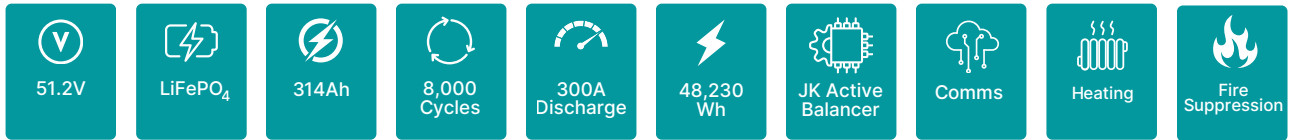




48.3kWh 51.2V

Stackable 314Ah LiFePO₄ BATTERY

TECHNICAL SPECIFICATION SHEET



This modular battery system is designed for scalable energy storage across a wide range of applications. Each stack delivers 48kWh or 64kWh of capacity, with an integrated control unit managing the system as a single, unified solution. Multiple stacks can be combined to scale total storage up to 1.28MWh. IP-rated and heated, the system is built for reliable performance in demanding environments.

Specifications	48.3kWh	64.4kWh
Rated Voltage (V)	51.V	
Maximum Charge (V)	57.6	
BMS	150A	
Nominal Capacity (Ah)	314Ah	
Maximum Charge Current (A)	300A	
Total Wh	48,230	64,307
Maximum Discharge	300A	
Discharge Cut-off Voltage	43.2V	
Discharge Temperature	-20°C to 45°C	
Charging Temperature	-15°C to 45°C	
Relative Humidity	5% - 65%	
Cell Configuration	3*16S1P	4*16S1P
Cycle Life	8000	
Communication Ports	CAN/RS485	
Design Life	15 Years	
Weight	394kg	517kg
IP-Rating	IP65	



Built-In Fire Suppression Unit

Our ultra-thin, built-in aerosol unit stops fires the moment they start. When temperatures spike to 170°C, the system releases a fast-acting potassium aerosol that instantly disrupts the fire's chemical reaction. Result: rapid suppression, zero maintenance, and reliable protection for enclosed electrical spaces.

