

Lithium Batteries

12V 60Ah / 100Ah / 120Ah LiFePO₄ + BMS + Safety Shutdown

The lowest cost battery by far.

When you take into account how many conventional batteries you will destroy in operation to match the performance and cycle span of a lithium. A lithium battery is by far the lowest cost per cycle of any battery.

For many years people have wanted a simple, easy, solution to installing lithium batteries in the automotive industry: Including commercial vehicles, campervans, caravans, military, police and ambulances. However, due to the specific incompatibility with charging voltages and currents on board the vehicles and the requirements of the battery, the two things simply could not be safely brought together without a very elaborate intermediary system linked into a BMS for the lithium battery.

All this is not gone; today we have lithium batteries with built in BMS and automatic shutdown systems that take care of the extreme faults that may be presented to a lithium battery. With the simple addition of a Battery to Battery charger the correct voltage and current profile is provided to the battery from the vehicle's alternator with no integration fuss. This means, when your alternator voltage is low, the battery to battery charger increases the voltage and when your alternator's voltage is too high the battery to battery charger decreases it. Also, when you have too much current, the battery to battery charger reduces the current, thus, presenting the lithium battery with its ideal safe voltage and current requirements. This has never been so important than with the modern Euro 5/6 vehicle applications. The first, all in one - simple to install - package that removes all fears with this technology for application on vehicles.

Lithium battery capacity is 100% usable, unlike that of lead acid's 50%.

Lithium batteries are also less than half the weight of the equivalent lead acid. This means that the available energy per weight ratio is 4 times better with lithium batteries.

Strap on the 100Ah model to aid with lifting.

Cell type is Prismatic

4 batteries can be linked in series to make up to a 48V battery bank.

Handles on the 120Ah model to aid with lifting.

Unlimited batteries can be linked in parallel to increase Ah capacity, increase charge and discharge rates.



12V 100Ah Model

12V 60Ah Model

12V 120Ah Model

recommended charging voltages:
Absorption: 14.6V
Max charge: 14.8V
Float: 13.6V

BMS and Safety features :

- Automatic fault recovery system.
- Internal cell thermal safety fuse.
- Flame retardant electrolyte.
- Fire retardant plastic case.
- Explosion proof stainless steel cells.
- Built in Battery Management System - cell balancing.
- Automatic battery protection system - internal.
- Automatic low voltage disconnect at 10V.
- Instant automatic short circuit protection.
- Protects the battery when high/low voltage | too high current and too high temperature.



Positive and negative terminals with bolt / thread and washer.

Specification: All integrated BMS and safety shutdown	60Ah	100Ah	120Ah
Nominal Voltage		12.8 VDC	
Nominal Amp Hrs	60-66	100-115	120-130
Nominal Wh power	760	1280	1536
Maximum continuous charge rate Amps	30 (0.5C)	50 (0.5C)	50
Maximum continuous discharge rate Amps	60 (1 C)	100 (1 C)	100
Intermittent discharge rate 30 seconds	120 (2 C)	200 (2 C)	200
Battery must be safely charged within units parameters	Cell type Prismatic Fire retardant plastic case		
Max charge Voltage	V=14.8V,		
Recommended Charge and float V	14.6V Charge, Float V=13.8V		
Cut off voltage	10V		
cutoff temperature	50 deg C		
Charge Curve style	CC/CV		
Operational temperature	-30 to 60 deg C		
Internal consumption:	Operational = 10mA, Dormant 0.1mA		
E13 marking.	10R00-10R05-14430-00		
Dimensions L x W x H cm	26 x 16 x 21	33 x 21.5 x 17	41 x 23.5 x 17
Weight Kg	10	14.5	15
Part Number	AL1260	AL12100	AL12120