



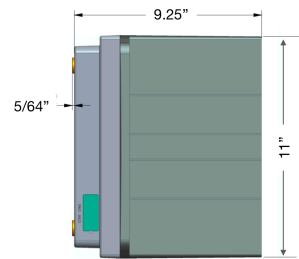
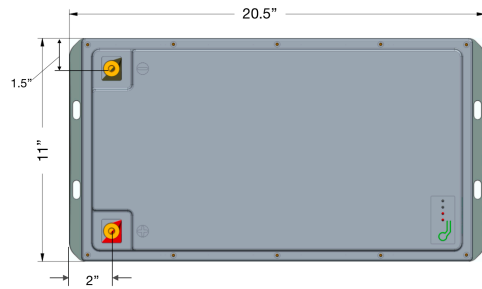
# LiFeBlue Battery Standard Model LB12300D 12 Volt - 300AH

[www.lifebluebattery.com](http://www.lifebluebattery.com)

920-LiFePO4 (920) 543-3764

| Specifications @ 77°F            | LiFeBlue LB12300D                                  |
|----------------------------------|--|
| Capacity                         | 300AH  |
| Nominal Voltage                  | 12.8 Volts   |
| Full Charge Resting Voltage      | 13.32 Volts  |
| Energy Storage                   | 3900 Wh  |
| Run Time @ 25 Amp Load           | 12 Hours   |
| Self Discharge Rate              | 14mA BLE on; 500µA Sleep                           |
| Data Communications              | Bluetooth BLE 4.0 or higher, RS485 Modbus, CAN Bus |
| <b>Charge</b>                    |  |
| Charging Temperature Range       | 32°~119°F (140°F Max)                              |
| Charge Method                    | IUoU; CC/CV  |
| Absorb Voltage, CV (recommended) | 14.2 to 14.6 Volts                                 |
| Float Voltage, CV Range          | 13.6 to 13.8 Volts                                 |
| CV, Absorb Time (recommended)    | 1-15 minutes                                       |
| Maximum Charge Current           | 150 Amps   |
| Recommended Current              | 1 to 120 Amps                                      |
| Full Charge, SoC Calibration     | Weekly   |
| Full Charge Current              | <2A/100AH  |
| <b>Discharge</b>                 |  |
| Discharge Temperature Range      | -4°F~140°F (-20°C~60°C)                            |
| Discharge Current                | 150 Amps; 200A 30 Min.                             |
| Discharge Current Peak           | 500 Amps, 3 Seconds                                |
| Discharge Cut Off Voltage        | 2.5 Volts, any cell                                |
| Inverter LVD, LBCO (recommended) | 11.5 Volts   |

