

XGW High Voltage LiFePO4 UPS Battery System

480V Series - Lithium Battery Replacement Solution for UPS

Designed for critical power backup applications, XGW 480V LiFePO4 battery system provides a reliable replacement solution for traditional VRLA batteries used in UPS systems.

Product Positioning

Application	UPS backup power
Battery Chemistry	LiFePO4
Voltage Platform	480Vdc
Configuration	150S1P
Target Market	Telecom / Data Center / Industrial UPS

1. Product Portfolio

Model	Nominal Voltage	Capacity	Rated Energy
XGW-LFP480-200Ah	480Vdc	200Ah	96kWh
XGW-LFP480-100Ah	480Vdc	100Ah	48kWh
XGW-LFP480-75Ah	480Vdc	75Ah	36kWh
XGW-LFP480-50Ah	480Vdc	50Ah	24kWh
XGW-LFP480-25Ah	480Vdc	25Ah	12kWh

2. Technical Specification

Parameter	Specification
Cell Type	3.2V LiFePO4 Cell
Battery Configuration	150S1P
Nominal Voltage	480Vdc
UPS DC Bus Compatibility	480Vdc nominal
Float Charging Voltage	540Vdc
Recommended Voltage Range	420~540Vdc (subject to UPS design)
Communication	CAN / RS485 optional
BMS Protection	Over voltage, under voltage, over current, short circuit, temperature
Cooling	Natural air cooling
Design Life	Up to 15 years (application dependent)

3. UPS Application Matching

UPS Requirement	Battery Solution
DC Nominal Voltage 480Vdc	480V LiFePO4 battery system
Float Voltage 540Vdc	BMS controlled charging voltage
Backup Time	Customized according to load and capacity

4. Battery Performance Characteristics

The battery performance characteristics include discharge behavior, charging performance, temperature adaptability and cycle life performance based on LiFePO4 cell technology.

Characteristic	Description
Discharge Performance	Stable voltage platform under 0.2C / 0.5C / 1C discharge conditions
Charge Performance	Stable charging profile with controlled voltage management
Temperature Performance	Suitable for wide operating temperature environments
Cycle Life	High cycle capability for long-term UPS backup applications

5. Safety & Reliability

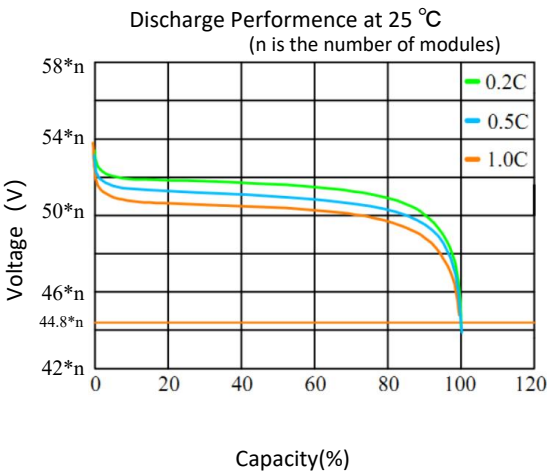
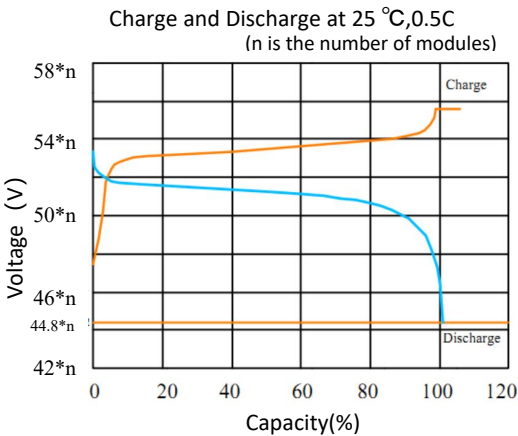
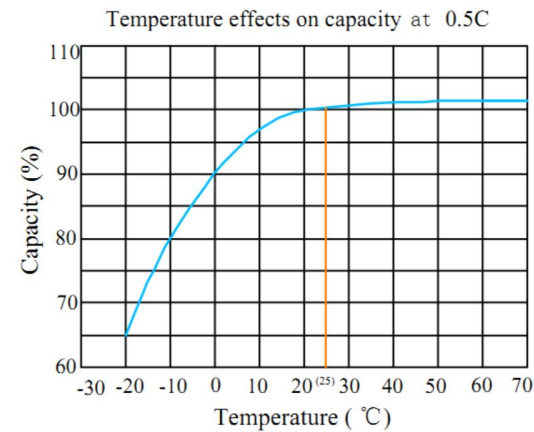
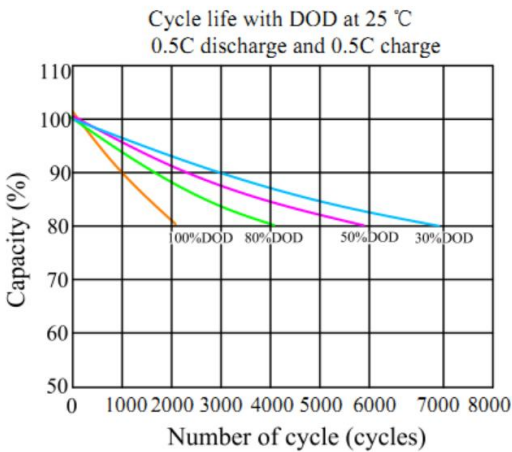
Item	Description
Cell Safety	LiFePO4 chemistry with excellent thermal stability
Protection	Multi-level BMS safety protection
Maintenance	Low maintenance compared with VRLA batteries
Installation	Cabinet/rack installation according to project requirements

