





701, Opal Tower, Business Bay, Dubai, UAE



**L** +971 4 427 3731

### **Product Datasheet**

## 12/24 V 100/150/200 Ah Lithium Ion Battery



#### **Description**

VOLTARIX 24V lithium iron phosphate (LiFePO<sub>4</sub>) batteries are engineered for superior performance, durability, and safety in demanding energy storage applications. Designed with advanced cell technology, they deliver high energy density, strong discharge capability, fast charging, and exceptional thermal stability even in high-temperature environments.

With an 80% depth of discharge (DoD) and long cycle life, VOLTARIX batteries ensure consistent power output and extended operational reliability. The intrinsic chemical and thermal stability of LiFePO4 enhances safety, while its stable redox reaction and rapid ion migration provide smooth, efficient energy delivery.

Each VOLTARIX 24V battery maintains a constant discharge voltage, enabling nearly full power delivery until depletion—reducing or eliminating the need for voltage regulation systems. Built with a rugged, impact-resistant casing, the battery is tested to withstand heavy external shocks without risk of fire or explosion, ensuring maximum reliability in every environment.

#### **Key Features**

- High Energy Efficiency: Available in 2.56kWh, 3.84kWh, and 5.12kWh capacities, providing flexible energy options for different applications.
- Long Cycle Life: Up to 10,000 cycles at 50% DoD, ensuring more than 10 years of reliable operation.
- High Safety & Stability: Built with LiFePO<sub>4</sub> chemistry, offering superior thermal and chemical stability with no risk of explosion or fire.
- Strong Discharge Capability: Supports continuous high discharge currents of up to 200A, suitable for heavyload applications.
- Intelligent Protection System: Integrated BMS with overcharge, over-discharge, temperature, and balancing protection.
- Fast Charging Performance: Accepts up to 100A charging current, reducing downtime and increasing system availability.
- Wide Operating Temperature Range: Reliable performance from 0°C to 55°C in charging and discharging.
- Compact & Lightweight Design: Energy-dense and space-efficient with impact-resistant ABS casing for durability.
- Consistent Power Output: Stable 25.6V nominal voltage ensures smooth and efficient energy delivery throughout the cycle.
- Maintenance-Free & Eco-Friendly: No gas emission or acid leakage, providing a clean and sustainable power solution.





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# **Specification**

Model	VLX-25.6-100-ABS	VLX-25.6-150-ABS	VLX-25.6-200-ABS
Electrical Characteristics			
Normal Voltage		25.6V	
Rated Capacity	100±1Ah(0.2C)	150±1Ah(0.2C)	200±1Ah(0.2C)
Energy	2.56Kwh	3.84Kwh	5.12Kwh
Cycle Life		≥ 2,000 @ 0.2C (100%DOD) ≥ 6,000 @ 0.2C (80%DOD) ≥ 10,000 @ 0.2C (50%DOD)	
Passive Protection Function	Over charge protection, Over discharge protection, Temperature protection, Balanced function		
Standard Charge			
Charging Voltage	29.2V		
Limited Charging Voltage	29.2V		
Max. Charging Current	50A	75A	100A
Max. Discharging Current	100A	150A	200A
Discharge Cut-off Voltage	20V		
<b>Environmental</b>			
Charge Temperature	0~55°C		
Discharge Temperature	0~55°C		
Storage Temperature	-20~45°C		
Mechanical Mechanical			
Dimensions (L*W*H)	522*228*220mm		
Weight	19.5Kg	31.4Kg	37.8Kg