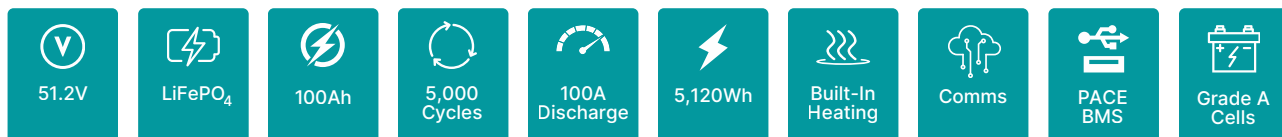




5.12kWh 51.2V

100Ah LiFePO₄ BATTERY

TECHNICAL SPECIFICATION SHEET



Specifications

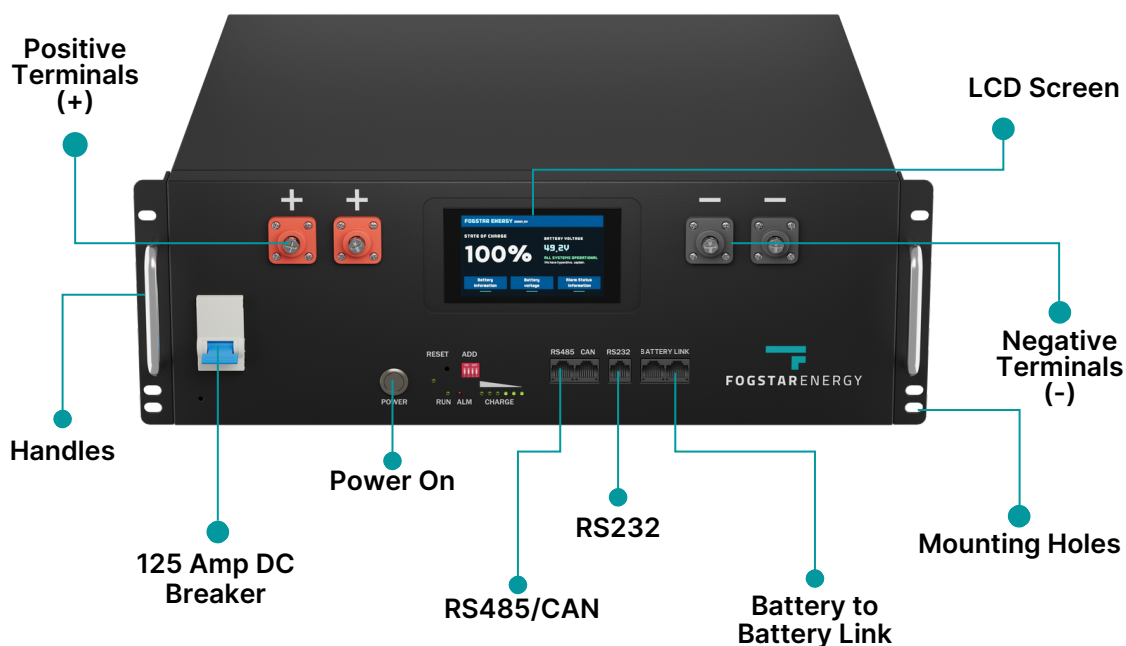
Rated Voltage (V)	51.2V
Maximum Charge (V)	57.6V
BMS	PACE 100A
Nominal Capacity (Ah)	100Ah
Minimum Capacity (Ah)	100Ah
Maximum Charge Current (A)	100A
Total Wh	5,120
Maximum Discharge	100A
Discharge Cut-off Voltage	43.2V
Discharge Temperature	-20°C to 60°C
Charging Temperature	-20°C to 45°C (heater enabled)
Storage Temperature	1 Month: -20°C ~ 60°C 3 Months: -10°C ~ 40°C 1 Year: -5°C ~ 20°C
Relative Humidity	45% ~ 85%
Cell Configuration	16S1P
Cycle Life	5,000 @ 95% DOD
Communication Ports	CAN, RS485, RS232
Design Life	15 years
Weight	45.2kg
Preloaded Inverter Protocols	Compatible with multiple LV inverters, including but not limited to LuxPower, Sunsynk, Victron and more.