6. Advantages Compared with VRLA Battery

- Longer service life and reduced replacement frequency.
- Higher energy density and reduced footprint.
- Lower maintenance requirement.
- Stable performance for critical UPS applications.
- Flexible capacity options from 12kWh to 96kWh.

Note: Final battery configuration should be confirmed according to UPS model, DC operating voltage range, backup time requirement and installation conditions.

Characteristics Curve



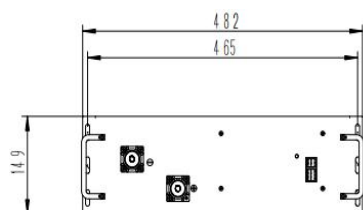
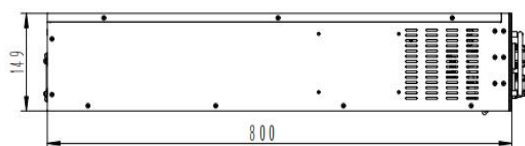
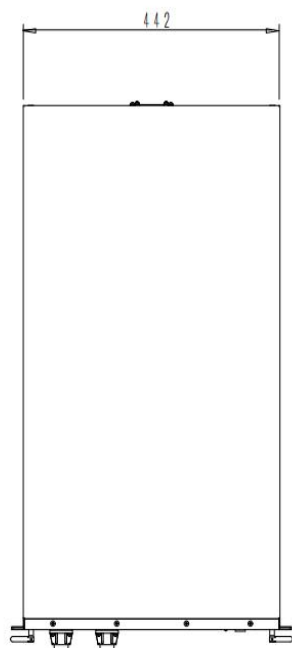
DIMENSION

