

12 VDC, 344 Ah LiFePO4 broadband standby battery

technetix

LEON[®] SB LBLIFEPO4-12V344AH

Technetix' LBLIFEPO4-12V344AH is a high energy density, lithium iron phosphate (LiFePO4) broadband battery for standby powering applications. This ultra high capacity 12 VDC, 344 Ah, 4400 Wh LiFePO4 battery offers premium performance while providing clean, energy efficient, safe, reliable and sustainable standby power to an HFC network standby power supply. Extreme high energy density with up to 90% depth of discharge (DoD) provides longer run-times and improved network reliability, with little to no maintenance.



LBLIFEPO4-12V344AH
(front angled view)

FEATURES

Higher capacity

- 3.4 times the capacity of a typical 100 Ah VRLA battery extends run-time

Advanced BMS

- Advanced BMS with Bluetooth[®] connectivity
- Can be used as a single 12 VDC battery or in a 36 VDC or 48 VDC string

Higher reliability

- Longer lifespan: 10x longer than VRLA and 3x longer than NMC
- Higher energy density: 3x longer run-time, 1/3 the weight for the same form factor as VRLA
- 4x faster charge-time than VRLA: during multiple successive outages, comes up to full charge faster, resulting in longer run-times and greater plant reliability
- Greater DoD: 90% of capacity is usable energy compared to 50% for VRLA
- Minimal effect on battery lifespan from high discharge rates
- Less maintenance due to lack of corrosion

Green/Environmentally-friendly

- Non-contaminating: contains no lead, mercury, cadmium, cobalt or rare earth metals to pollute and enter ground water
- 100% recyclable
- Less waste:
 - Fewer raw materials (number of batteries required) for same energy density reduces waste
 - Longer lifespan equates to fewer batteries used over time resulting in less waste

Efficient

- No float charging required: reduces operational energy use
- Low self-discharge rate: eliminates wasted energy required to “top up” batteries
- Less effects from extreme temperature:
 - Charge: 0°C to +60°C (+32°F to +140°F)
 - Discharge: -20°C to +60°C (-4°F to +140°F)

Safe

- No outgassing of harmful acidic gases and explosive hydrogen that are present with lead-acid during charging
- No sulphuric acid-based electrolyte: eliminates acid burn hazards and the need for personal protective equipment (PPE) such as aprons, gloves, face shields, etc.
- Inherently non-combustible:
 - Safest, most chemically and structurally stable of all battery chemistries
 - Excellent thermal stability without any possibility for thermal run-away, decomposition at high temperatures, fire, or explosion
 - No flammability hazards eliminates special personnel training

12 VDC, 344 Ah LiFePO4 broadband standby battery



LEON[®] SB LBLIFEP04-12V344AH

SPECIFICATIONS

Parameter	Specification	
Electrical		
Nominal Voltage	12.8 VDC	
Nominal Capacity	344 Ah	
Energy Storage	4403 Wh	
Cells	3.2 VDC prismatic LiFePO4	
Charging		
Charging Mode	CC, CV	
Continuous Charge Current (Max.)	0.43C (150 A)	
End of Charge Voltage	14.6 VDC	
Charging Cut-Off Current	0.029C (10 A)	
Discharging		
Continuous Discharge Current (Max.)	0.43C (150 A)	
BMS		
Type	Internal	
Self-Consumption Current	10 mA (operating mode)	
	500 µA (sleep mode)	
	50 µA (power down mode)	
Overcharge Protection Voltage	15.20 VDC	
Overcharge Protection Delay	3.0 s	
Overcharge Protection Recovery Voltage	14.0 VDC	
Overdischarge Voltage Protection	9.6 VDC	
Overdischarge Protection Recovery Voltage	11.0 VDC	
Overdischarge Protection Delay	3.0 s	
Overdischarge Protection Recovery Conditions	Disconnect load & charge	
Short Circuit Protection Delay	200 µs	
Short Circuit Protection Recovery Condition	Disconnect load	
Balancing/Equalization Turn-On Voltage	3.45 VDC/cell	
Balance/Equalization Current	50 mA (min.), 75 mA (max.)	
High Temperature Operation Protection	+65 °C (+149 °F)	
High Temperature Operation Protection Reconnect	+55 °C (+131 °F)	
Low Temperature Charge Protection	-5 °C (+23 °F)	
Low Temperature Charge Protection Reconnect	0 °C (+32 °F)	
Low Temperature Discharge Protection	-25 °C (-13 °F)	
Low Temperature Discharge Protection Reconnect	-20 °C (-4 °F)	
Environmental & Physical		
Operating Temperature	Charge	0 °C to +60 °C (+32 °F to +140 °F)
	Discharge	-20 °C to +60 °C (-4 °F to +140 °F)
Storage Temperature		-20 °C to +45 °C (-4 °F to +113 °F)
Storage Humidity		< 95%
Terminal Type		M8 x 1.25
Terminal Torque		221 in-lb (25 Nm)
Case Material		ABS
Dimensions (H x W x D)		10.3"H x 14.5"W x 7.5"D (26.2H x 36.8W x 19.1D cm)
Weight		62.0 lb (28.1 kg)

12 VDC, 344 Ah LiFePO4 broadband standby battery

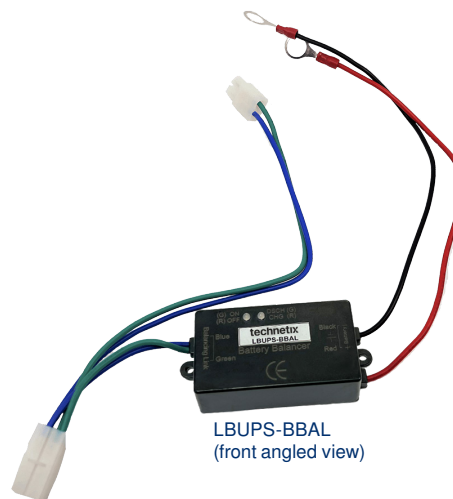
LEON[®] SB LBLIFEPO4-12V344AH

ORDERING INFORMATION

Part #	Description
LBLIFEPO4-12V344AH	12 VDC, 344 Ah LiFePO4 broadband standby battery
Optional Accessories	
LBUPS-BBAL	12 VDC, 3 A battery balancer/equalizer for VRLA or LiFePO4 batteries



LBLIFEPO4-12V344AH
(front angled view)



LBUPS-BBAL
(front angled view)