

Lithium Iron Phosphate (LiFePO4) Battery 12.8V 100Ah/100A BMS

Features:

- **Longer Cycle Life:** LFP Offers up to 20 times longer cycle life and 5 times longer float/calendar life than a lead acid battery. This helps to minimize replacement cost and reducing the total cost of ownership over time.
- Lighter Weight: About 40% of the weight of a comparable lead acid battery. LFP is generally a "drop-in" replacement for lead acid batteries.
- **Higher Power**: Delivers twice the power of a lead acid battery, even at high discharge rates, whilst maintaining high energy capacity.
- Wider Temperature Range: -20°c to +60°c.
- **Superior Safety:** Lithium Iron Phosphate chemistry eliminates the risk of explosion or combustion due to high impacts, overcharging or short circuit.
- **Increased Flexibility:** Modular design enables deployment of up to four batteries in series and max 12 batteries in parallel.
- Connectivity: Use the free iOS or Android app to monitor via Bluetooth.
- **Protection:** Advanced built-in BMS provides high protection when in use.



General Description:



Applications:

- Electric vehicles, boats, toys
- Mobility scooters
- Kontiki, trolling motors
- Solar/wind energy storage
- Telecommunications
- Medical equipment
- UPS, Back-up power
- Emergency lighting

General Description:

This high performance 12.8V 100Ah capacity LFP battery is perfect for powering your deep cycle systems. The battery design is strong, safe and easy to use. This is the very latest Lithium technology available and with our unique onboard BMS (Battery Management System) further increase safety and durability.

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Batteries can be connected in parallel for increased capacity and connected in series for increased voltage Max 48V, 1200Ah (57kWh).

Electrical Specifications:		Mechanical Specifications:	
Nominal Voltage:	12.8V	Terminal Type:	2 * M8 Bolts (washers incl.)
Nominal Capacity:	100Ah	Weight:	10.5kg
Nominal Energy:	1280Wh	Case Dimension (L x W x H):	260mm x 168mm x 210mm
Internal Resistance:	≤30mΩ @ 50% SOC	Case Type:	Black ABS, IP56 rating
Capacity:	@ 25A: 240minutes (4hours)	Cell type / Chemistry:	Prismatic-LiFePO4
Self-Discharge:	< -5% / per month	Bluetooth Smart Module:	iOS/Android free app
Maximum in Series:	4 pcs	BMS Features:	
		Low voltage, high voltage, over temperature, over-current, short- circuit protection, cell balancing, Bluetooth connectivity	
Maximum in Parallel:	12 pcs		

Discharge Current and Voltage:

Max Continuous Discharge Current:	100A	
Peak Discharge Current:	300A (10s)	
Discharge Pulse Current:	400A ±50A (31ms ±10ms)	
BMS Low Voltage Cut-off:	8.8V (2.2V ±0.5V)	
BMS Reconnect Voltage:	10.8V (2.7V ±0.05V)	
Short-Circuit Protection:	200-800µs Auto-recover or charge release	

Max Charge Current	100A	
Recommended Charge Current:	5A – 50A	
End of Charge Voltage:	14.4V ±0.2V	
BMS Over Charge Voltage Cut-Off:	15V (3.75V ±0.05V)	
Balancing Voltage:	3.6V ±0.05V per cell	
Balancing Current:	116mA ±10mA	

Charge Current and Voltage:

Compliance Specifications

Temperature Ranges:

-20°c to +60°c		CE for pack
		UN38.3 for pack
-20°c to +45°c	Certifications:	UL1642 for cells
		IEC61233 for cells
-20°c to +45°c		BIS for cells
+60°c	Shipping Classifications:	UN3840
	-20°c to +45°c -20°c to +45°c	-20°c to +45°c Certifications: -20°c to +45°c

Packaging:







Discharge Rate Curves:



State of Charge Curves:

Temperature Discharge Curves:



Charging Characteristics:



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Cycle Life Curves:



Self-Discharge Curves:



iOS / Android App Specifications:

- Free Download from Google Play or the App Store
- BLE4.0
- State of charge, cycle count, current, voltage, temperature, capacity, average time to full/empty













