

DESIGNED FOR LiFePO₄

Smart charge, maximising charging efficiency

Ektor devices implement smart charging, specifically designed for LiFePO₄ batteries

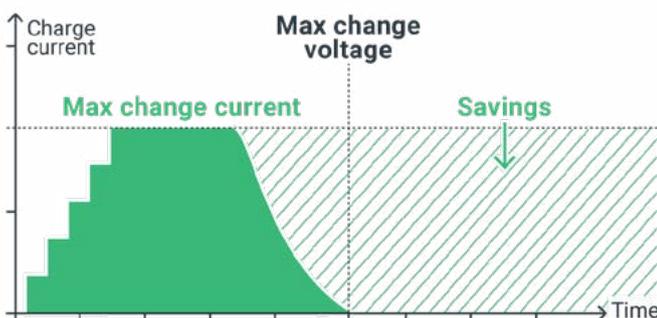
Our smart charging algorithm maximises charging efficiency to save power and protect battery health. The system continuously monitors the battery to ensure it is always performing at its peak and is ready for the next emergency.

LITHIUM BATTERIES

Introduced in Generation III and now a standard of Ektor products, our Lithium Iron Phosphate batteries are **fully compliant with IEC 60598.2.2**, the emergency lighting equipment standard. These LiFePO₄ batteries replace older NiMH, NiCd and lead-acid types typically found in emergency devices.

As part of Ektor's commitment to **environmentally friendly** products, the new battery technology contains no known carcinogens or toxic heavy metal contaminants, which cannot be said for previous battery technologies.

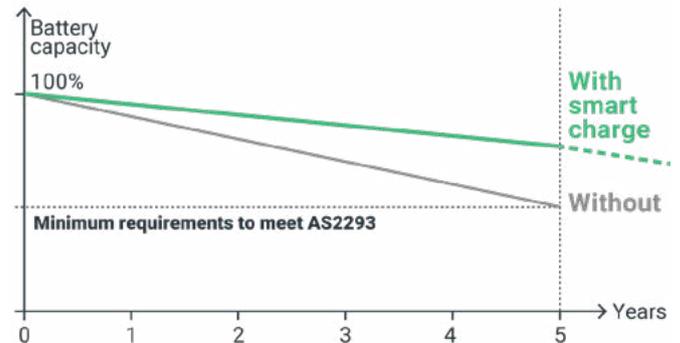
LiFePO₄ batteries **last up to twice as long** as older technologies, extending service intervals and further reducing environmental impact.



Optimal LiFePO₄ Charge algorithm

INCREASED SERVICE LIFE

Smart charging minimises chemical cycling to limit degradation and extend service life. **Tapering the current as the battery nears full capacity** preserves internal chemistry, preventing unnecessary performance loss and potential overheating associated with continuous charging.



Extended battery service life with LiFePO₄ and smart charging

AUDITABLE PERFORMANCE

Our advanced smart-charging technology, built into all battery-powered Ektor products, combines with the through-life traceability of our smart emergencies to provide class-leading lifetime performance in emergency lighting systems.

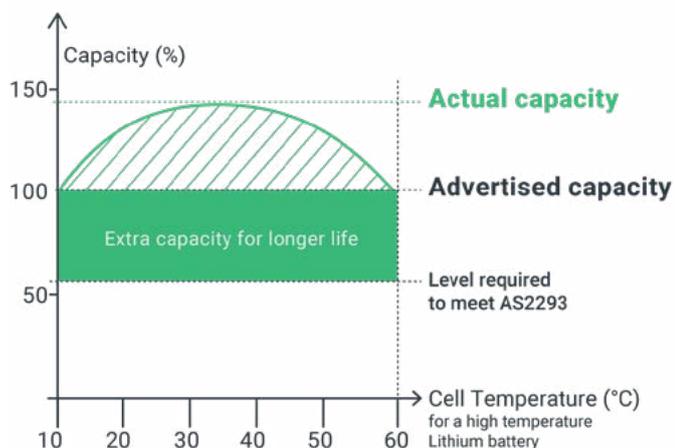
All products undergo comprehensive testing at our **quality certified manufacturing facility** prior to dispatch, including a complete discharge and recharge cycle. For DALI and Lynk compatible devices, this initial test record is uploaded to the cloud to establish a digital lifecycle history that remains continuous from the point of manufacture through to on-site commissioning.

Over the life of the product, when attached to a **compliant monitoring system**, product data can sync to the cloud to record device states and detailed performance data. By tracking lifetime performance and maintenance history for the device, trends can be identified, aiding in the management of the health of the system.

SOFT-START CHARGING

Normally, the time directly after an emergency or scheduled discharge is when current draws are largest, as all systems are returning to normal and batteries recharge. Ektor products are designed with a soft-start charging system that gradually ramps up current draw over the first 10 minutes. **This reduces the risk of electrical issues in the building due to a high inrush of current** and prevents excess heat generation in the charging process to better preserve battery health.

Ektor products feature soft-start battery charging technology to reduce start-up currents in the building after a power failure.



REAL-WORLD BATTERY ASSURANCE

Extremes in temperature negatively impact a battery cell's ability to store and discharge energy, leading to reduced performance in the real world. Yet most emergency lighting suppliers only rate their battery capacity at a single ambient temperature.

Ektor specifies battery capacity with these real-world conditions in mind. Our products include additional capacity as overhead to cover the full operating temperature range, ensuring they meet the required AS/NZS2293 duration whether the cell is in a sweltering ceiling space or in cold winter conditions.

You can learn more about our compliance and quality control on our website ektor.com.au/compliance/

Guaranteed battery performance and through-life reporting gives Ektor the edge.

CONTACT US TO DISCUSS THE BEST SOLUTION FOR YOUR PROJECT

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