



WARRANTY DOCUMENT

48V 5.12kWh STACKABLE BATTERY
JUNE 2026



CONTENTS

3	Warranty Statement
3	What is Covered
4	Product Protection Features
4	Performance and Capacity
5	Warranty Exclusions
9	Commercial and High-Cycle Applications
9	International Relocation and Export
9	Warranty Assessment
10	Warranty Procedure
10	Limitation of Liability
10	Governing Law
10	Warranty Version

Need to speak to someone?

Our friendly and helpful customer service team are always happy to help;

 customerservice@fogstar.co.uk

 01527 757980



1. Warranty Statement

Fogstar warrants that the **Fogstar Energy 48V 5.12kWh Stackable Battery** ("the Product") shall be free from defects in materials and workmanship under normal use and service for a period of **six (6) years** from the date of purchase. Fogstar also provides technical support for the Product for a period of up to ten (10) years from the date of purchase. Technical support is provided separately from the Product warranty and does not extend, renew or increase the six (6) year warranty period.

This warranty applies only to Products purchased from Fogstar or an authorised Fogstar reseller and is valid only where the Product has been installed, commissioned, operated, maintained and stored in accordance with Fogstar's published specifications, installation instructions and user manuals.

The Product must be installed using suitably rated cables, connectors, over-current protection devices and electrical equipment appropriate for the intended application and in accordance with applicable electrical standards and good industry practice.

This warranty is provided in addition to, and does not affect, any statutory rights available under applicable consumer protection legislation.

Proof of purchase must be provided to support any warranty claim.

2. What is Covered

Subject to the terms of this warranty, Fogstar will repair or replace a Product that is found, upon inspection and testing by Fogstar, to have failed due to defects in materials or workmanship.

Examples of covered defects may include:

- Internal cell failure.
- Battery Management System (BMS) failure.
- Failure of internal temperature monitoring systems.
- Failure of the integrated heating system.
- Failure of integrated communication hardware.
- Failure of the LCD display.
- Manufacturing defects affecting charging or discharging performance.
- Manufacturing defects resulting in abnormal operation.

All warranty assessments are subject to inspection and verification by Fogstar.

Customer Support

Fogstar is committed to supporting the Product beyond the expiry of the six (6) year warranty period. Technical support for the Product is available for up to ten (10) years from the date of purchase, subject to the continued availability of product information, software, firmware, spare parts and technical resources.

Technical support may include:

- Product configuration guidance.
- Installation assistance.
- Basic fault-finding and diagnostic assistance.
- Communication and inverter integration guidance.
- Product documentation and user guidance.
- Firmware and software guidance where applicable.
- General technical advice relating to the operation of the Product.

Technical support does not constitute warranty coverage and does not extend, renew or increase the six (6) year warranty period.

Fogstar reserves the right to determine the scope and availability of technical support after the expiry of the warranty period.

Where replacement parts, repairs, on-site support, inspections, specialist technical investigations or product recovery services are required outside the warranty period, additional charges may apply.

Whilst Fogstar will endeavour to provide support for up to ten (10) years from the date of purchase, support services remain subject to the availability of components, software, technical information and third-party products.

3. Product Protection Features

The Product incorporates an integrated Battery Management System (BMS) designed to provide protection against certain operating conditions, including over-charge, over-discharge, excessive current, short-circuit conditions and low-temperature charging.

These protection features are intended to reduce the risk of damage during normal operation. However, no protection system can prevent all forms of misuse, abuse, incorrect installation, incorrect system design or operation outside the Product's published specifications.

The presence of a protection feature does not extend warranty coverage to damage resulting from improper installation, unsuitable system design, environmental exposure or operation outside the Product's intended use.

4. Performance and Capacity

Lithium batteries naturally experience a gradual reduction in available capacity over time and through normal use.

Reduction in capacity resulting from age, cycle count, operating conditions, storage conditions or normal battery degradation does not constitute a defect and is not covered under this warranty.

Warranty coverage applies only where a fault arises as a result of a defect in materials or workmanship.

Capacity testing may be performed by Fogstar using its own testing procedures and equipment, the results of which shall be final for the purposes of warranty assessment.

5. Warranty Exclusions

This warranty does not cover failures, defects or damage resulting from:

Installation or System Design Errors

- Failure to follow Fogstar installation instructions.
- Incorrect system design.
- Installation in a system where the maximum potential charge current, discharge current or connected load exceeds the Product's published specifications.
- Inadequately sized cables.
- Loose electrical connections.
- Failure to protect the Product using appropriately rated fuses, circuit breakers or other over-current protection devices suitable for the installation.
- Incorrectly rated fuse protection.
- Incorrectly rated circuit breakers.
- Protection devices that have been bypassed, modified, removed or incorrectly installed.
- Installation that does not comply with applicable electrical regulations, building regulations, manufacturer requirements or local energy storage installation standards.

