

ISSUE 2

Lithium Iron Phosphate Batteries (LiFePO4)

Individual Batteries & Custom Battery Assemblies













About Our LiFePO4 Batteries

Euro Energy offer a wide range of LiFePO4 batteries, both in 12.8 and 25.6 Volt options, with a wide range of capacities.

LiFePO4 technology provides a solution to the need for a lightweight, higher capacity battery, normally without the need for major testing and tooling investment. All of our LiFePO4 batteries are fully compliant with UN38.3 testing requirements.

Batteries can take the form of standard 'blocks' as shown, or combined blocks to form custom battery assemblies, each containing a Battery Management System (BMS) to protect against abuse.

The technology is much safer than other lithium chemistries, and has a specific energy between that of Ni-MH and Lithium Ion. Safety is excellent, with it being the battery chemistry of choice for many manufacturers.

Benefits of LiFePO4 Batteries

Highest cycle life

Up to 3000 cycles to 60% capacity at 100% depth of discharge (0.5CA). This compares with 500 cycles from Ni-MH and often less from Li-lon

Light weight

1/3 weight reduction from Ni-MH, less than half the weight of VRLA

Excellent temperature range

Operates from -20°C to +60°C, lower temperature storage permissible

Capable of high rate discharge

10C discharge, limited only by the BMS electronics

Fast charging

1C charging possible

Available as a 'drop-in' replacement for Valve Regulated Lead Acid

Batteries available as off-shelf solutions with the same footprints as their lower capacity VRLA counterparts

Excellent recoverable capacity at high discharge rates

If you discharge at 1C, you'll recover full capacity in Ah. If you discharge VRLA at 1C, this is likely to be as low as 60% of the Ah rating

Low self discharge

Better than Ni-MH or VRLA, close to the performance of Li-Ion

Parallel connection possible to produce the highest capacities

Individual batteries can be series or parallel connected to double capacity or voltage as can our custom packs

Safe for transportation

Although LiFePO4 batteries at over 100Wh fall into the UN Miscellaneous Dangerous Goods Class 9 category, they are inherently safer than other Lithium technologies. It is possible to meet the UN38.3 testing criteria without a Protection Circuit (PCM), although this is normally included in the BMS, the use of which is advisable to maintain cell balancing.



LiFeP04 3-12

Voltage/Capacity 12.8V/3Ah (38.4Wh)
Approx. Size (LxWxH) 90 x 70 x 101/106mm
Approx. Weight 0.60kg
Terminal Faston 250
Part Number 04732



LiFeP04 20-12

 Voltage/Capacity
 12.8V/20Ah (256Wh)

 Approx. Size (LxWxH)
 181 x 77 x 167mm

 Approx. Weight
 2.90kg

 Terminal
 Insert M5

 Part Number
 04728



LiFeP04 5-12

Voltage/Capacity 12.8V/5Ah (64Wh)
Approx. Size (LxWxH) 91 x 70 x 101/106mm
Approx. Weight 0.90kg
Terminal Faston 250
Part Number 04714



LiFeP04 33-12

Voltage/Capacity 12.8V/33Ah (422Wh)
Approx. Size (LxWxH) 195 x 130 x 155/168mm
Approx. Weight 5.40kg
Terminal Insert M6
Part Number 04724



LiFeP04 7.5-12

Voltage/Capacity 12.8V/7.5Ah (96Wh)
Approx. Size (LxWxH) 151 x 65 x 94/100mm
Approx. Weight 1.30kg
Terminal Faston 250
Part Number 04734



LiFeP04 40-12

Voltage/Capacity 12.8V/40Ah (512Wh)
Approx. Size (LxWxH) 195 x 130 x 168/175mm
Approx. Weight 6.40kg
Terminal Insert M6
Part Number 04731



LiFeP04 10-12

Voltage/Capacity 12.8V/10Ah (128Wh)
Approx. Size (LxWxH) 151 x 65 x 94/100mm
Approx. Weight 1.50kg
Terminal Faston 250
Part Number 04726



LiFeP04 60-12

Voltage/Capacity 12.8V/60Ah (768Wh)
Approx. Size (LxWxH) 239 x 132 x 205/210mm
Approx. Weight 9.50kg
Terminal Insert M6
Part Number 04711



LiFeP04 12-12

Voltage/Capacity 12.8V/12Ah (153.6Wh)
Approx. Size (LxWxH) 151 x 98 x 95/101mm
Approx. Weight 1.60kg
Terminal Faston 250
Part Number 04727



LiFeP04 80-12

Voltage/Capacity 12.8V/80Ah (1024Wh)
Approx. Size (LxWxH) 258 x 166 x 206mm
Approx. Weight 12.30kg
Terminal Insert M6
Part Number 04740



LiFeP04 15-12

Voltage/Capacity 12.8V/15Ah (192Wh)
Approx. Size (LxWxH) 151 x 98 x 95/101mm
Approx. Weight 1.90kg
Terminal Faston 250
Part Number 04730



LiFeP04 100-12

Voltage/Capacity 12.8V/100Ah (1280Wh)
Approx. Size (LxWxH) 395 x 110 x 285mm
Approx. Weight 14.3kg
Terminal Insert M6
Part Number 04741





LiFeP04 4.5-24

Voltage/Capacity 25.6V/4.5Ah (115.2Wh)

Approx. Size (LxWxH) 151 x 65 x 94mm

Approx. Weight 1.43kg

Terminal Faston 250

Part Number 04742



LiFeP04 20-24

Voltage/Capacity 25.6V/20Ah (512Wh)
Approx. Size (LxWxH) 195 x 130 x 155mm
Approx. Weight 6.40kg
Terminal Insert M7
Part Number 04745



LiFeP04 7-24

 Voltage/Capacity
 25.6V/7Ah (179.2Wh)

 Approx. Size (LxWxH)
 151 x 98 x 95mm

 Approx. Weight
 1.9kg

 Terminal
 Faston 250

 Part Number
 04743



LiFeP04 30-24

Voltage/Capacity 25.6V/30Ah (768Wh)
Approx. Size (LxWxH) 239 x 132 x 205mm
Approx. Weight 9.85kg
Terminal Insert M7
Part Number 04746



LiFeP04 15-24

 Voltage/Capacity
 25.6V/15Ah (384Wh)

 Approx. Size (LxWxH)
 195 x 130 x 155mm

 Approx. Weight
 5.00kg

 Terminal
 Insert M7

 Part Number
 04744



LiFeP04 60-24

Voltage/Capacity 25.6V/60Ah (1536Wh)
Approx. Size (LxWxH) 436 x 108 x 317mm
Approx. Weight 17.00kg
Terminal Insert M8
Part Number 04747



Require a battery not listed here?

Please contact our Customer Service Team on +44 (0) 116 234 0567

or email info@euroenergy.co.uk