Reliability by Design

At Fogstar, quality isn't an afterthought, it's our foundation. Every battery is engineered and tested to exacting standards, with meticulous attention to safety, consistency, and performance. From component selection to final assembly, our processes are built to deliver long-term reliability you can trust.





Safety Precautions



Never work on these batteries while powered or connected to the grid. Install only in suitable, safe environments by a qualified person, following all electrical codes. Ensure correct grounding, polarity, programming, cabling, and torque. Use only with compatible 51.2V systems. Never in series or with other chemistries. Keep away from heat, hazards, pets, and children. If overheating or burning smells occur, trip the breaker and call emergency services. Clean only with a dry cloth.

Battery Warranty

The Fogstar Energy 5.12kWh Rack battery comes with a 10-year warranty covering BMS failure, cell failure, temperature sensors, charging/discharging faults, and internal corrosion. Excludes misuse, tampering, incompatible systems, or accidental damage.

To submit a claim, contact Fogstar Customer Support:

customerservice@fogstar.co.uk

01527 757980

Please include your proof of purchase and a clear description of the issue.

Parallel Connectivity

Up to 32 units can be connected in parallel (31 for Victron). These batteries **cannot** be connected in series.

Charging Parameters

Bulk: 57.6V

Float: 55.2V

Low DC cut off: 43.2V

Battery Connections

We supply 35mm² twin cables in both positive and negative. Each cable has a single M8 ring lug at one end, splitting into two M6 ring lugs at the other. These are intended as battery-to-battery links and are only required when connecting multiple rack batteries in parallel. For correct installation, always connect all negative conductors before attaching the positive.

Also included: an RS232-to-USB cable and a battery-to-battery communication cable (RS485-to-RS485), ensuring straightforward system integration.

Updating the Inverter Protocol

The PACE Battery Management System (BMS) seamlessly integrates with a wide range of popular inverters, containing pre-loaded protocols for Victron, Pylontech, Growatt, Sofar, Solis, and Goodwe. Changing the inverter protocol doesn't involve any complex software downloads; you can change it simply by navigating the LCD Touchscreen.

Battery Heating

The integrated heating system activates below 5 °C, enabling safe charging at 0 °C and reliable operation in ambient temperatures down to -20 °C.



5.12V 51.2V RACK STORAGE CABINETS

Our Fogstar Energy Storage Cabinets are designed in the UK and built from high-quality materials using innovative engineering techniques.

They're fully compatible with our 5.12kWh Fogstar Energy rack batteries, supporting up to 32 units in parallel (31 when used with Victron systems).

Many manufacturers recommend linking batteries through their positive and negative terminals, but in our experience this can cause cell imbalances. That's why our cabinets use a busbar system, ensuring the load is distributed evenly across every cell.

You'll immediately notice the integrated, heavy-duty nickel-plated copper busbars, designed to make parallel connections simple, reliable, and efficient.

Our cabinets come in the following sizes;

3 Rack Cabinet (15kWh)

6 Rack Cabinet (30kWh)

IP-Rated 8 Rack Cabinet (40.96kWh)



3 Rack Cabinet (15kWh)



6 Rack Cabinet (30kWh)



IP-Rated 8 Rack Cabinet (40.96kWh)

FEATURES



Vented
Panelling

The cabinets feature vented panelling at the front of the units, allowing air to flow around the battery units.



Cable
access

The cabinets incorporate two, circular cut-out cable access points in both the bottom and top of the units. These allow for a neat and tidy cabling system.



Nickle
Plated Busbar

Thick nickel plated copper busbars, enable users to connect our batteries in parallel with ease.



IP-rated
Option

The IP56-rated cabinet is weather-ready, protecting against dust and water ingress for dependable outdoor use.



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FEATURES



Tempered
Glass Front
Panel

The cabinets feature a tempered glass front panel at the front of the units, providing a clear view of your system while maintaining a clean, modern and professional finish.



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