



Auxiliary Power Unit Batteries
Advanced Lithium-ion Technology

Smart Lithium-ion Technology at Work

2x Available Capacity vs Lead Acid

4x Longer Life

2x Faster Charge

2x Lighter

Extremely Safe and Compatible

Return on Investment (ROI)

Ethium batteries eliminate any replacement cost and downtime, allowing you to focus on your business. When compared with Diesel Auxiliary Power Unit (APU) solutions, Electric APUs equipped with Ethium batteries will save you thousands in fuel costs.

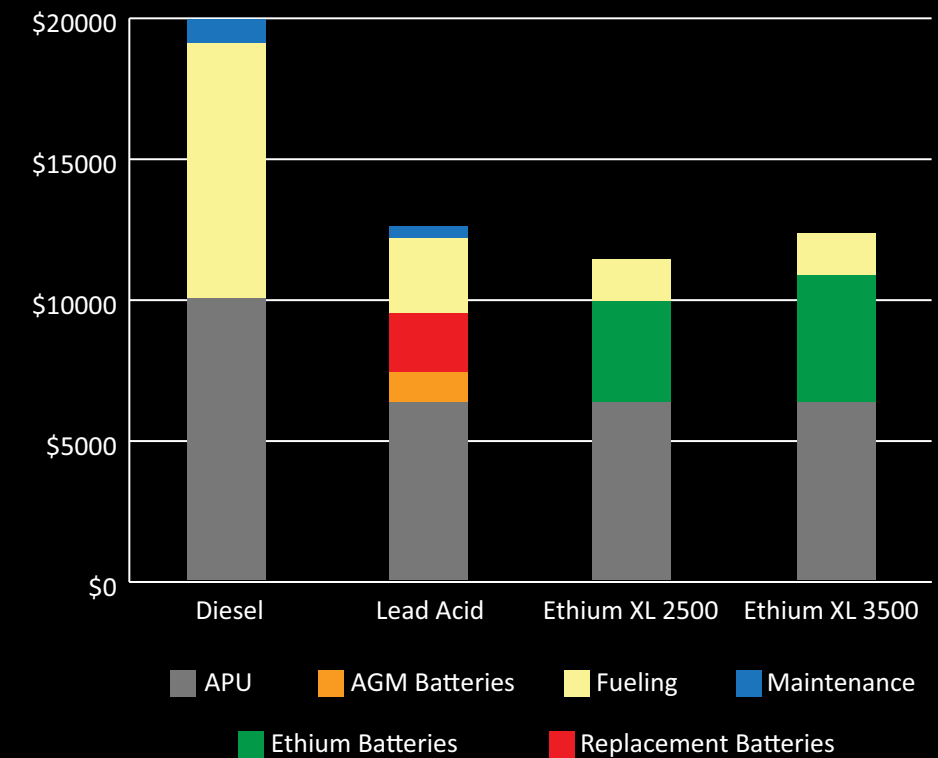
Ethium XL series batteries are available in 2.5 kWh capacity providing the quickest ROI, and in 3.5 kWh capacity to offer “Diesel APU like” runtime and performance, with minimal fuel costs.

Higher Truck Resale Value
With 10 years+ of battery life, Ethium generates residual APU value. Alternatively, the batteries can be reused on a new vehicle, drastically reducing costs.

Maintenance Free
Easy to install with no need for maintenance or replacement.

Warranty
All Ethium batteries come with a full 5 year / 1,000 cycle warranty.

