

Lithium Iron Phosphate (LiFePO4) Batteries

Until recently, lead acid and nickel cadmium batteries have been the only battery types available to support a multitude of remote power applications. These batteries are extremely heavy and while weight may not be an important factor for batteries in a stationary environment, for batteries being used in a motive application, having to carry such a heavy dead weight can be arduous. As a result, the search has been on to find a lightweight battery solution.

Enter Lithium Iron Phosphate or LiFePO4.



LFP60AHA



LFP100AHA



LFP400AHA

LiFePO4 batteries are extremely stable and safe to use. This safety, combined with their light weight has seen them picked up widely for use in both military and commercial applications. Furthermore, LiFePO4 batteries do not suffer from some of the problems which are inherent to lead acid batteries.

Some of the advantages of LiFePO4 include:

Advantages

- Operation at up to 75°C
- Half the weight and smaller in size than lead acid
- No thermal runaway
- Many more charge cycles than lead acid
- No corrosive element - Ph ~ 7
- No toxic heavy metals (i.e.: lead, cadmium)
- Safe disposal
- High discharge rate
- Low self-discharge
- Operable in any orientation
- Fast charge rate (up to 3CA)

Applications

- Military
- Substations
- Marine
- Automotive
- Power stations
- Hospitals
- Wheelchairs
- Golf-carts
- UPS
- Renewable Energy
- Mining

Magellan Power's new range of LiFePO4 batteries will support your application at a much higher temperature (up to 75°C). They charge faster, last longer and are safe, light and easy to dispose of which reduces the risk of occupational handling injury. Combine this with a battery life that is completely maintenance free, Lithium Iron Phosphate batteries are sure to revolutionise back-up power requirements in coming years. To learn more about how Lithium Iron Phosphate batteries can power your application please contact us.



Lithium Iron Phosphate Battery Range Specifications

Operating Voltage			Operating Temperature		
(Charge)	4.00V		(Charge)	-25°C~75°C	
(Discharge)	2.8V		(Discharge)	-25°C~75°C	

Model	Nominal Capacity	Dimensions (mm)	Max Charge Current	Max Discharge Current	Standard Charge/Discharge Current	Cycle Life	Temperature Durability of Case	Self Discharge Rate	Weight		
LFP40AHA	40Ah	190x118x46	≤3CA	(Constant Charge)	≤3CA	0.3CA	(80DOD%)	≥2000Times	≤250C°	≤3% (pm)	1.6kg±100g
				(Impulse Current)	≤10CA		(70DOD%)	≥3000Times			
LFP60AHA	60Ah	215x115x61	≤3CA	(Constant Charge)	≤3CA	0.3CA	(80DOD%)	≥2000Times	≤110C°	≤3% (pm)	2.5kg±100g
				(Impulse Current)	≤10CA		(70DOD%)	≥3000Times			
LFP100AHA	100Ah	220x145x68	≤3CA	(Constant Charge)	≤3CA	0.3CA	(80DOD%)	≥2000Times	≤250C°	≤3% (pm)	3.2kg±100g
				(Impulse Current)	≤10CA		(70DOD%)	≥3000Times			
LFP150AHA	150Ah	279x182x70.6	≤3CA	(Constant Charge)	≤3CA	0.3CA	(80DOD%)	≥2000Times	≤250C°	≤3% (pm)	5.6kg±100g
				(Impulse Current)	≤10CA		(70DOD%)	≥3000Times			
LFP160AHA	160Ah	279x182x70.6	≤3CA	(Constant Charge)	≤3CA	0.3CA	(80DOD%)	≥2000Times	≤250C°	≤3% (pm)	5.6kg±100g
				(Impulse Current)	≤10CA		(70DOD%)	≥3000Times			
LFP300AHA	300Ah	305.7x210x55.5	≤3CA	(Constant Charge)	≤2CA	0.5CA	(80DOD%)	≥2000Times	≤200C°	≤3% (pm)	9.6kg±200g
				(Impulse Current)	≤10CA		(70DOD%)	≥4000Times			
LFP400AHA	400Ah	282x449x70	≤3CA	(Constant Charge)	≤2CA	0.3CA	(80DOD%)	≥2000Times	≤250C°	≤3% (pm)	13.5kg±200g
				(Impulse Current)	≤10CA		(70DOD%)	≥3000Times			
LFP800AHA	800Ah	288x850x71	≤1CA	(Constant Charge)	≤1CA	0.3CA	(80DOD%)	≥2000Times	≤250C°	≤3% (pm)	26kg±300g
				(Impulse Current)	≤10CA		(70DOD%)	≥3000Times			



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