Excessive Current or Electrical Abuse

- Charging currents exceeding published specifications.
- Discharge currents exceeding published specifications.
- Repeated operation at or beyond maximum ratings.
- Excessive surge or inrush current loads.
- Reverse polarity connections.
- Short circuits.
- Connection to incompatible electrical equipment.
- Charging or discharging outside the published operating parameters.

Communication and Integration

The Product incorporates CAN, RS485 and RS232 communication interfaces to facilitate integration with compatible third-party equipment.

Warranty coverage does not apply to:

- Communication failures caused by incorrect inverter settings.
- Incorrect protocol selection.
- Incorrect communication settings.
- Incorrect DIP switch configuration.
- Incorrect battery addressing.
- Incorrect master/slave configuration.
- Incorrect parallel communication wiring.
- Incompatible third-party equipment.
- Unsupported inverter firmware.
- Unsupported battery firmware.
- Third-party software, monitoring platforms or gateway devices.
- Loss of functionality resulting from firmware updates to third-party equipment.

The inability to establish communication with third-party equipment does not, in itself, constitute a defect in the Product.

Outdoor Installation and Environmental Exposure

The Product is **not an IP-rated battery** and is intended for installation in clean, dry and protected environments.

Warranty coverage does not apply to damage resulting from:

- Water ingress.
- Moisture ingress.
- Condensation.
- Flooding.
- Standing water.
- Excessive humidity.
- Environmental contamination.
- Corrosion resulting from environmental exposure.
- Installation in outdoor environments.
- Installation in locations exposed to rain, snow, spray or direct weather conditions.
- Prolonged exposure to direct sunlight or excessive heat.

The Product must be installed in a location protected from environmental exposure at all times. Suitable installation locations include clean, dry, well-ventilated indoor environments that are protected from moisture, direct sunlight, excessive heat and adverse environmental conditions.

To maximise service life and performance, the Product should be installed in a sheltered, well-ventilated location and protected from prolonged direct sunlight, excessive heat and adverse environmental conditions.

Prolonged exposure to direct sunlight, particularly during periods of high ambient temperature, may increase the internal temperature of the Product and could result in the Battery Management System (BMS) temporarily limiting or disabling charging and/or discharging functions to protect the battery.

Heating System

The Product incorporates an automatic heating system designed to assist charging at low temperatures. Warranty coverage does not apply to:

- Damage caused by bypassing, modifying or disabling the heating system.
- Damage caused by bypassing, modifying or disabling any Battery Management System (BMS) protection feature.
- Damage resulting from operation outside the Product's published temperature specifications.

The presence of an integrated heating system does not remove the requirement to install and operate the Product within its published specifications.

Inverter Compatibility

Fogstar publishes compatibility information for guidance purposes only. Warranty coverage does not extend to:

- Changes made by inverter manufacturers.
- Firmware changes made by inverter manufacturers.
- Removal of support by third-party manufacturers.
- Loss of functionality caused by third-party equipment.
- Incorrect inverter programming.
- Incorrect charge or discharge parameters.
- Incorrect commissioning

Where the Product is operating within specification, communication or integration issues arising from third-party equipment shall not constitute a warranty defect.

Parallel Systems

The Product is designed for parallel operation only and must not be connected in series. Warranty coverage does not apply to:

- Series connection of batteries.
- Incorrect parallel configuration.
- Mixing batteries of different ages, capacities, chemistries or models.
- Mixing Fogstar batteries with non-Fogstar batteries.
- Failure to follow commissioning procedures.
- Damage resulting from unequal state of charge when connecting batteries in parallel.
- Damage caused by incorrect communication cabling between batteries.

Over-Discharge and Storage Damage

- Batteries left in a discharged state.
- Deep discharge beyond published limits.
- Storage at an excessively low state of charge.
- Failure to recharge the battery following low-voltage shutdown.
- Damage caused by parasitic loads during storage.
- Capacity loss resulting from prolonged storage in a discharged condition.
- Batteries requiring recovery charging due to over-discharge.

Fogstar may offer recovery services for over-discharged batteries at a fixed service charge.

Mechanical Damage

- Impact damage.
- Crushing.
- Dropping.
- Excessive vibration.
- Transportation damage occurring after delivery.
- Physical abuse.
- Cosmetic damage that does not affect functionality.

