

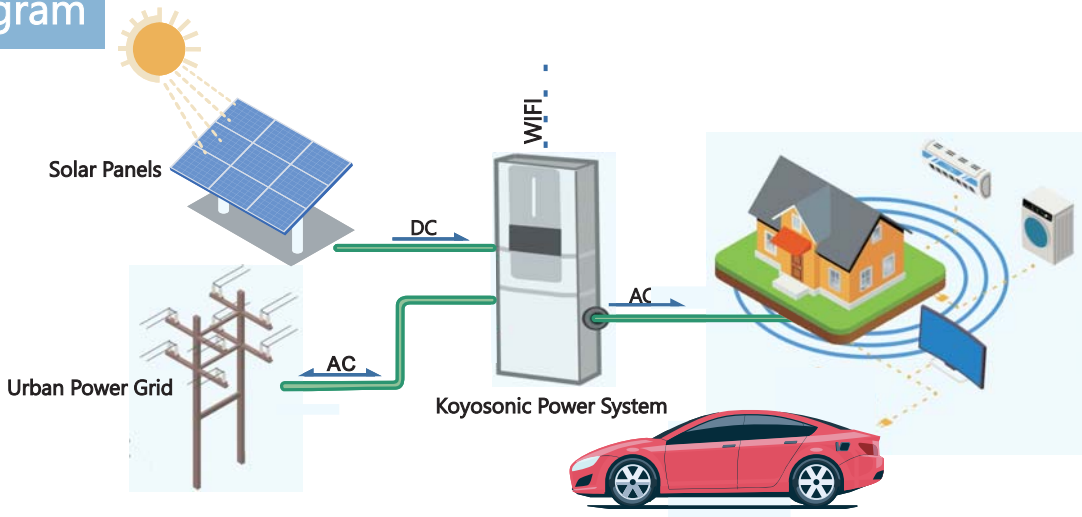
LiFePO₄ PowerWall Energy Storage Batteries

Koyosonic PowerWall is a fully-integrated AC battery system for residential or light commercial application. Its rechargeable LiFePO₄ battery pack provides energy storage for solar self-consumption, time-based control, and backup. Powerwall's electrical interface provides a simple connection to any home or building. Its revolutionary compact design achieves market-leading energy density and is easy to install, enabling owners to quickly realize the benefits of reliable, clean power.



LiFePO₄ PowerWall Energy Storage Batteries

Power System Diagram



Many Matchable Inverters

Koyosonic Powerwall batteries can support many communication ports and docking stations in inverters from different suppliers as follows. We can also do adjustment as wanted as per the inverter brands or protocols from inverter suppliers.