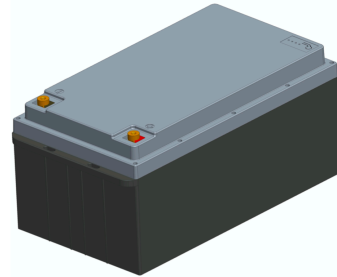
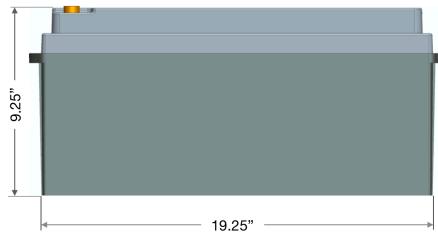
| Battery Protection                    | LiFeBlue LB12300D   |
|---------------------------------------|---|
| BMS                                   | PCM, MPU  |
| Over Voltage, any cell, Open          | 3.75 Volts, ±0.03 Volts   |
| Over Voltage, Release                 | 3.6 Volts, ±0.05 Volts  |
| Over Discharge, any cell, Open        | 2.5 Volts, ±0.05 Volts  |
| Over Discharge, all cells, release    | 2.8 Volts, ±0.05 Volts  |
| Over Current                          | >400 Amps; 6 Seconds  |
| Over Current Release                  | 30 Seconds  |
| Over Temperature                      | 149°F (65°C)  |
| Over Temperature release              | 131°F   |
| Low Temperature Charge, Open          | <32°F   |
| Low Temperature Charge, Release       | >40°F   |
| MOSFET Over Temperature, Open         | 212° F  |
| MOSFET Over Temperature, Release      | 158° F  |
| Short Circuit Protection              | >500A for 500µs   |
| Short Circuit Protection release      | 30 Seconds, Remove Load   |
| <b>Mechanical</b>                     |   |
| Length                                | 20.5"   |
| Width                                 | 11"   |
| Height                                | 9.25"   |
| Weight                                | 88Pounds  |
| Hardware                              | M8 bolt, washer, lock washer, Fits 5/16" Ring                                     |
| Hardware Torque                       | 80 in-lb. (9 N-m)   |
| <b>Miscellaneous</b>                  |   |
| Battery in Parallel                   | 4 (maximum recommended)   |
| Battery in Series                     | 1, 2, 3 or 4  |
| Discharge Test Setting                | 100% DoD @ 1C   |
| Discharge Test Results                | >2800 Cycles~83% remaining capacity   |
| Recommended Storage Method            | 50% SoC; <75% RH, Test Voltage every 90 days and charge if below 13.0V            |
| Recommended Storage temperature Range | 20°F~95°F (cooler is better)  |
| Lithium Ion Chemistry                 | Lithium Iron Phosphate (LFP; LiFePO4)   |
| Cell Type                             | Prismatic Cells   |
| Internal resistance (50% SoC)         | ≤20mΩ @1kHz AC  |
| Certifications                        | UL1642; IEC62133; TUV CB; CE; UN38.3; ISO9001-2009; ISO14001; OHSAS18001; TS16949 |



## SAFETY WARNING

**Read and follow all instructions. Improper use or handling may result in damage or injury to people or property.**

- Loose connections or Inadequately sized bus bars, connectors or cables may cause over-heating and are a potential fire hazard.
- Do not use temperature compensation with any battery charger.
- Battery must not be installed near any heat source.
- Do not expose the battery to water or fire.
- Do not connect the battery in reverse polarity.
- Do not short battery terminals.
- Do not crush the battery.
- Do not mix with lead acid or any other battery chemistry.



### INSTALLATION INSTRUCTIONS

- Batteries must be installed in a dry compartment where there is no exposure to direct sunlight, dripping or spraying water from any source, debris or to loose items that can contact the battery terminals or cables. Keep away from children and pets.
- Each battery must be installed in the upright position (battery case top facing up) and securely fastened to avoid any movement of the battery, terminal connectors or wiring.
- Terminal bolts must be tightened properly before use. Torque each terminal bolt to 9 N-m or 80 in-lb. Do not over tighten. Check bolt torque periodically.
- Use a terminal post or bus bar to connect batteries in parallel if there are more than 2 ring terminals on any battery terminal.
- Cables must be free of acid from previous use and be kept clean and dry.
- Always install proper circuit protection. A fuse, circuit breaker or other current interruption device, properly sized for each branch circuit that is connected to a LiFeBlue battery, is required.
- Fully charge the battery before initial use. Fully charge the battery at least every 10 days. Do not leave the battery fully discharged more than 15 days.
- Each LiFeBlue battery includes a Battery Management System (BMS). The battery pack and cells are monitored and protected by the BMS. It is for protection only in case the limits of safe operation are exceeded. You must use appropriate voltage regulators for each charge source.
- The user is responsible for the proper and safe operation of the battery by limiting voltage, current and temperature to the normal operation values found on the data sheet.
- LiFeBlue Battery shall not be used in connection with life support systems, life saving or other medical equipment or devices. Use of LiFeBlue Battery with this type equipment is at your own risk.
- If the battery becomes very hot, has a smell, or the case becomes distorted or abnormal looking, stop using immediately and disconnect the negative cable.