

48V Lithium-ion Battery - 8Ah

UltraPhosphate™ Technology

A123's UltraPhosphate Lithium-ion 48V Battery provides a cost effective and compact solution to support considerable fuel economy savings for micro-hybrid vehicle applications. With powerful charge acceptance and the potential to eliminate a battery cooling system, A123's 48V battery sets a new automotive standard. The UltraPhosphate difference provides a robust battery that can support engine downsizing, performance upgrades such as electric supercharging, and fuel saving micro hybrid features like start-stop and recuperation.



Dynamic Charge Acceptance

A123's powerful 48V battery can accept high rates of charge and capture more energy from regenerative braking for improved vehicle fuel economy and reduced emissions. This high power capability can be sustained over the life of the product. A123's breakthrough lithium-ion chemistry now delivers a wider temperature operating range for exceptional cold charging performance.



Extensive Cycle Life

UltraPhosphate technology delivers a solution that generally lasts the life of the vehicle, often without the need for active battery cooling. This advantage potentially eliminates air ducts, fans and thermal integration work for the vehicle manufacturer.



Reliability

Smart on-board battery management system (BMS) electronics report real-time data and diagnostics to protect the battery and prevent premature failures, reducing service and warranty costs. The integrated BMS provides cell balancing built-in system-level safety features, protecting the battery from under/over voltage and over temperature conditions.



Light Weight & Compact

The high power density of UltraPhosphate allows for a lower mass and more compact design. This battery can be packaged under seats, behind trim panels, and in other space constrained locations.

Product Specifications

Capacity	8Ah LFP
Configuration	14S1P
Weight	<8kg
Extended Operating Temp	-30°C to 65°C
Storage Temp	-40°C to 65°C
Dimensions	304 x 96 x 180 mm
Typical SoC Range	30-80%
Operating Voltage	24-54V
10s Discharge, BOL (kW)	15.0
10s Charge, BOL (kW)	16.0
60s Discharge, BOL (kW)	7.5
60s Charge, BOL (kW)	9.0
Usable Energy	>180Wh