Total APU Cost of Ownership
5 Year Trade Cycle



Advantages of Lithium-ion Technology



Proven
Technology



High Energy
Density



Quick
Recharge



Extended
Life



Lightweight



Maintenance
Free



Smart



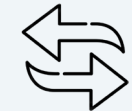
Efficient



Quick Return
on Investment



Extremely
Safe



Drop-in
Solution



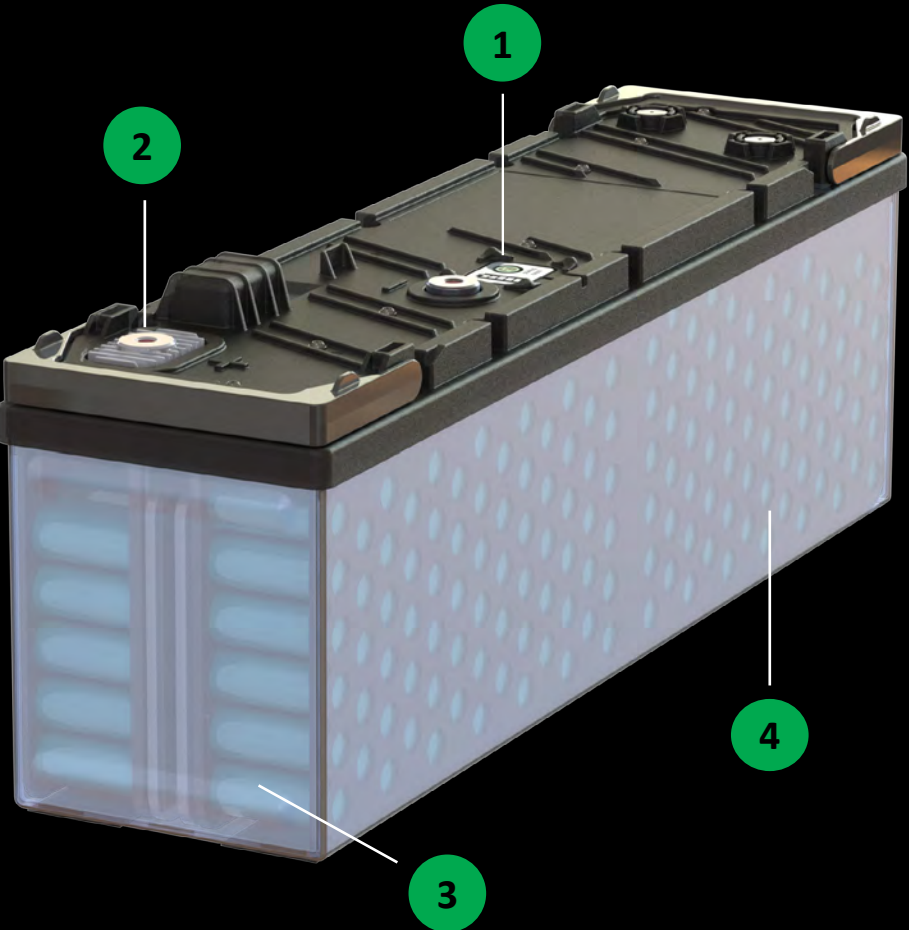
High & Low
Temperature
Performance

Technology

Ethium XL series batteries are engineered specifically for long-haul commercial vehicle APUs and provide an extremely power-dense, safe, and durable solution, built for the life of the truck.

- 1. On/Off Switch with LED Indicator**
Batteries can be switched on/off using a fully sealed push button. State of charge and fault/status are displayed on the user-friendly LED indicator.
 - 2. Terminals & Enclosure**
Corrosion-resistant plated terminals. Durable reinforced plastic cover with corrosion-resistant aluminum enclosure. IP67 water and dust proof rating.
 - 3. Cylindrical LiFePO₄ Cells**
UL rated lithium iron phosphate cells for high energy density, durability, safety, and full compatibility with equipment designed to use lead acid batteries.
 - 4. Internal Construction**
Compact and load bearing honeycomb cell structure with a sealed enclosure. Virtually wire-free design with optimum heat dissipation. Engineered for strength, energy density, and low weight.
- Advanced BMS**
Advanced Battery Management System (BMS) capable of complete cell control (voltage, temperature, battery health, current flow, cell balancing) and configurability across all applications.
- Active Thermal Management (ATM)**
ATM uses embedded heating elements controlled by the BMS that allows the battery to be used in cold environments.

AVC Technology
Patent-pending Active Voltage Control (AVC) technology that automatically optimizes the charging rate to minimize charge time while protecting the APU and the vehicle's starting batteries.



Communication & Connectivity

Active CAN communication for battery monitoring using an ECOM service dongle. Plug and play ready for cellular-based fleet management. E-Link IoT module available.

