www.voltarix.ae
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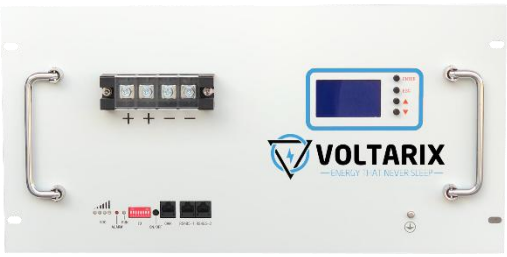
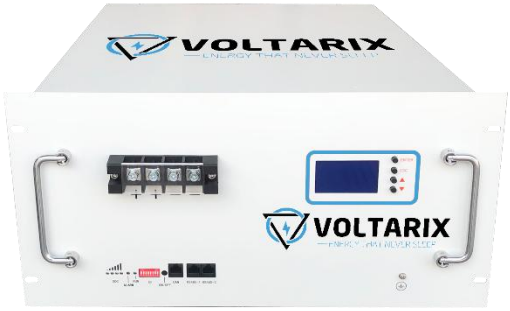
Product Datasheet

Rack Type Energy Storage Battery





Description

The **Voltarix Modular LiFePO$_4$ Battery System** is an advanced, stackable energy storage solution engineered for **data centers, telecom stations, and industrial applications** requiring high reliability, efficiency, and scalability. Designed with a **modular 51.2V architecture**, this system allows flexible configuration with capacities ranging from **5kWh to 14.34kWh** (100Ah–280Ah), enabling seamless expansion to match today's needs and tomorrow's growth. With its **high energy density** and **rack-mount design**, the Voltarix Stack Series optimizes space utilization while delivering robust, long-lasting performance. The system ensures **superior safety**, **intelligent energy management**, and **long cycle life**, making it ideal for both **new installations and retrofit integrations** in commercial or critical power environments. Built using **advanced LiFePO$_4$ chemistry**, the Voltarix battery guarantees stability, environmental safety, and minimal maintenance — providing a dependable power backbone for mission-critical infrastructure.

Key Features

- **Modular Design:** Expandable capacity up to 14.34kWh per system
- **Nominal Voltage:** 51.2V (compatible with 100Ah–280Ah configurations)
- **Applications:** Ideal for **data centers, telecom towers, industrial backup, and solar hybrid systems**
- **Space-Efficient:** Compact **rack or stack mount** design for optimized installation flexibility
- **High Safety & Longevity:** LiFePO$_4$ chemistry ensures **>6000 cycles** with stable thermal performance
- **Scalable Energy Infrastructure:** Modular connection supports evolving power requirements
- **Smart Energy Management:** Integrates easily with **Voltarix inverters and EMS platforms** for real-time monitoring and control

VOLTARIX
—ENERGY THAT NEVER SLEEP—

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Specification

MODEL NO		VLX-51-100R	VLX-51-200R	VLX-51-280R
Battery Chemistry		LiFePO4		
Capacity (Ah)		100	200	280
Scalability		Max.16pcs in parallel (8 1.92kWh)	Max.16pcs in parallel (1 63.84kWh)	Max.16pcs in parallel (2 29.44kWh)
Nominal Voltage (V)		51.2		
Operating Voltage(V)		46-56		
Energy (kWh)		5.12	10.24	14.34
Usable Energy (kWh)		4.61	9.22	12.90
Charge/Discharge Current (A)	Recommend	50	100	100
	Max.	80	100	150
	Peak(2mins,25℃)	100	120	200
Other Parameter				
Recommend Depth of Discharge		90%		
Dimension (W/H/D,mm)		482.6*420*155	482*800*221.5	482.6*800*221.5
Weight Approximate (kg)		42.5	89.50	125
Master LED Indicator		4 LED (SOC:25%~100%)		
		2 LED (working, alarming, protecting)		
IP Rating of Enclosure		IP20		
Working Temperature		Charge:0℃～55℃ Discharge: -20℃～55℃		
Storage Temperature		0℃～35℃		
Humidity		5%~95%		
Altitude		≤2000m		
Cycle Life (25±2℃,0.5C/0.5C,80%EOL)		≥6500		
Installation		19inch Rack-mounted		
Communication Port		CAN2.0, RS485		
Warranty Period [3]		10 years		
Life Cycle Power During Warranty Period		22.42MWh@80%EOL	44.85MWh@80% EOL	80MWh@80%EOL
Certification		CB-IEC62619, CE-EMC, MSDS, UN38.3		