

STARTAUX 24V 8D / Data Sheet

SoluThium
StartAux

24V 150AH LITHIUM IRON PHOSPHATE DUAL-PURPOSE BATTERY

1. PRODUCT OVERVIEW

The StartAux 24V 8D is a next-generation LiFePO4 battery purpose-built for Heavy-Duty Trucks, Construction Equipments, Marine, and RV power systems.

Twice the Power, Half the Weight: Standard Group 8D dimensions with 2x the usable energy and 50% less weight (36 kg)—a seamless upgrade that instantly boosts performance without modifying your system.

Supercap Load Dump Protection: A built-in Supercapacitor Buffer absorbs alternator voltage spikes, safeguarding sensitive vehicle electronics and ensuring stable, clean power delivery.

Cloud-Powered Insight AI™: Real-time data sync to the cloud enables AI-driven predictive maintenance, helping you prevent failures before they happen and eliminating unexpected downtime.

Intelligent Connectivity: Integrated Bluetooth and IoT-ready architecture provide instant visibility into battery health, performance metrics, and GPS location—anytime, anywhere.

Smart Thermal Management: Automatic cold-weather pre-conditioning ensures dependable operation in harsh climates, delivering reliable performance down to -30°C (-22°F).

Always Ready, No Matter What: Smart load control plus Force-Start recovery means the battery is always ready. Whether for critical backup or unexpected situations, your power system stays dependable and trustworthy.

Active Cell Balancing: A high-efficiency active equalizer continuously redistributes energy between cells, maximizing usable capacity and extending overall battery lifespan.



3. MECHANICAL SPECIFICATIONS

| | |
|----------------------|--------------------------------------|
| Dimensions (LxWxH) | 20.55x9.85x9.08 in 522x250x231 mm |
| BCI Group Size | Group 8D |
| Weight | Approx. 36 kg (79.4 lbs) |
| Terminal Type | SAE Post |
| Case Material | Powder Coated Steel |
| Enclosure Protection | IP67 |

2. ELECTRICAL SPECIFICATIONS

| | |
|----------------------------------|--|
| Nominal Voltage | 25.6V |
| Rated Capacity | 150 Ah |
| Rated Energy | 3.84 kWh |
| Max-Charge Voltage | 28.8 V |
| Discharge Cut-off Voltage | 20 V |
| Max Continuous Charge Current | 150 A |
| Max Continuous Discharge Current | 150 A |
| Peak Cranking Current (5S) | 1800 A |
| Charge Temp | $0^{\circ}\text{C} \sim 55^{\circ}\text{C}$ ($32^{\circ}\text{F} \sim 131^{\circ}\text{F}$) |
| Discharge Temp | $-30^{\circ}\text{C} \sim 60^{\circ}\text{C}$ ($-22^{\circ}\text{F} \sim 140^{\circ}\text{F}$) |
| Cycle Life @ 80% DOD | > 3000 |
| Self-Discharge Rate / Month | < 5% |

4. SMART ENERGY MANAGEMENT

| | |
|--|---|
|  Instant Local Access |  Cloud Command Center |
|  GPS Location Tracking |  Thermal Pre-conditioning |
|  Parallel Support |  Load Dump Solution |
|  Active Balancing |  Jump Start Support |
|  Insight AI™ Analytics |  Ultimate Dual-Purpose |

5. TARGET APPLICATIONS

Construction, Truck, Marine, Bus, RV

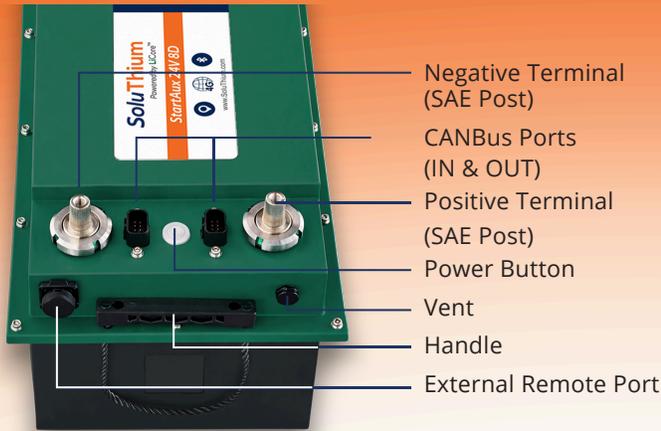
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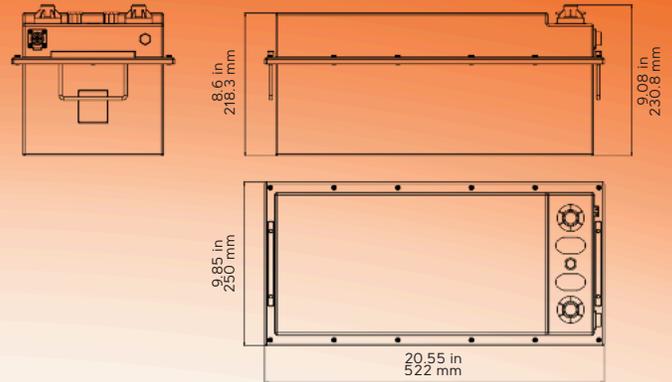
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Engineering & Interfaces

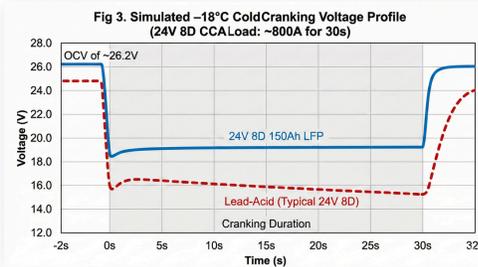
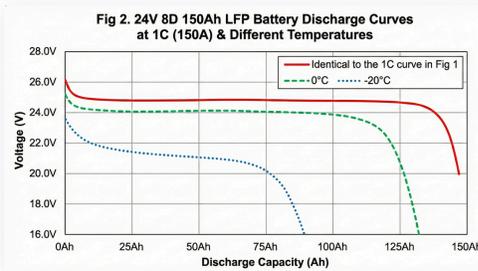
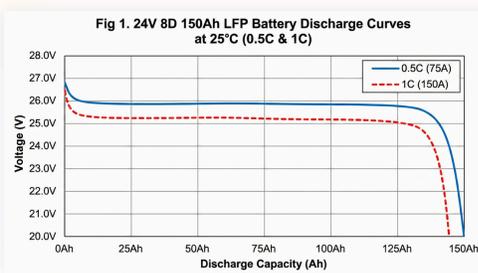
6. TERMINALS & INTERFACES



8. DIMENSIONS



7. PERFORMANCE CURVES



9. COMPLIANCE & SAFETY

CERTIFICATIONS

UL 1973 (Pending)
IEC 62619 (Pending)
CE / UKCA (Pending)
UN38.3 (Certified)

10. WARRANTY & SUPPORT

Standard Warranty: 5 Years Limited Warranty*

Technical Support: Lifetime remote technical support via email and phone.

The StartAux 24V 8D is more than a battery—it is a smart power platform for connected fleets.

With exceptional power, intelligence, and reliability in a true drop-in 8D size, it turns traditional energy storage into a high-value, data-driven asset. Powered by LiFePO4 performance, a telemetry-ready Digital BMS, and seamless cloud connectivity, SoluThium gives fleet operators real-time visibility, predictive diagnostics, and total operational confidence.