

DISCOVER AES LiFePO₄ BATTERY INDUSTRIAL MOBILE WARRANTY POLICY

DOCUMENT NUMBER
885-0008

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READ THIS DOCUMENT CAREFULLY: Discover has spent over 10 years developing what we know to be some of the highest quality Advanced Energy Systems available in the market today. We have vast field and testing experience that we incorporate into our design criteria. This document attempts to educate and inform you on what to do and what not to do to protect your investment, and to provide you with the best warranty in the business. Most importantly we want to give you confidence you are buying an excellent product from a great company.

LIMITED PERFORMANCE WARRANTY

Discover Energy Corp. ("Discover"), together with its agents, dealers, and distributors, warrants to the original product purchaser ("User"), that your Discover Advanced Energy System Battery ("Battery(ies)") will provide unlimited cycles while maintaining at least 60% of the original "Nominal Energy" for the earlier of the listed "Energy Period" or total "Energy Throughput" as per the table below, subject to the terms and conditions outlined herein.

For Mobile Applications Discover warrants the "Control Systems" for 3 years from the initial installation date.

Mobile Application: Energy Throughput and Energy Period

Battery Model	Nominal Volts / Wh	Energy Period	Total Energy Throughput	Annual Energy Throughput Limit	Warranty Service Level
15-24-1000	24V / 1024 Wh	4 Years	2 MWh	600 kWh	4 years performance warranty.
15-36-1000	36V / 1008 Wh	4 Years	2 MWh	600 kWh	
14-24-2800	24V / 2816 Wh	4 Years	5.6 MWh	1600 kWh	
12-36-6700	36V / 6720 Wh	4 Years	13 MWh	3800 kWh	
12-48-6650	48V / 6656 Wh	4 Years	13 MWh	3800 kWh	

Definitions

"Control Systems" means the Battery Management System and Solid-State Relay (BMS) together with the communications, firmware, and software found in the BMS.

"Energy Throughput" means the aggregate energy charged and discharged through the Battery as logged by the on-board data logger.

"Nominal Energy" means the nominal rated Watt-hour (Wh) energy published for the Battery in Discover technical documentation at the time of manufacture.

"Stationary Energy Storage Application" means product application, typically off-grid solar, micro-grid or backup power, where the Battery is operated in a fixed and stationary position.

"Mobile Application" means product applications where the Battery is routinely exposed to vibration, lateral and/or vertical forces as a result of installation on, or inside, a moving apparatus.

"Service Life" means the total period in years from the initial commissioning date that the Battery is covered by this Limited Performance Warranty.

LIMITATION ON APPLICATIONS

Without the involvement of Discover in system design and Discover's express written authorization, the Battery is not intended for use in a Stationary Application, as a primary or backup power source for life support systems or other medical equipment, or any application where product failure could lead to injury to persons, loss of life or catastrophic property damage. To the extent permitted by law, Discover disclaims any and all liability arising out of any such use. Further, Discover reserves the right to refuse to service any Battery used for these purposes and disclaims any and all liability arising out of Discover's refusal to service.

WARRANTY LIMITATIONS AND EXCLUSIONS

EXCEPT AS HEREIN EXPRESSLY STATED, THERE ARE NO WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, BY OPERATION OF LAW OR OTHERWISE, FOR ANY BATTERY IDENTIFIED IN THIS LIMITED PERFORMANCE WARRANTY. DISCOVER DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER WARRANTIES AND/ OR GUARANTEES, EXPRESS OR IMPLIED, AND, AS SUCH, THE SAME SHALL NOT APPLY TO THE BATTERIES. IN NO EVENT SHALL DISCOVER BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE WHATSOEVER FOR ANY REASON (INCLUDING, WITHOUT LIMITATION, LOST PROFITS, LOSS OF USE, LOST EQUIPMENT OR LOST REVENUES) REGARDLESS OF THE LEGAL THEORY ON WHICH ANY SUCH CLAIM MAY BE MADE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

This warranty does not cover defects that are caused by normal wear and tear, inadequate maintenance, insufficient ventilation, transportation, storage or faulty repair, misuse, neglect, accident or abuse, modification to the Battery, failure to observe operating instructions and parameters or improper installation. This warranty does not cover defects caused by external influences while in the User's possession, including unusual physical or electrical stress such as power surges, uncontrolled voltages and currents, system harmonics, lightning, flood, fire, or accidents. This warranty does not cover any damage that may occur as a result of improper connection, system integration, or installation. This warranty does not cover consumable components including but not limited to fuses (or the cost to change fuses) that are incorporated within the Battery for protection against external phenomena or operation outside of the preset parameters of the Battery.