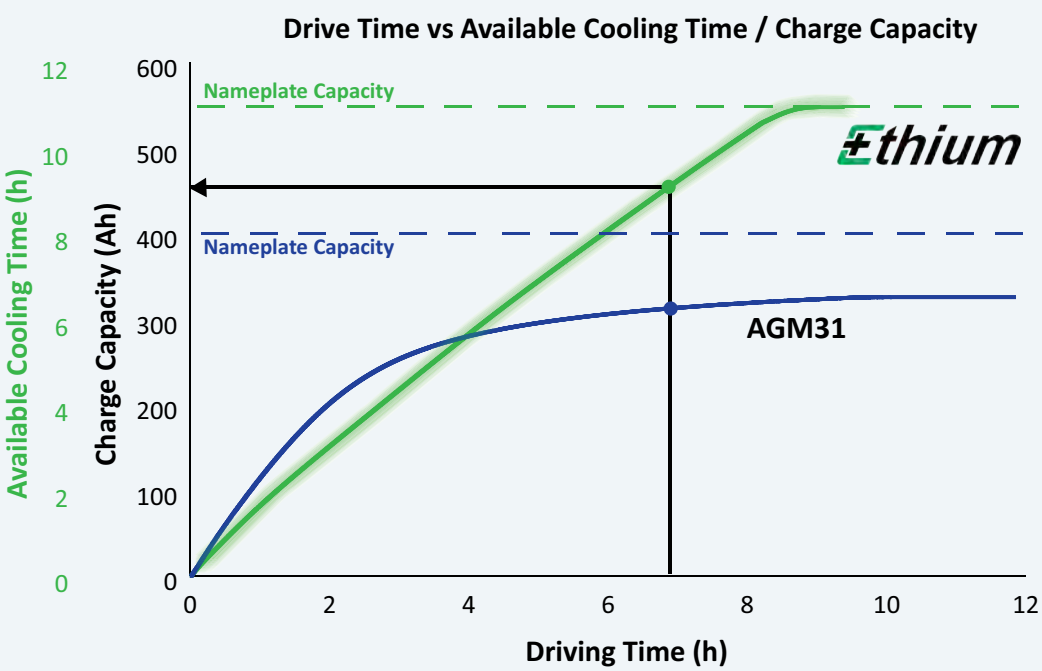
ECOM service dongle and pigtail adaptor
PN: E2046012, E2087004



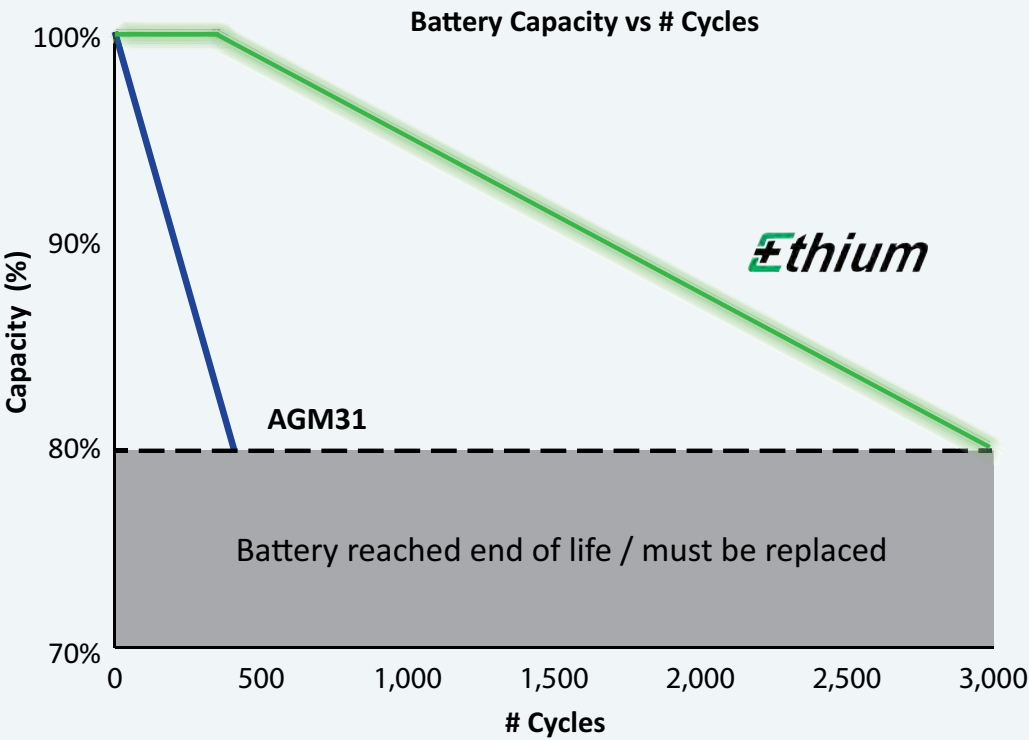
E-Link fleet management (IoT) device

Performance

Ethium advanced battery technology with Active Voltage Control (AVC) charges significantly larger capacity batteries faster than AGM31 batteries, maximizing runtime even on shorter drives.



