

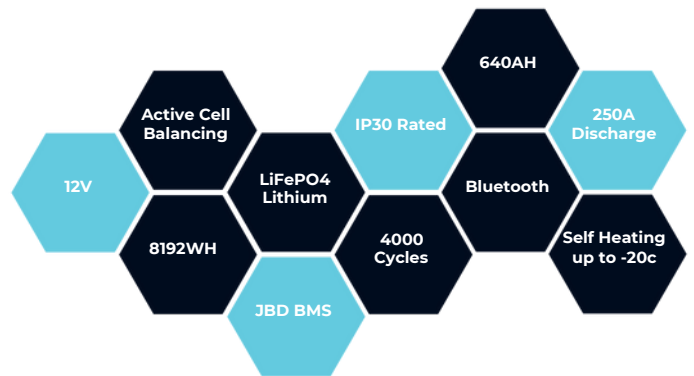
POLARMAX

LiFePO4 LITHIUM BATTERY

640AH



POLARMAX XPL12-640



CELL INFORMATION

Cell Type	Grade A Prismatic	Nominal Voltage	12.8V
Cell Configuration	4S2P	Discharge Cut Off Voltage	10V
Nominal Capacity	640AH	Discharge Temperature Range	-20C to 60C
Energy	8192WH	Charge Temperature Range	-20 to 60C (Heater Enabled)
Cell Chemistry	Lithium Iron Phosphate	Storage	10C to 35C @ 50% SOC
Cell Nominal Voltage	12.8V	Measurements (LxWxH in mm)	640mm x 245mm x 220mm
Cycle Life	4000 Cycles @ 100% DOD	Weight	54KG
Maximum Discharge	250A	Housing Material	ABS Plastic
Maximum Charge	250A	Conformity	UN38.3, ROHS, CE, UL -
Max Parallel connections	4	Can Bus	14.2v - 14.4v Max
Max Series connections	4	Recommended Charging Current	

BMS INFORMATION

Maximum Discharge	Temperate Protection	OverCurrent Protection	OverDischarge Protection	Max Charging Current
250A	Yes	Yes	Yes	Yes

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BATTERY PERFORMANCE

Lithium Iron Phosphate batteries rely on a chemical reaction, so their performance will naturally degrade over time, even if stored for extended periods without regular use. Additionally, if factors like charging, discharging, and ambient temperature are not kept within the recommended ranges, the battery's lifespan may be reduced, and the device it powers could suffer damage from electrolyte leakage.

If the battery no longer holds a charge for extended periods, despite being properly charged, it may be time to replace it.

STORING YOUR BATTERY

We recommend storing your batteries at room temperature, with a charge level of approximately 30% to 50% of their capacity.

To prevent over-discharge, we suggest charging the batteries at least once every three months.

BATTERY SERIES AND PARALLEL MODE

All 12V batteries can be connected either in series, with four (4) batteries, or in parallel (4) batteries. Busbar Connections must only be used for string connections.

CHARGING

Your battery should be charged with a charger specifically designed for lithium iron phosphate batteries.

Bulk Charge: 14.2V - 14.6V Float Charge: 13.5V - 13.8V

Charging Current: up to 100A DC/DC chargers MUST be used for alternator charging only

TEMPERATURE CONSIDERATIONS

- Charging: This battery has an internal heating element for low-temperature operation. To maintain optimal health and longevity, the heater will automatically work when the temperature is below 0°C (32°F).
- Discharging: The Xplorer Energy PolarMax battery excels in cold environments, offering a discharge & recharge temperature range down to -20°C (-4°F).

BATTERY MONITORING

The PolarMax battery focuses on reliability and longevity. You can easily monitor its state of charge (SOC), Temperature, Cycle count, Health and performance using the Xplorer Energy App.

BATTERY SAFETY

- Do not attempt to disassemble the battery.
- Do not short-circuit the battery.
- Do not store batteries in direct sunlight.
- Store the battery in a cool, well-ventilated area.
- Store batteries away from combustible objects and materials.
- Never leave a battery unattended during charging.
- Keep batteries away from static electricity.
- Ensure batteries are kept out of reach from children and pets.
- Avoid immersing the battery in water.
- Do not crush, burn, or alter the battery in any way.
- Use batteries solely as per the manufacturer's specifications.
- Dispose of batteries properly by recycling them.

BATTERY WARRANTY

- Xplorer Energy provides a 10-year warranty on all PolarMax Lithium Leisure batteries.
- This warranty is exclusively available to the original owner and is non-transferable.
- Proof of purchase will be required to process any warranty claims or returns.
- If you experience any issues, please contact us promptly at sales@alpha-batteries.co.uk
- The warranty does not cover damage resulting from gross negligence, Commercial Use, normal wear and tear, accidents or collisions, misuse, or improper installation.

JBD Bluetooth App: Please charge battery before using

