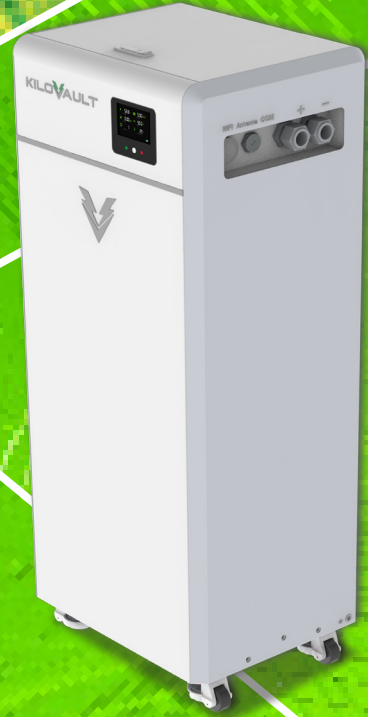


KiloVault[®] HAB-XL

19.2kWh Lithium Floor Standing Energy Storage System



LFP TECHNOLOGY

The advanced Lithium Phosphate (LFP) technology operates a wider temperature range to deliver the most dependable performance.



ETL CERTIFIED to UL9540A

The KiloVault HAB-XL 19.2kWh has a Built-In Smart and Reliable Relay-Based Battery Management System that integrates multilevel safety concepts for excellent performance. Designed to meet and exceed all safety requirements for energy storage systems. At the cell level our systems have successfully passed explosion resistance crush, puncture, drop and impact tests. At module, stack, and system levels our systems have successfully passed UL9540A. The KiloVault HAB-XL's advanced battery management system protects against under/over voltage and current, temperature and short circuit protections.



Expandable from 19.2kWh to 384kWh.

Capable of connecting 20 units in parallel to achieve 384kWh. batteries connected in parallel can communicate with each other for voltage monitoring and protection.



CLOSED-LOOP COMMUNICATION WITH HYBRID INVERTERS

via Based Battery Management System (BMS). Compatible inverters: Growatt, Victron, Sol-Ark, and Schneider, SMA, Megarevo and others.



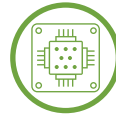
LOCAL TOUCH SCREEN LCD DISPLAY

3.5" touch screen LCD integrated communication, convenient for real-time monitoring of battery performance.



Rapid ShutDown

Rapid shutdown is an electrical safety requirement set for solar panel systems by the National Electrical Code (NEC). Simply put, it provides a way to quickly de-energize a rooftop solar panel system.



Advanced Battery Management System.

The built-In BMS integrates with multilevel safety features including overcharge and deep discharge protection, voltage and temperature protection, overcurrent protection, cell monitoring, and over temperature and under temperature. The KiloVault HAB-XL has a large power capacity of 19.2kWh, with a fast charging and continuous discharge power, providing 96% efficiency.

- Over current protection
- Overcharge and deep discharge protection
- Voltage, current, battery capacity, accumulative energy, and temperature monitoring.
- Handles more surge capacity from the inverter
- 180 charge 180 discharge current
- 500-amp surge capacity
- 10 years warranty



MONITORING

- 3.5" touch screen LCD with integrated communication, convenient for real-time monitoring of data. Displays voltage, current, state of charge, and power output.
- WIFI connection allows you to monitor voltage, current, battery capacity, accumulative energy, and temperature.
- Automatic over-the-air firmware updates ensure your system remains safe, and secure.

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19.2kWh Lithium Floor Standing Energy Storage System

About

The KiloVault HAB-XL 19.2kWh Lithium Iron Phosphate battery from KiloVault is an advanced solution for your residential and commercial needs. Scalable up to 384kWh with a serviceable top cover access to make installation of this battery simple and worry free. The KiloVault HAB-XL can be AC or DC coupled to solar arrays. When paired with a compatible inverter the HAB-XL is usable in many applications that require solar storage, including Off-Grid, Backup Power, Self-Supply, Peak Charge Reduction, and Demand Response.



Specifications

ITEM	SPECIFICATION
Battery Efficiency	>96%
DC	Direct current
Full Charge Voltage	56 V
HAB-XL to HAB-XL (inter-battery) communication cable	RJ45 120 Ω Resistor Plug, 6-position, 4-conductor, male connectors both ends. Straight through. Maximum length, 10 feet
HAB-XL to HAB-XL (inter-battery) communication protocol	CAN Bus
HAB-XL to Inverter communication protocol	CAN Bus / RS485
High Voltage Cutout	58.4 \pm 0.4 V (not a set point) Recovery 54.0 \pm 0.4 V
Low Voltage Cutout	43.2 \pm 0.4 V (not a set point) Recovery 50.4 \pm 0.4 V
Maximum Cell Balancing current	150 mA
Maximum Continuous Charge Current	180 A (not a set point)
Maximum Continuous Discharge Current	180 A (not a set point)
Maximum Continuous Discharge Power	8.5 kW
Maximum HAB-XL to HAB-XL Cable Length	4.92 ft (1.5 m)
Minimum Cell Balancing Volts	3350 mV
Minimum Discharge Voltage	48.0V \pm 0.5V
Nominal Capacity	400 Ah
Usable Capacity	19.2 kWh
Nominal Voltage	51.2 VDC
Operational Temperature Range	Discharge: -20°C ~60°C (-4°F~140°F) Charge: 0°C ~ 45°C (32°F~113°F)
Peak Discharge Current (3s)	500 A (3S), 750A (1S)
Peak Discharge Power (3s)	25KW
Recommended Floating Charge Voltage	54V
Self-Discharge Rate	\leq 3% per month, \leq 15% per year Note: The KiloVault® HAB-XL will enter sleep mode: <ul style="list-style-type: none"> • By pressing down the Power button for 6~8 seconds. • No current for 7 Days and SOC \leq20% • UVP is Triggered, and delay 2 Min

KiloVault® HAB-XL™

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Specifications Environmental

ITEM	SPECIFICATION
Operational Temperature Range	Indoors away from direct exposure to rain or sun
Operating Temperature	-10°C~ 40°C (14°F~104°F)
Recommended Operating Temperature	15°C to 35°C (59°F to 95°F)
Short Term (less than one month) Storage Temperature	-20°C~45°C (-4°F~110°F)
Absolute Maximum Altitude	180A @ 2,000m~4,000m

Physical Specifications

ITEM	SPECIFICATION
KiloVault® HAB-XL Weight	529.74Lbs 240kg net 599.6Lbs 272kg gross
KiloVault® HAB-XL Height	48.75 in (1238 mm) With wheels
KiloVault® HAB-XL Width	19.48in (495 mm)
KiloVault® HAB-XL Depth	15.74in (400 mm)
KiloVault® HAB-XL Ingress Rating	IP54
Battery Terminal Torque	15 Nm, 11.06 ft-lb, 132.76 in-lb.
Large (power) ports	PG25: Approx. 0.79 in (20mm)
Small (communication) ports	PG21: Approx. 1.1 in (28mm)