480V/200AH

Rack dimension:600*1000*1200mm

Net weight:900KG

Wooden dimension:800*1200*1400mm



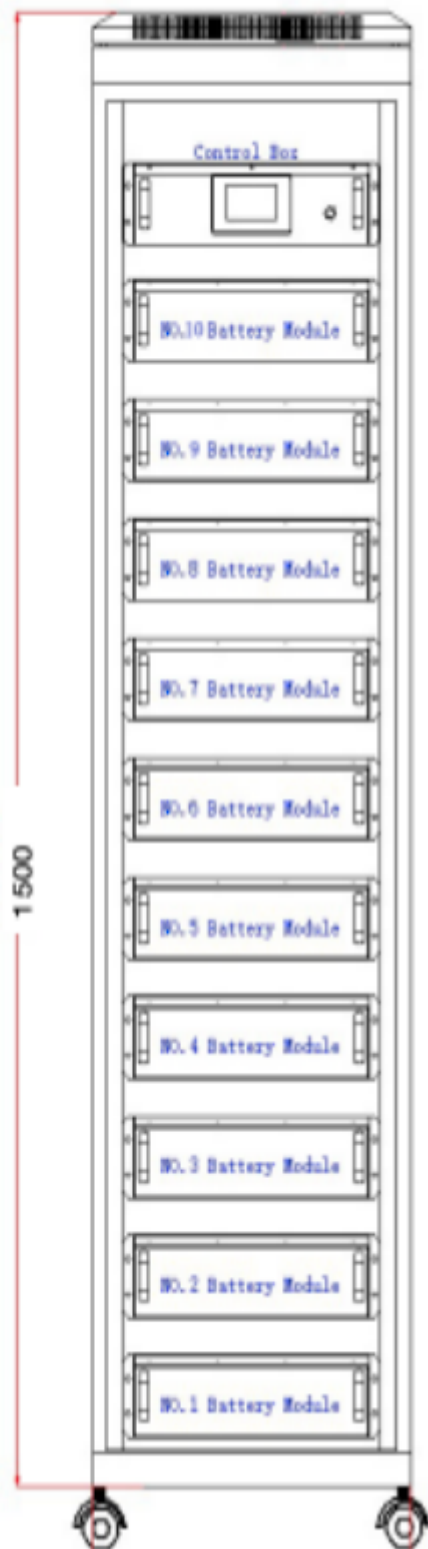
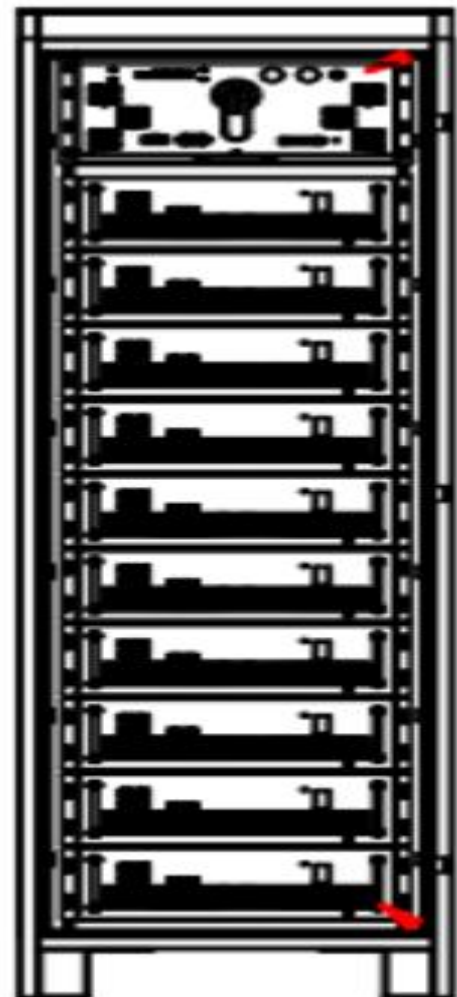
DIMENSION

