



batteryshop.nz

ALLiON

LITHIUM BATTERIES



POWER YOUR ADVENTURE WITH LITHIUM (LiFePO₄) BATTERIES

ALLiON batteries' Lithium Iron Phosphate (LiFePO₄) cells provide superior thermal and chemical stability compared to other lithium technologies.

Their wide operating temperature range also ensures ALLiON batteries deliver reliable power every time, making them the perfect adventuring companion for RVs, motorhomes and caravans.

- Lightweight (~60% lighter than lead acid batteries)
- Onboard Battery Management System
- Excellent cycle life (2000 to 4000 cycles)
- Safe & stable LiFePO₄ technology
- Fast recharge with overcharge protection
- Bluetooth status monitoring (on selected models)

SAFER - LIGHTER - LONGER LIFE



LITHIUM IRON LiFePO₄ TECHNOLOGY

ALLiON Lithium Batteries have been designed to provide market leading performance and safety. Using LiFePO₄ technology, these batteries deliver several key advantages compared to existing lead acid battery technology.

Thermally and chemically stable LiFePO₄ technology is safe and durable, delivering many years of reliable operation. The superior cycle life lowers the cost of ownership by reducing the number of battery replacements and the high discharge/recharge rates mean ALLiON batteries can deliver more power, more often to power your adventure.

Lightweight

ALLiON batteries' high energy density delivers around 60% weight reduction compared to equivalent AGM lead acid batteries. The lower weight means safer manual handling and a lower overall weight of your energy storage system.

Safe & Stable LiFePO₄ technology

LiFePO₄ technology is well regarded for its thermal and chemical stability. ALLiON batteries are safe and durable, fully capable of delivering many years of reliable operation. Unlike lead acid batteries which need external ventilation to prevent explosive gases accumulating, LiFePO₄ does not vent any gas during operation. Full sealed in this way, ALLiON batteries can also be safely mounted on their side and installed in compact spaces without having to worry about venting.

Partial State of Charge (PSoC)

Lead acid batteries are happiest when they are fully charged (100% SoC). Operating at PSoC increases the rate of sulphation which directly reduces battery performance and cycle life. Sulphation is not an issue for LiFePO₄ technology so performance and cycle life is not affected when operating at a PSoC. This means ALLiON batteries will still deliver all of their benefits in applications where they are being charged by variable energy sources like wind and solar.



Onboard Battery Management System

The Onboard Battery Management System within ALLiON Batteries protects the battery if voltage, current or temperature vary outside the designed operating range.

Bluetooth Status Monitoring*

Prevent unexpected surprises on the road by checking the State of Charge and health of your battery on your smart device via Bluetooth technology.

**on selected models*

Excellent Cycle Life (2,000 to 4,000 cycles)

ALLiON batteries are rated for 2,000 to 4,000 cycles depending on the Depth of Discharge (DoD). This means even with deep discharging, an ALLiON battery will deliver 2,000 cycles whereas a deeply discharged lead acid battery equivalent will deliver around 300 cycles. This huge increase in cycle life means less battery replacements, reducing the overall cost of ownership.

Fast Recharge with Overcharge Protection

ALLiON batteries' flat discharge curve delivers full power for an extended period of time. The higher charge acceptance of LiFePO₄ technology means that even a deeply discharged battery can be charged safely & efficiently in less than 3 hours.