Terminal and Connection Damage

- Over-torqued terminals.
- Under-torqued terminals.
- Stripped threads.
- Cross-threaded terminals.
- Damaged terminal inserts.
- Damaged studs.
- Damaged busbars.
- Damage resulting from failure to follow published torque specifications.

Water, Moisture and Environmental Exposure

The Product is intended for installation in dry, protected environments or suitable enclosures designed for battery energy storage systems. Warranty coverage does not apply to damage resulting from:

- Water ingress.
- Moisture ingress.
- Condensation.
- Flooding.
- Excessive humidity.
- Environmental contamination.
- Corrosion resulting from environmental exposure.
- Installation in unsuitable outdoor environments without adequate protection.
- Installation in locations exposed to direct sunlight, rain, snow, spray or direct weather conditions.

Corrosion and Chemical Exposure

- Saltwater exposure.
- Chemical contamination.
- Corrosion caused by environmental conditions.
- Exposure to corrosive substances.

Unauthorised Modification or Repair

- Opening the battery enclosure.
- Modification of battery settings.
- Modification of BMS parameters.
- Firmware modification.
- Third-party repair attempts.
- Replacement of internal components by unauthorised persons.
- Structural modifications to the Product.

Other Exclusions

- Abuse, misuse or neglect.
- Accidental damage.
- Fire.
- Theft.
- Lightning strikes.
- Natural disasters.
- Any use outside the Product's intended purpose.

6. Commercial and High-Cycle Applications

The Product is designed for residential, commercial and off-grid energy storage applications. Normal capacity reduction, performance degradation and wear resulting from regular cycling do not constitute manufacturing defects and are not covered under this warranty.

Warranty coverage applies only to defects in materials and workmanship.

7. International Relocation and Export

Where a Product is exported, relocated or transported outside the United Kingdom after purchase, warranty coverage shall remain subject to the terms of this warranty.

Fogstar shall not be responsible for the costs, arrangements or regulatory requirements associated with the international transportation of the Product.

Lithium batteries are classified as dangerous goods for transport purposes and may be subject to restrictions imposed by carriers, freight forwarders and national authorities.

Where a warranty inspection, repair or replacement requires the Product to be returned to Fogstar, the customer shall be responsible for arranging and paying for any international transportation, export, import, customs, dangerous goods handling or associated compliance costs.

If the Product cannot be made available to Fogstar for inspection, Fogstar reserves the right to withhold any warranty remedy until such inspection has been completed.

8. Warranty Assessment

All warranty claims are subject to inspection and testing by Fogstar.

Where a warranty claim relates to charging, discharging, communications, integration or system performance, Fogstar may require:

- Photographs of the installation.
- Commissioning records.
- Inverter settings.
- Communication settings.
- System diagrams.
- Diagnostic logs.
- Battery logs.
- Other relevant technical information.

Fogstar may utilise physical inspection, diagnostic testing, BMS records, event logs, charge and discharge history, environmental indicators, electrical testing and any other technical evidence reasonably available when determining warranty eligibility.

Evidence indicating operation outside published specifications may result in partial or complete rejection of a warranty claim.

Where inspection identifies no manufacturing defect, Fogstar reserves the right to charge reasonable collection, inspection and return costs.

9. Warranty Procedure

If you believe your Product has developed a fault, you should contact Fogstar Customer Support as soon as reasonably possible.

Customers may be asked to provide:

- Proof of purchase.
- Photographs or videos.
- Diagnostic information.
- Details of the installation.
- Inverter configuration details.

Approved warranty claims will be repaired or replaced at Fogstar's discretion.

Replacement Products may be new or refurbished and may incorporate equivalent or improved components.

10. Limitation of Liability

Nothing in this warranty excludes or limits liability for death or personal injury caused by negligence, fraud, fraudulent misrepresentation, or any liability that cannot be excluded by law.

Subject to the above, Fogstar's liability under this warranty shall be limited to the repair or replacement of the Product, or reimbursement of the original purchase price, at Fogstar's sole discretion.

Fogstar shall not be liable for any indirect, incidental, consequential or economic losses including, but not limited to:

- Loss of use.
- Loss of earnings.
- Loss of business.
- Loss of profits.
- Loss of energy generation.
- Loss of stored energy.
- Property damage arising from incorrect installation or use.

11. Governing Law

This warranty shall be governed by and construed in accordance with the laws of England and Wales.

Any disputes arising from this warranty shall be subject to the exclusive jurisdiction of the courts of England and Wales.

12. Warranty Version

The warranty applicable to the Product shall be the version published by Fogstar and in force on the date the Product was originally purchased.

