



BATTERY ENERGY STORAGE SYSTEM



Lynx Power Bank Ranges:

- ✓ **LPB-30-60**
- ✓ **LPB-45-45**
- ✓ **LPB-50-100**
- ✓ **LPB-100-200**

Harvesting Clean Energy / Protecting Our Environment

MODEL : LPB-45-45

BATTERY ENERGY STORAGE SYSTEM



Design Standards

Lynx Power Bank is a new range of secure integrated Battery Energy storage system. This mobile and modular solution includes batteries, PCS, cooling fan, fire protection and auxiliary components, External PV power and AC generator are available for option.

Lynx Power Bank is mainly developed for no emission and low noise, Reduce the dependence on grid, Improve power supply quality and Ensure the power consumption of emergency load.

Benefits

- Integrated installation, convenient storage and transportation.
- Simple operation and easy maintenance.
- Power and Capacity can be expanded, meet different user needs.
- No emission and Low Noise.
- High Safe and reliable.



General Specification

Model	LPB-45-45
Rated Output Power@25°C	45kW
Rated Output Voltage	400V@50Hz,3ph.
Battery Storage Capacity	46.08kWh
Loading Dimension(L*W*H)	2280*983*2007mm
Weight	1600kg
Loading Capacity of 40'HC	12units
Operating Temperature Range	-10~50°C

Battery

Type	LFP(LiFePO4)
Total Energy	46.08kWh
Rated Capacity	900Ah
Rated Voltage	51.2VDC
Charger / Discharger Current	900 A(1.0C)
DOD	90%
Cyclic Life	4000(0.5C@90%DOD)

Inverter&Charger

DC (battery)

Battery Voltage Range	38 – 66VDC
Maximum current	200A

AC (on-grid)

AC Input Voltage Range	187-265 Vac
Rated Frequency Range	50Hz/60Hz(±5)
PF	1.0 leading or lagging
AC Connection	Single or Three phase

AC (off-grid)

Rated Voltage	230Vac(±2%)
Frequency	50Hz(±0.1%)
Cont. output power at 25°C	36KW
Cont. output power at 40°C	30KW
Cont. output power at 65°C	21KW
Peak power	75KW
Max. Efficiency	96%
Protection Degree	IP21
PowerControl / PowerAssist	Yes
Integrated Transfer switch	Yes
Cooling	Forced Air Cooling
Display	WEB
Communication Port	CAN/RS485
Certificates	EN-IEC 60335-1, EN-IEC 60335-2-29, EN-IEC 62109-1

Cooling System

Cooling type	Fan
Operation Mode	Temperature controlled
Rated Voltage	220Vac±10%
Rated Frequency	50/60Hz
Qty.	4pcs

Fire Protection

Type	Gas fire fighting system FM200
Gas Purity	> 99.6%
Extinguishing Concentration	> 9%
Discharge Time	< 10s
Backup power	Yes
Rated Voltage	220~240Vac
Rated Frequency	50/60Hz
Working ambient Temperature	-60~50°C

EMS

Hardware Equipment	Cerbo GX
Remote Display	the Victron VRM website
4G RTU	LT220M

Socket Options

Input	CE 125A/5PH*1
Output	CE 32A/1PH*6 ; CE 63A/3PH*1
Operation Mode(Output)	Manual / Timer / Optically

Power Feature's

Two AC Outputs

The main output has no-break functionality. The Quattro takes over the supply to the connected loads in the event of a grid failure or when shore/generator power is disconnected. This happens so fast(less than 20 milliseconds) that computers and other electronic equipment will continue to operate without disruption.

The second output is live only when AC is available on one of the inputs of the Quattro. Loads that should not discharge the battery, like a water heater for example, can be connected to this output.

PowerControl - Dealing with limited generator, shore side or grid power

The Quattro is a very powerful battery charger. It will therefore draw a lot of current from the generator or shore side supply (16A per 5kVA Quattro at 230V AC). A current limit can be set on each AC input. The Quattro will then take account of other AC loads and use whatever is spare for charging, thus preventing the generator or mains supply from being overloaded.

PowerAssist - Boosting shore or generator power

This feature takes the principle of PowerControl to a further dimension allowing the Quattro to supplement the capacity of the alternative source. Where peak power is so often required only for limited period, the Quattro will make sure that insufficient mains or generator power is immediately compensated for by power from the battery. When the load reduces, the spare power is used to recharge the battery.

