

Version 1.0

DATASHEET EPSILON 12V90Ah

The Epsilon is a drop-in lead-acid replacement, with all the benefits of Lithium Iron Phosphate. It has superior weight reduction, enormous energy reserves and stable voltage even at extreme loads. This lithium battery is suitable for 12V installations. Eliminating the need for an external safety relay means the lithium battery is very easy to install.

BATTERY MONITORING

The Super B Epsilon has integrated battery monitoring which provides details about its status such as voltage, current, temperature, state of charge and time remaining. Hands-on monitoring is also possible via Bluetooth and LED indicators to inform you about the actual status of your battery. The free Be-InCharge app provides 24/7 information about the state of charge, time to go and status of the battery.

FEATURES

- Traction battery
- Drop-in replacement for AGM/GEL lead-acid
- LN5 batteries
- Lithium Iron Phosphate (LiFePO4): safe lithium technology
- Integrated short circuit protection
- Integrated BMS (Battery-Management system)
- Charge current regulator, for safe low temperature charging
- CAN / LIN / Bluetooth interface for battery monitoring
- Battery monitoring / History Storage
- Adaptive cell balancing
- Monitoring via BeInCharge Bluetooth app for iOS and Android



SAFETY

Super B batteries are based on Lithium Iron Phosphate technology (LiFePO4). This is the safest Lithium technology available today. On top of that our bespoke casing and electronics further increase safety and durability.

PERFORMANCE



Maintenance free



Fast Charging



Safest lithium technology



High discharge rates



High capacity



Low weight



High cycle count



Low selfdischarge

3-YEAR WARRANTY

Super B's 3-year warranty offers the best peace of mind. It is the benefit of years of continuous engineering improvement and proven experience with all of our batteries in the harshest environments.



ELECTRICAL SPECIFICATIONS

| Nominal Capacity | 90Ah |
|----------------------|--|
| Energy | 1152Wh |
| Nominal Voltage | 12.8V |
| Open Circuit Voltage | 13.2V |
| Self Discharge | <3% per Month |
| Cycle life | >2000 (at 1C charge/discharge, 100% DoD) |

MECHANICAL SPECIFICATIONS

| Dimensions (LxWxH) | 353 x 175 x 190 mm 13.9" x 6.9" x 7.5" |
|-----------------------|---|
| Weight | 12.5 kg / 27.6 lbs |
| Case Material | GFRP |
| Ingress Protection | IP51 |
| Cell Type / Chemistry | Cylindrical - LiFePO4 |

CHARGE & DISCHARGE SPECIFICATIONS TEMPERATURE SPECIFICATIONS

| Charge Method | CCCV |
|----------------------------------|---------------|
| Charge Voltage | 14.3V - 14.6V |
| Max Charge Current | 90A |
| End of Discharge Voltage | 8V |
| Discharge Current Continuous | 200A |
| Discharge Pulse Current (10 sec) | 350A |

| Charge Temperature | -10°C to 45°C ² 14°F to 113°F ² |
|-----------------------|--|
| Discharge Temperature | -20°C to 60°C -4°F to 140°F |
| Storage Temperature | -10°C to 35°C 14°F to 95°F |

COMPLIANCE SPECIFICATIONS

| Certifications | CE, FCC, |
|-------------------------|----------|
| | UN 38.3 |
| Shipping Classification | UN 3480 |

GENERAL PRODUCT SPECIFICATIONS

| EAN-13 | 8718531361317 |
|---------------------|---------------------------------|
| Battery Designation | IFpR19/67[60p4s] M/-20+60/90 |

 $^{^{1}}$ When temperature is < 0° C and > 45° C performance will be degraded.