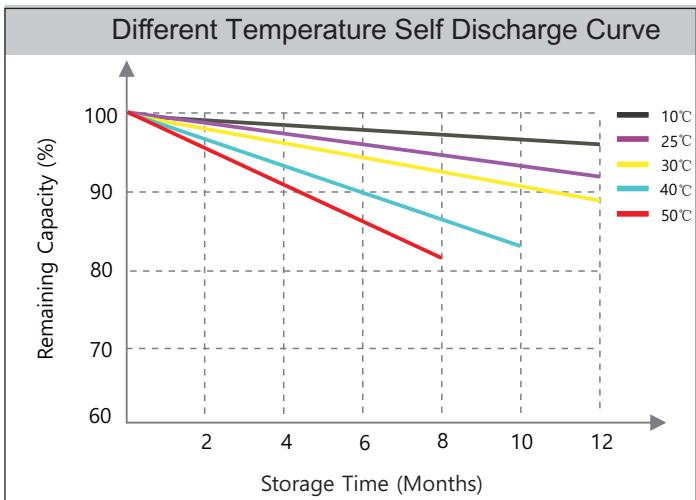
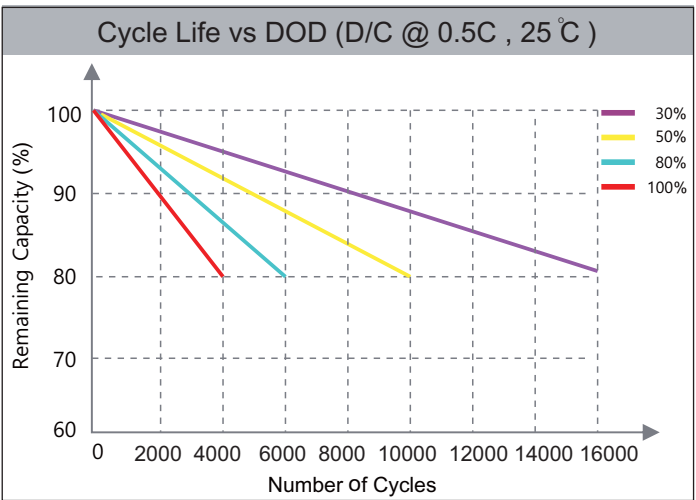
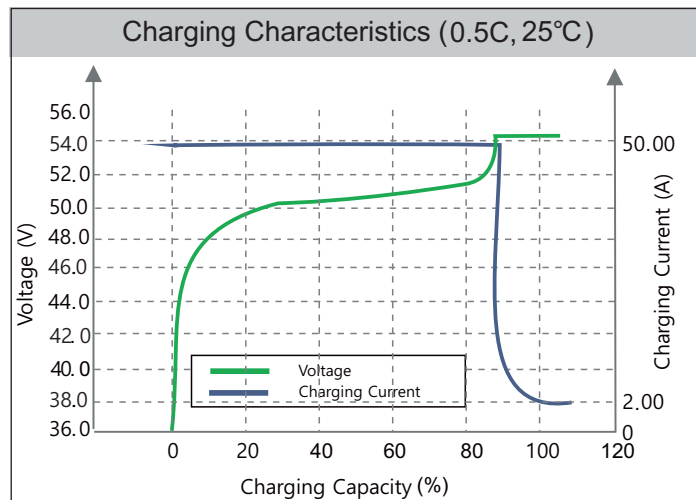
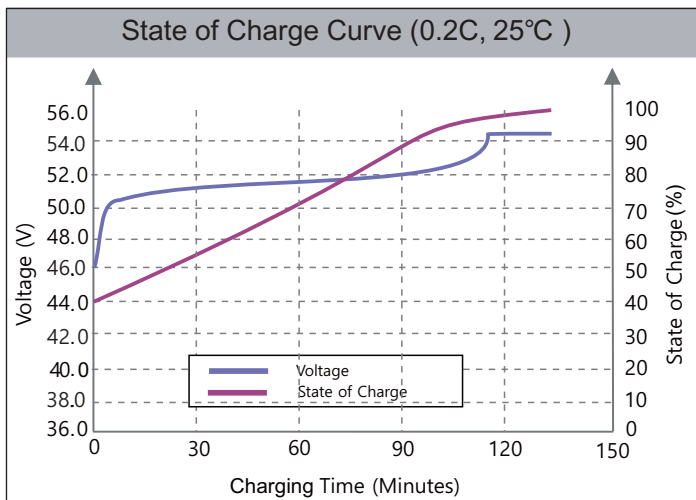
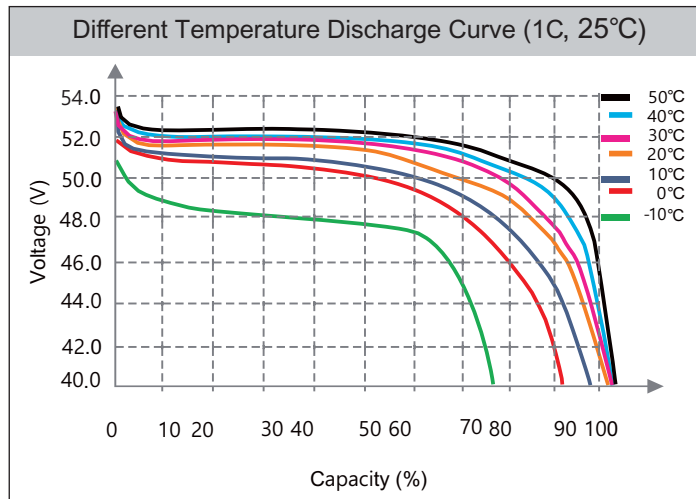
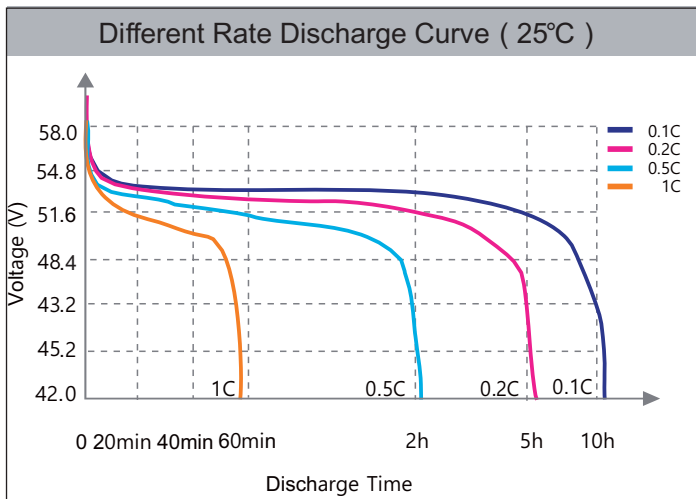
LiFePO₄ PowerWall Energy Storage Batteries

