

Lithium Iron Phosphate (LFP) Battery



More Miles. Less Space.

Ideal for commercial and fleet vehicles, the Aries[™] battery pack from Our Next Energy (ONE) delivers industry leading energy density using more abundant materials - saving costs, reducing CO_2 emissions, and eliminating supply chain constraints.

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Battery Pack Performance

Energy 79 kWh

Chemistry LFP

Mass 550 kg

Volume 285 L

GED 144 Wh/kg

VED 287 Wh/L Dimensions 1630 x 760 x 229 mm

Volume Cell-to-Pack 76%

Voltage 348 V

Peak Power 120 kW

Cont. Power **79 kW**

Cycle Life (1C/1C) 3000 Cycles

aries

Using lithium iron phosphate (LFP) chemistry that is free of nickel and cobalt, Aries' structural architecture yields 76% cell-to-pack density to deliver the most energy dense LFP battery in the market. This density means you can travel more miles with a battery pack that takes up less space.

Entering full-scale production in 2023.

Aries opens up sustainable routes for commercial and fleet vehicles.

Why LFP?

- + Peace of Mind Durable LFP chemistry mitigates thermal runaway
- + More Sustainable Uses sustainable raw materials that are up to 10,000 times more plentiful than lithium batteries that rely on cobalt and nickel
- + Low Maintenance

LFP chemistry doesn't require special maintenance to extend lifespan; permits charging up to 100% without degradation to allow the user to get the most out of the battery

Validated and tested according to engineering standards:

- + SAE J1798 Electrical Performance
- + SAEJ2380 Structural Performance Testing
 + ISO 16750 and IEC 60068 Environmental
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- + SAE J2464 Abuse Testing
- + IEC 60529 Intrusion Testing
- + SAE J2721 Corrosion Resistance Testing
- + SAE J2288 Lifetime Durability Testing
- + Certification for shipping per UN 38.3EMC conformance to FMC1278
- + Miscellaneous characterization testing per ISO and IEC specifications

Features:

- Higher Energy Density
 76% cell-to-pack architecture yields more energy density than the leading competitor
- + More Cargo Capacity Improved energy density means a smaller battery pack that takes up less space, allowing more cargo capacity
- + Scalable

108 cells in a scalable architecture allows for series and parallel configurations to meet your power and energy needs

- + Increased Efficiency 3,000 cycles at full depth of discharge intended service life
- + Heat Control Liquid cooling loop thermal management system
- + Overcharge Protection Integrated BMS with redundant current measurement and overcharge protection
- + Serviceable Design BMS designed to allow for easy access and serviceability

About ONE

Our Next Energy, Inc. (ONE) is a Michigan-based energy storage technology company focused on engineering batteries that will accelerate electrification. Our vision is simple: Double the range of electric vehicles; use safer, more sustainable raw materials; and establish a localized supply chain. ONE was founded in 2020 by Mujeeb Ijaz, a leader in the battery industry with more than 30 years of experience in developing electric vehicles and battery systems technologies.

For sales inquiries, contact sales@one.ai

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