480V/100AH

Rack dimension:800*1200*1500mm

Net weight:800KG

Wooden dimension:1000*1400*1600mm



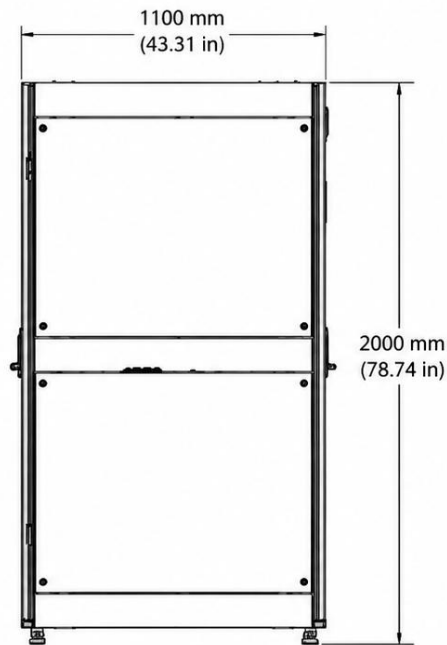
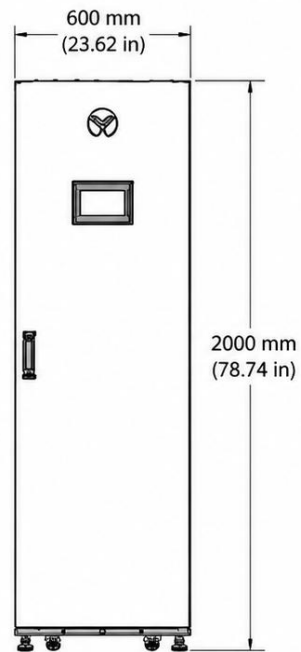
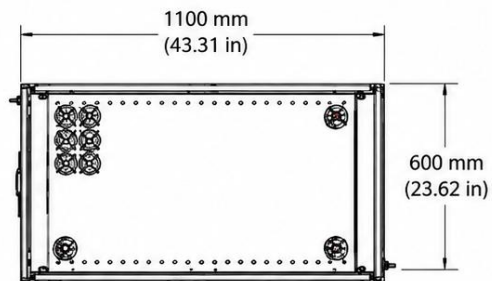
DIMENSION

480V/75AH

Rack dimension: 600*1100*2000 mm

Net weight: 750KG

Wooden dimension: 800*1200*2200mm



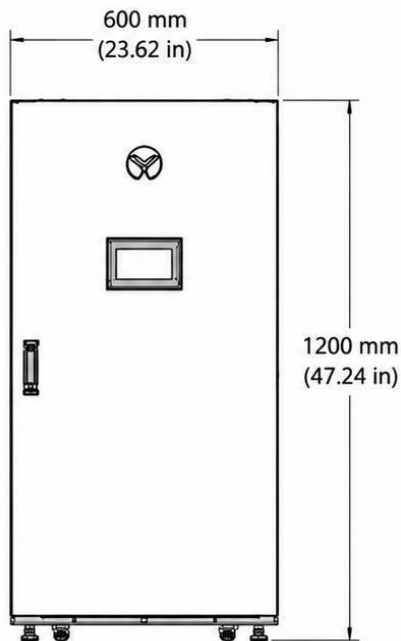
DIMENSION

480V/75AH

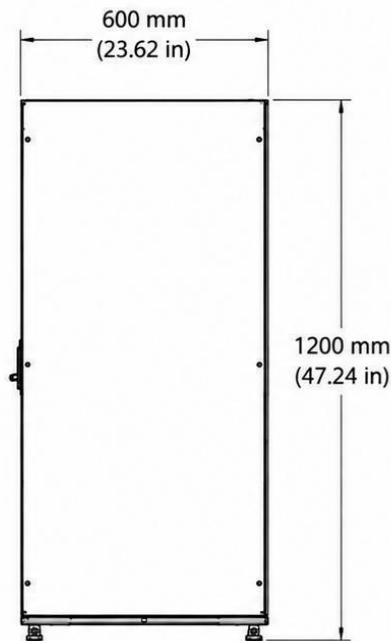
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Net weight:200KG

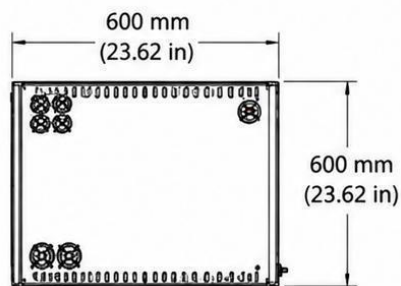
Wooden dimension:800*1200*2200mm



FRONT VIEW



SIDE VIEW



TOP VIEW

