

12 VDC, 100 Ah LiFePO4 broadband standby battery



LBLIFEPO4-12V100AH

Technetix' LBLIFEPO4-12V100AH is a high energy density, lithium iron phosphate (LiFePO4) broadband battery for standby powering applications. This high capacity 12 VDC, 100 Ah, 1280 Wh LiFePO4 battery offers premium performance while providing clean, energy efficient, safe, reliable and sustainable standby power to an HFC network standby power supply. High energy density with up to 90% Depth of Discharge (DoD) provides longer run-times and improved network reliability, with little to no maintenance.



LBLIFEPO4-12V100AH
(front angled view)

FEATURES

Advanced Battery Management System (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

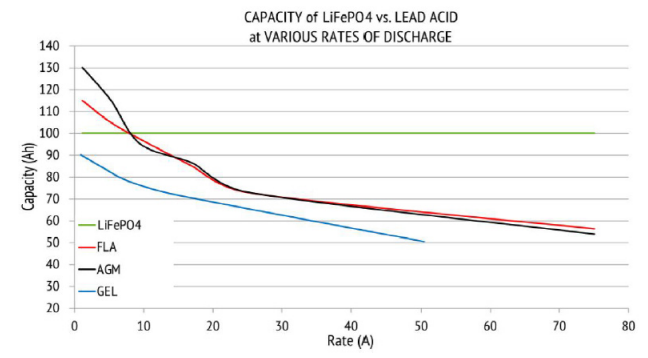
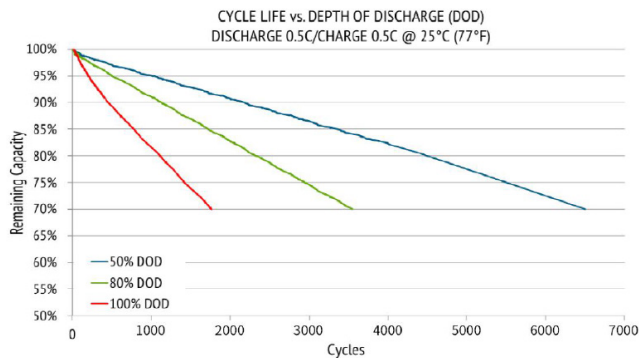
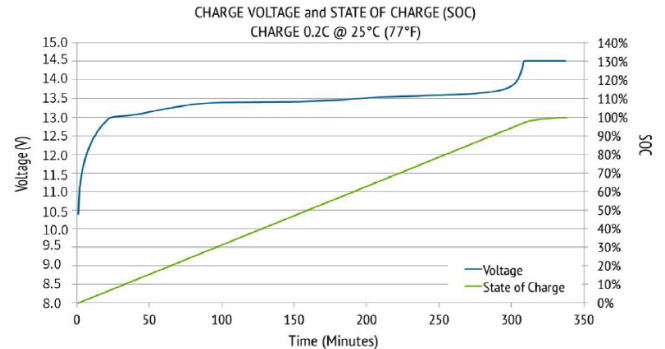
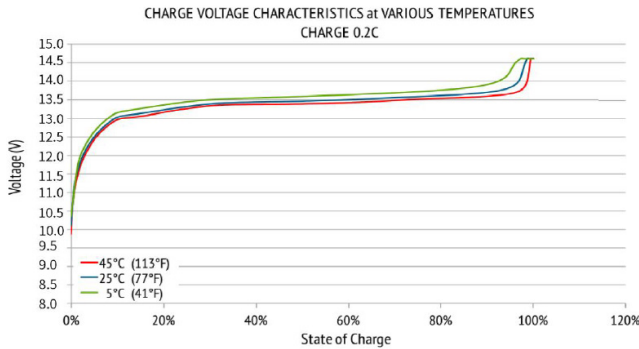
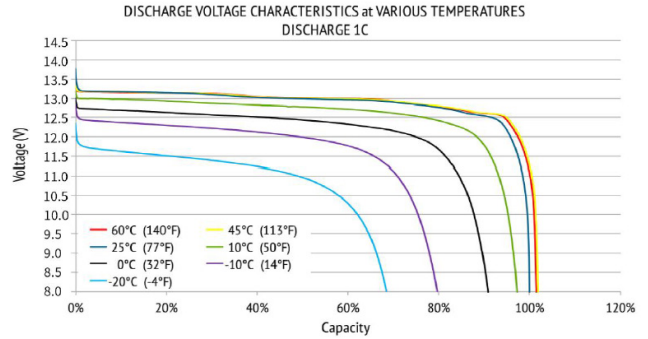
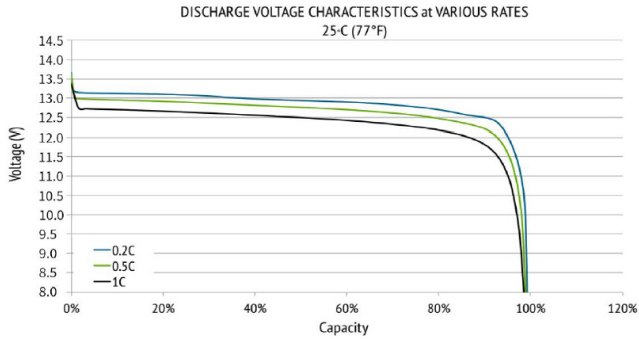
- No float charging required: reduces operational energy use
- Low self-discharge rate: eliminates wasted energy required to “top up” batteries
- Less effects from extreme temperature:
 - Charge: 0°C to +55°C (+32°F to +131°F)
 - Discharge: -20°C to +60°C (-4°F to +140°F)

