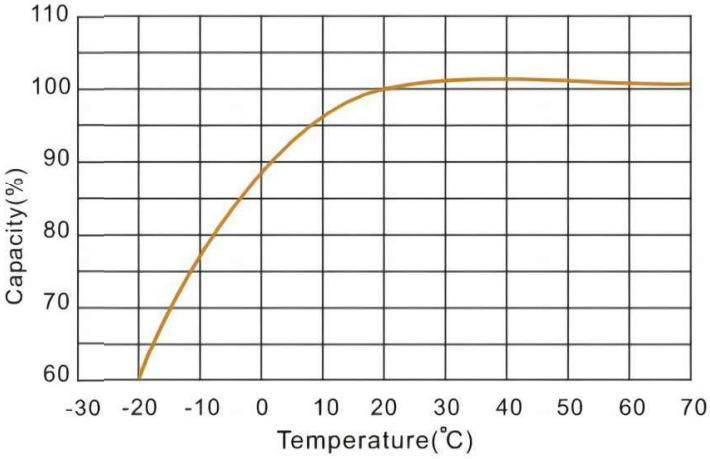
LITHIUM IRON PHOSPHATE BATTERY D12-9K

PERFORMANCE CHARACTERISTICS

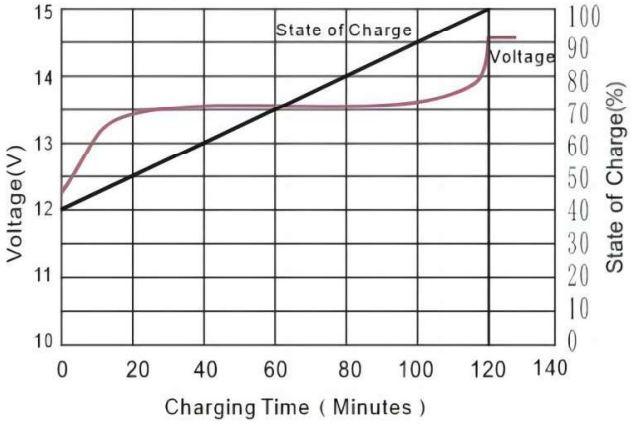
Dischange Perform ance at 25℃



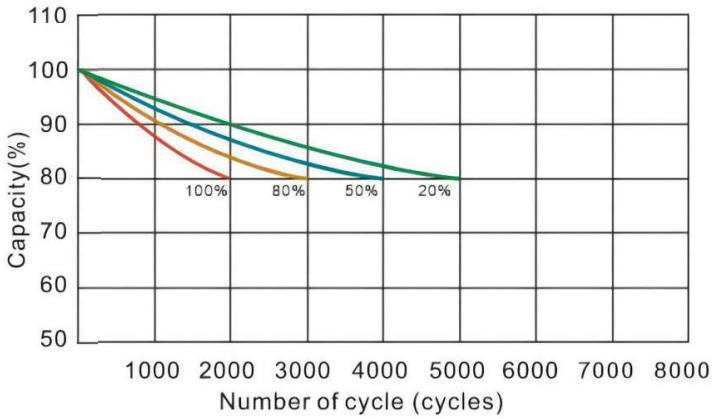
Temperature effect s on capacity at 0.2C



State of Charge Curve (0.5C. 25℃)



Cycle life with DOD at 25℃, 0.2C



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