Technical Specification

Model	PW100-48	PW200-48	PW300-48
Nominal Voltage	51.2V		
Capacity	100Ah	200Ah	300Ah
Energy	5120Wh	10240Wh	15360Wh
Internal Resistance @ 50% SOC	≤30mΩ	≤70mΩ	≤100mΩ
Cycle Life	≥6000 cycles @ 80% DOD, 25°C, 0.5C ≥4000 cycles @ 80% DOD, 40°C, 0.5C		
Standard Charge Voltage	58.0V±0.5V		
Charge Cut-off Voltage	56.0V±0.5V		
Discharge Cut-off Voltage	45.0V±0.2V		
Recommended Current	50A	50A	100A
Max. Continuous Current	100A	100A	200A
Display	LCD		
Communication Interface	Rs485 / RS232 / CAN (Optional)		
Dimensions	505 x 543 x162mm	590 x 620 x210mm	821 x 647 x168mm
Approx. Weight	46kg	85kg	128kg
Design Life	≥15 years		
Certification	UN38.3 / MSDS/ UL1973(Cell) / IEC62619(Cell)		
Charge Temperature	0°C~65°C (Under 0°C extra heating mechanism)		
Discharge Temperature	-20°C~65°C (Under 0°C work with reduced capacity)		
Storage Temperature	-40°C~55°C @ 60%±25% relative humidity		

