

GP12V100

Specification sheet

No.12091

LITHIUM IRON PHOSPHATE BATTERY

ELECTRICAL PERFORMANCE

Nominal Voltage	12.8 V	
Nominal Capacity	100 Ah	
Capacity @ 25A	240 min	
Energy 1280 Wh	1280 Wh	
Resistance	≤30 mΩ @ 50% SOC	
Self Discharge	<3% / Month	
Cells	Cylindrical	

CHARGE PERFORMANCE

Recommended Charge Current	5 A - 50 A
Maximum Charge Current	100 A
Recommended Charge Voltage	14.2 V - 14.6 V
BMS Charge Cut-Off Voltage	15.6 V (3.9 ±0.025 vpc) (1.1 ±0.4 s)
Reconnect Voltage	15.2 V (3.8 ±0.05 vpc)
Balancing Voltage	14.4 V (3.6 ±0.025 vpc)

DISCHARGE PERFORMANCE

Maximum Continuous Discharge Current	100 A	
Peak Discharge Current	200 A (7.5 s ±2.5 s)	
BMS Discharge Cut-Off Current	280 A ±50 A (9 ±4 ms)	
Recommended Low Voltage Disconnect	11.0 V	
BMS Discharge Cut-Off Voltage	8 V (2.0 ±0.08 vpc) (140 ±60 ms)	
Reconnect Voltage	9.2 V (2.3 ±0.1 vpc)	
Short Circuit Protection	200 ~ 600 µs	



MECHANICAL PERFORMANCE

Dimension (L x W x H)	329 x 172 x 225 mm 13.0 x 6.8 x 8.8"
Approx. Weight	27.8 lbs (12.6 kg)
Terminal Type	M8
Terminal Torque	80 ~ 100 in-lbs (9 ~ 11 N-m)
Case Material	ABS
Enclosure Protection	IP65

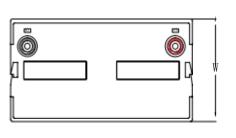
TEMPERATURE PERFORMANCE

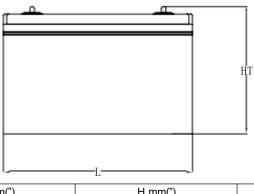
Discharge Temperature	-4 ~ 131 °F (-20 ~ 55 °C)
Charge Temperature	32 ~ 113 °F (0 ~ 45 °C)
Storage Temperature	23 ~ 95 ⁰F (-5 ~ 35 °C)
BMS High Temperature Cut-Off	149 °F (65 °C)
Reconnect Temperature	131 ⁰F (55 ℃)

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(")
330 (13.0)	175 (6.9)	213 (8.4)	225 (8.8)

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.









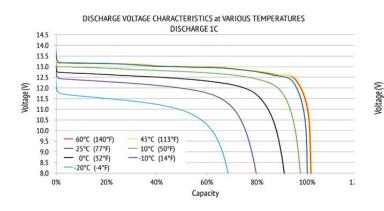
DISCHARGE VOLTAGE CHARACTERISTICS at VARIOUS RATES

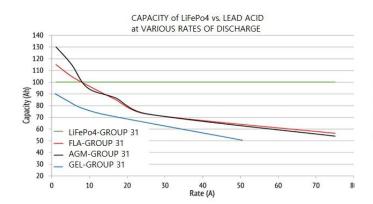
GP12V100

Specification sheet

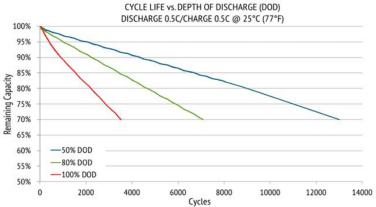
No.12091

PERFORMANCE CHARACTERISTICS





25-C (77°F) 14.5 14.0 13.5 13.0 12.5 12.0 11.5 11.0 10.5 10.0 9.5 -0.20 9.0 -0.5C -10 8.5 -2C 8.0 0% 20% 80% 100% 40% 60% 120% Capacity



FEATURES & BENEFITS



High cycle life

>3500 cycles @80% DoD for effectively lower total cost of ownership.

Longer service life

Low maintenance batteries with stable chemistry.

Built in circuit protection BMS Battery Management Syste

Battery Management System (BMS) is incorporated against abuse.

up to 6 months thanks to its extremely low self discharge (LSD) rate and no risk of sulphation.

Quickly recharge

Better storage

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.

ß

Lighter 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:

- 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.