Ethium batteries use inherently safe lithium iron phosphate chemistry and are constantly monitored by embedded BMS electronics to provide extremely long life (3,000 cycles or ten years of life for most applications).



Product Specifications

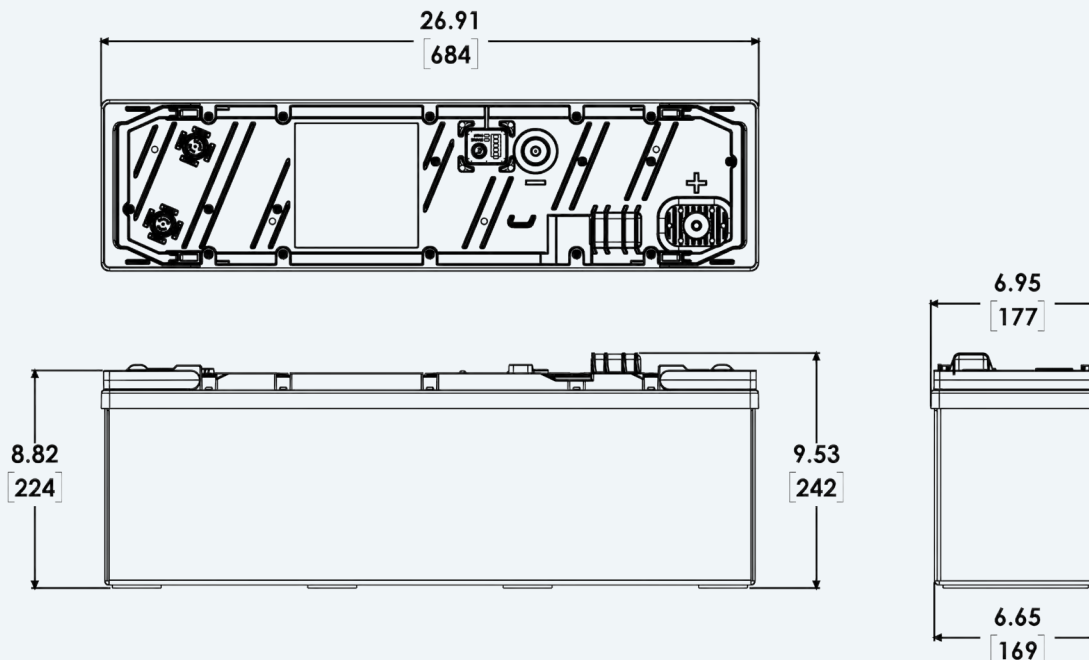
Data Sheet

Chemistry	Lithium iron phosphate (LiFePO ₄)	Reccomended storage range	-20 to 55°C / -4 to 131°F
Battery Management System (BMS)	Temperature, voltage, battery health, current, state of charge	Absolute min/max storage range (temporary)	-40 to 85°C / -40 to 185°F
Temperature controls	Active heating and passive cooling	Self-discharge rate	2% / month
Equivalence	2x AGM31	Product life	3,000 cycles @ 0.25 C
Capacity	XL12A-3500: 275 Ah / 3.5 kWh XL12A-2500: 200 Ah / 2.5 kWh	Terminals / Torque values	Nickel plated - M10x1.5 / 35 ft-lbs
Nominal voltage	12.8 V	Connector	Deutsch, sealed, 6 pins (Type DT06-6S)
Max charge voltage	14.6 V	Weight	XL12A-3500: 70 lbs / 32 kg XL12A-2500: 54 lbs / 25 kg
Peak current (30 sec)	0.7 C	Casing material	Aluminum and reinforced nylon
Short circuit protection	Yes	Ingress protection rating	IP67
Minimum State of Charge (SOC)	Recommended 10% Factory cut off at 5%	Warranty	Full 5 year / 1,000 cycle
Max Charge / Discharge	0.5 C		
Operating temperature range	-20 to 55°C / -4 to 131°F		

Specifications may change without notice at any time

Dimensions

Measurements in inches [millimeters]



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