

12V Starter Battery

UltraPhosphate™ Technology

A123's UltraPhosphate Lithium-ion 12V Engine Start Battery sets a new performance standard for micro-hybrid vehicle applications by delivering outstanding cold cranking power with a battery that outperforms incumbent lead-acid technologies. By utilizing advanced chemistry and system design, the A123 solution offers outstanding cycle life, high charge acceptance, and up to a 60% weight reduction over lead-acid. A123's UltraPhosphate difference provides a robust lead-free solution to the rigorous demands of start-stop and recuperation, which are key fuel saving features of a micro-hybrid vehicle. Already producing a third generation product, A123 continues to set the bar on lithium-ion battery performance.



Cold Temperature Performance

A123's breakthrough Lithium-ion chemistry now delivers a wider temperature operating range for exceptional cold crank performance that outperforms lead acid and also contributes to system reliability.



Extensive Cycle Life

A123's UltraPhosphate delivers a solution that widely performs for the life of the vehicle. Long life and high durability in start-stop applications defer the need to replace the 12V Starter Battery, which improves vehicle manufacturers warranty risk and total cost of ownership for the consumer.



Dynamic Charge Acceptance

A123's robust 12V battery can accept high rates of charge and capture several times more energy from regenerative braking for improved vehicle fuel economy and reduced emissions. This advantage is sustained over product life and does not suffer the severe performance degradation experienced with lead-acid technologies.



Lighter Weight

A123's 12V system weighs less than half of the lead-acid battery that it is replacing, contributing to increased vehicle fuel economy and better performance.



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 and built-in state of charge and state of health measurement and calculation which allows for removal of intelligent battery sensors from the vehicle system.

Product Specifications

Capacity	40 Ah
Cold Cranking (-18° C)	600 A
Weight	6.5 kg
Voltage, Nominal	13.2 V
Operating Temp	-30°C to 55°C
Storage Temp	-40°C to 60°C
Dimensions (LN3)	160 x 175 x 190 mm