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

LBLIFEPO4-12V100AH

LBLIFEPO4-12V100AH performance characteristics



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LBLIFEP04-12V100AH

SPECIFICATIONS

Parameter	Specification	
Electrical		
Nominal Voltage	12.8 V	
Nominal Capacity	100 Ah	
Run-time @ 20 A	300 min.	
Resistance	≤10 mΩ @ 50% SoC	
Efficiency	99%	
Self Discharge	<3% per month	
Cycle Life	6000 cycles DoD 80% (@ 0.2C)	
Modules in Series (Max.)	4	
Charging		
Recommended Charge Current	20 A	
Charge Current (Max.)	100 A	
Recommended Charge Voltage	14.2 V-14.6 V	
Reconnect Voltage	14.0 V (3.5 ±0.05 Vpc)	
Balancing Voltage	13.6 V (3.4 ±0.025 Vpc)	
Discharging		
Continuous Discharge Current (Max.)	100 A	
Peak Discharge Current	550 A (400 ms)	
Recommended Low Voltage Disconnect	11 V	
Reconnect Voltage	10.8 V (2.7 ±0.1 Vpc)	
Short Circuit Protection	200-600 μs	
Compliance		
Certifications	UN38.3 (battery) CE (battery)	
	UL1973 (battery)	
Shipping Classification	UN 3480, Class 9	
BMS		
Charge Voltage Cut-off	14.6 V (3.65 ±0.002 Vpc)	
Discharge Current Cut-off	130 A	
Discharge Voltage Cut-off	10.4 V (2.6 ±0.05 Vpc)	
High Temperature Cut-off	+75 °C (+167 °F)	
Reconnect Temperature	+50 °C (+122 °F)	
Environmental & Physical		
Operating Temperature	Charge	0 °C to +55 °C (+32 °F to +131 °F)
	Discharge	-20 °C to +60 °C (-4 °F to +140 °F)
Storage Temperature	-5 °C to +35 °C (+23 °F to +95 °F)	
Terminal Type	M8 x 1.25	
Terminal Torque	80-100 in-lb (9-11 Nm)	
Case Material	ABS	
Enclosure Protection	IP65	
Cell Type - Chemistry	Prismatic - LiFePO4	
Dimensions (H x W x D)	8.4"H x 13.0"W x 6.8"D (21.3H x 33.0W x 17.3D cm)	
Weight	24.2 lb (11.0 kg)	

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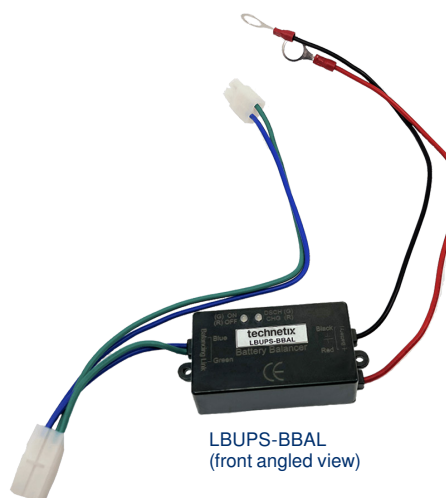
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ORDERING INFORMATION

Item Code	Model Code	Description
19204264	LBLIFEPO4-12V100AH	12 VDC, 100 Ah LiFePO4 broadband standby battery
Optional Accessories		
19201004	LBUPS-BBAL	12 VDC, 3 A battery balancer/equalizer for VRLA or LiFePO4 batteries



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(front angled view)



LBUPS-BBAL
(front angled view)