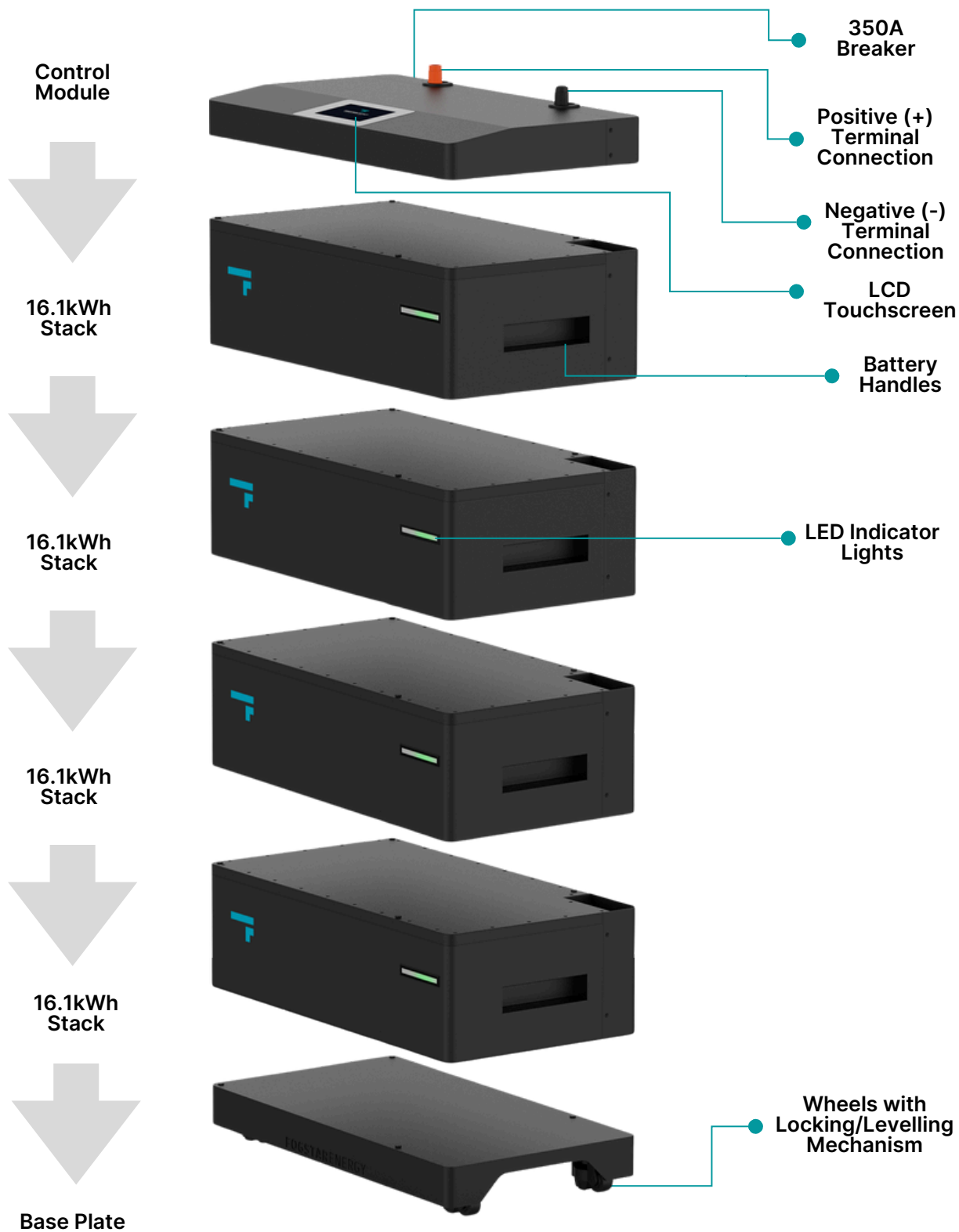




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Safety Precautions



Due to its significant weight (123kg per 16.1kWh stack), it's crucial to have at least five people assist with lifting, adhering to safety regulations.

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 LV 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.

Only connect a maximum of four (4) battery modules per stack.

Battery Warranty

The Fogstar Energy 48.3kWh and 64.4kWh battery comes with a 6-year warranty and 10-year customer support, covering BMS failure, cell failure, temperature sensors, charging/discharging faults, and internal corrosion. A full warranty document can be found on our website www.fogstar.co.uk.

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.

Battery Dimensions (LxWxH mm)

48.3kWh: 830x450x949
64.4kWh: 830x450x1199

The system height is modular, with each battery stack having a height of 250mm, and the combined base and control module contributing a total height of 199mm. This modular construction allows the overall height to increase in line with the number of battery stacks while maintaining the same footprint.

Charging Parameters

Bulk: 57.6V
Float: 55.2V
Low DC cut off: 43.2V

Battery Connections

The system is supplied with pre-terminated 95 mm² battery power cables for straightforward installation. These enable direct connection between the battery system and inverter, or via an external busbar where required.

Battery to battery cables are terminated with Amphenol connectors for secure, low-resistance connections.

A 1.5 m communication cable are also supplied to enable system control and data integration. The supplied power cables are compatible with most inverter systems. In some installations, battery cables may be routed to a busbar, with manufacturer-supplied inverter leads used for the final connection. For correct installation, all negative connections must be made before connecting the positive.

Updating the Inverter Protocol

Compatible with multiple LV inverters, including but not limited to LuxPower, Sunsynk, Solis, Victron, Voltacon and more.

Jk Active Balancer

The 2A JK active balancer ensures cell balancing by actively transferring energy between cells. It will automatically activate whenever significant disparity is detected in the pack. This results in improved efficiency, longer battery lifespan, and more stable performance across the pack.

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.

LED Indicator Lights

●	Alarm / Error
●	Low Battery
●	Charging / Fully Charged