



LiFeBlue Battery

Low Temperature Model LB12100D-LT

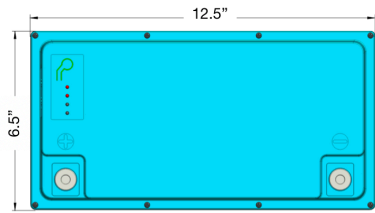
12 Volt - 100AH

www.lifebluebattery.com

920-LiFePO4 (920) 543-3764

Specifications @ 77°F	LiFeBlue LB12100D-LT
Capacity	100AH
Nominal Voltage	12.8 Volts
Full Charge Resting Voltage	13.32 Volts
Energy Storage	1300 Wh
Run Time @ 25 Amp Load	4 Hours @ 77°F
Self Discharge Rate	14mA BLE on; 500µA Sleep
Data Communications	Bluetooth BLE 4.0 or higher; RS485 Modbus; CAN Bus
Charge	
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	100 Amps, 30 min @ 77°F
Recommended Current	1 to 80 Amps
Full Charge, SoC Calibration	Weekly
Full Charge Current	<2A/100AH
Heater Current From Charger	6 Amps
Heater Controller	<32°F On; >40°F Off
Discharge	
Discharge Temperature Range	-4°F~140°F (-20°C~60°C)
Discharge Current	100 Amps Continuous
Discharge Current, 3 seconds	350 Amps

Battery Protection	LiFeBlue LB12100D-LT
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; 4 Seconds
Over Current Release	60 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
Mechanical	
Length	12.5"
Width	6.5"
Height	9.25"
Weight	28 Pounds
Hardware	M8 bolt, washer, lock washer, Fits 5/16" Ring
Hardware Torque	80 in-lb. (9 N-m)
Miscellaneous	
Battery in Parallel	4 (maximum recommended)
Battery in Series	Do Not Connect In Series
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.