LiFePO₄ PowerWall Energy Storage Batteries

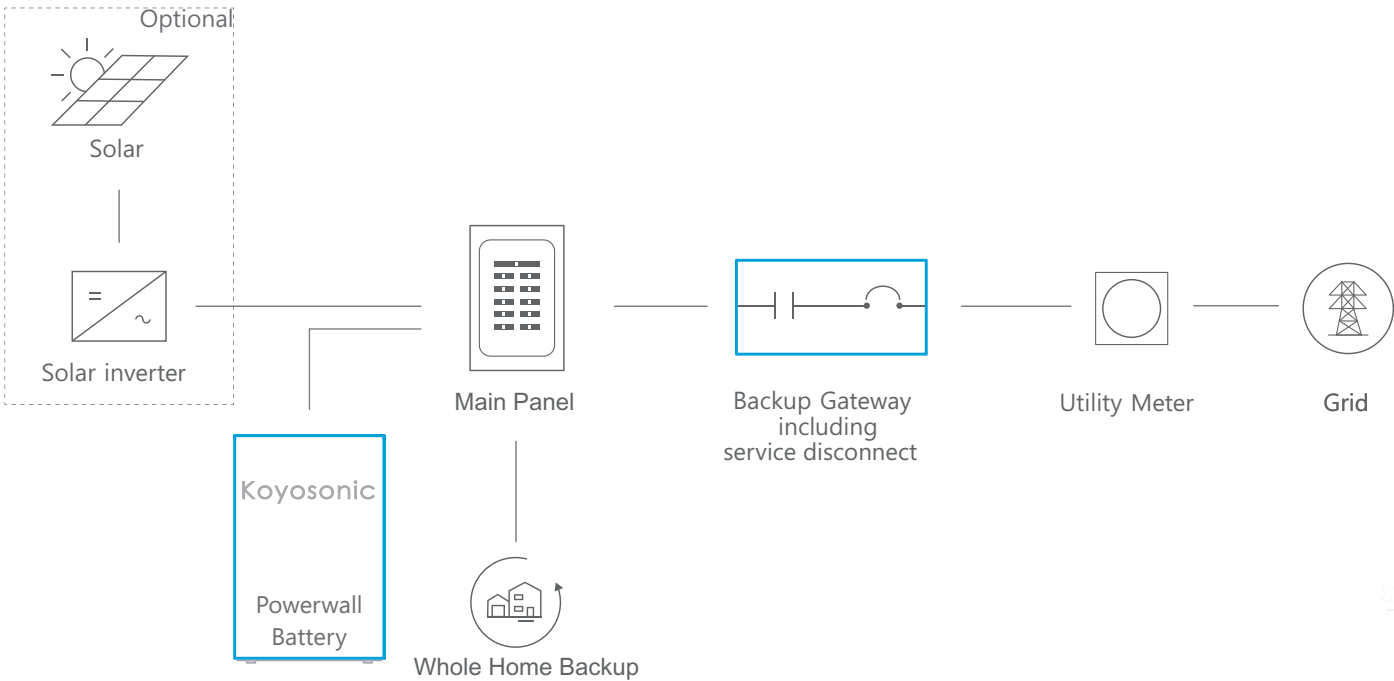
Technical Characteristics



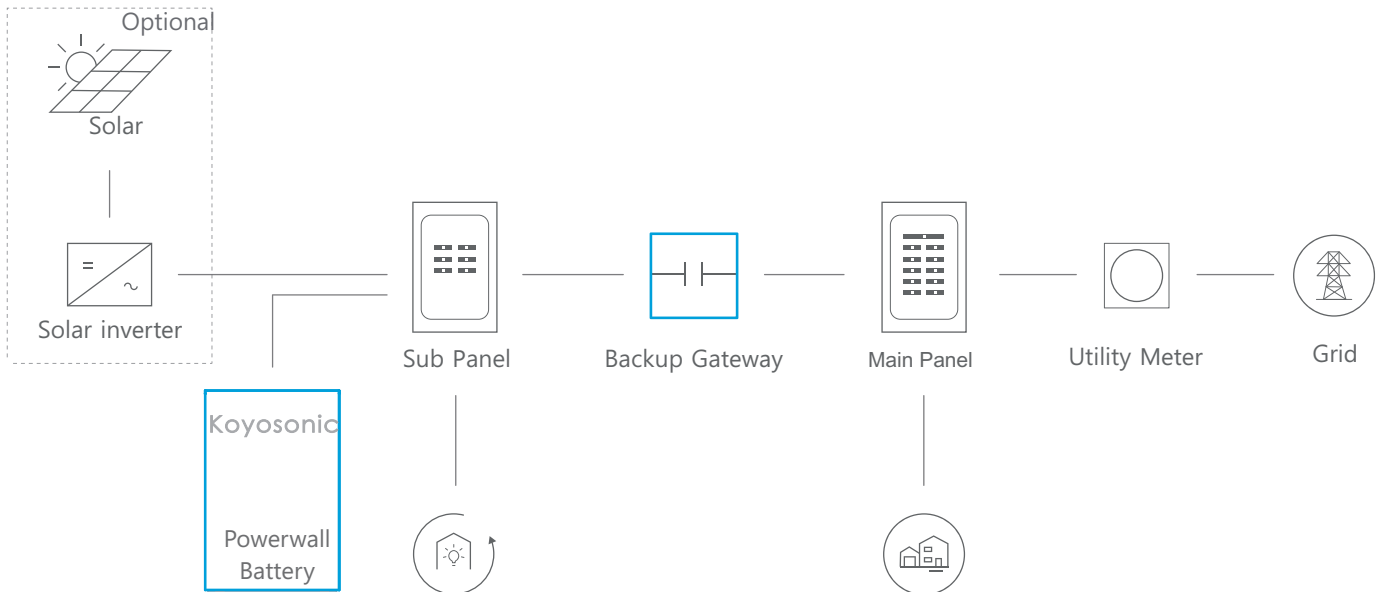
LiFePO₄ PowerWall Energy Storage Batteries

Typical System Layouts

WHOLE HOME BACKUP



PARTIAL HOME BACKUP



LiFePO₄ PowerWall Energy Storage Batteries

Features and Advantages



High cycle life

6000 cycles @80% DoD for effectively lower total of ownership cost



Built in circuit protection

Battery Management System (BMS) is incorporated against abuse.



Quickly recharge

Save time and increase productivity with less down time owing to superior charge/discharge efficiency.



Light weight

A lithium battery can provide more Wh/Kg and it is just 1/3 of its equivalent VRLA-AGM battery in weight.



Longer service life

Maintenance-free batteries with stable chemistry.



Better storage

Up to 6 months owing to its extremely low self discharge (LSD) rate and no risk of sulphation.



Extreme heat tolerance

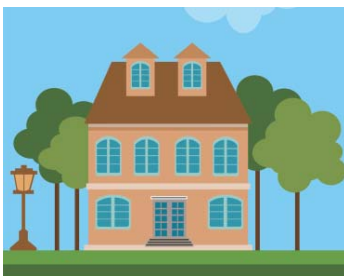
Suitable for use in a wider range of applications where ambient temperature is unusually high: up to +60°C.



CAUTIONS:

- Do NOT short circuit, reverse polarity, crush or disassemble.
- Do NOT heat or incinerate.
- Do NOT immerse in any liquid.
- Store at 30~50% SOC. Recharging every 3 months is recommended. It should be stored in a clean, cool, dry and well-ventilated place.

Main Application Sites



House



Small Shop



School



Hospital