For further clarity, this warranty is void if the Battery:

1. is continually operated (charge or discharge) at below, or above its specified temperature range (as measured and logged by the Battery internal data logger),
2. is operated at an average temperature exceeding 30 degrees Celsius / 86 degrees Fahrenheit over the life of the Battery (as measured and logged by the Battery internal data logger),
3. surpasses the annual or average annual Energy Throughput threshold which indicates the energy storage system is undersized (as measured and logged by the Battery internal data logger),
4. is not operated in accordance with the parameters as set forth in the English language version of the Operating Manual (all warnings and faults are measured and logged by the Battery internal data logger),
5. is charged by a charge curve, charge algorithm, battery charger or other unregulated charge source, that has NOT been approved by Discover as set forth in the English language version of the Operating Manual (as measured and logged by the Battery internal data logger),

6. is subjected to excess vibration as might be caused by out of balance, or improperly operated floor burnishing machine pads (as measured and logged by the Battery internal data logger),
7. data logger is destroyed or altered,
8. manufacturing date codes, safety certification numbers or serial and tracking numbers are destroyed or altered,
9. is disassembled, altered, or repaired by someone other than an authorized Discover agent,
10. is damage during shipping or installation,
11. is not installed in conjunction with adequate balance of system components,
12. is directly connected to a DC motor without the proper safety protection of a motor controller, or external motor voltage clamping system,
13. is altered so that the BMS is bypassed,
14. is not properly protected from inrush current,
15. is subjected to terminal burn out,
16. is not registered with Discover at the time of commissioning which could delay or prevent the notification and required installation of firmware that updates the functionality of a single battery or the functionality of multiple batteries in a system,
17. when requested, data logs are not provided in support of a warranty claim.

IMPORTANT: PROPERLY PROTECT THE BATTERY WITHIN THE OVERALL INSTALLATION

Proper grounding, isolation, fusing, breakers and disconnects must be correctly used throughout the balance of systems to effectively isolate and protect all components of the system against faults, short circuits, reverse polarity or component failure. The sizing of all system components should be determined using established electrical codes and standards and evaluated by certified engineers, electricians, and licensed installers. Although every Battery has internal circuitry, system firmware and fuses to protect the Battery from operation outside of its pre-set limits, additional balance of system protections may be required. The internal circuitry, system firmware and fusing will not protect the Battery from extreme electrical phenomena.

CAUTION: DC MOTOR BRAKING - VOLTAGE SPIKES

In operation, DC motors build up a lot of energy (like a rubber band). When the Battery reaches its low voltage fault level and the Battery's BMS disconnects or interrupts the load, energy accumulated by the load has to go somewhere. This energy cannot be used as current or amperage flow any longer and converts to high voltage spikes while the motor is braking or stopping. This happens quickly and aggressively and can damage the Battery's BMS electronics. Direct connection to DC motors without the proper safety protection of a motor controller, or external motor voltage clamping systems (such as high power anti-parallel diodes or braking resistor systems) may result in damage to the internal protection system of the Battery, creating unsafe system conditions. This will void the warranty.

WARNING: DC MOTOR - INRUSH CURRENT

A one horsepower DC motor will continuously draw 746 watts of energy. At 24 volts this is over 30 amps ($746 \text{ W} / 24 \text{ V} = 31 \text{ A}$). When typical induction motors become energized, a much larger amount of current (in amps) than normal rushes into the motor to set up the magnetic field surrounding the motor to overcome the initial resistance of the load. As the motor overcomes the initial resistance of the load and increases in speed, the current draw subsides to a steady state level that equals; (a) the current required at the supplied voltage necessary to supply the motor load, plus (b) losses to windage, cabling and friction in the motor, and in the load. Initial inrush currents normally reach 3 times the steady state level but can easily reach 6 times the horsepower rating measured in watts of the motor. To protect the Battery BMS and electronics, an inrush current limiting device must be used when connecting the Battery to DC motors.

REMINDER: REGISTER YOUR BATTERY AND PROVIDE DATA LOG WHEN REQUESTED

Exclusion for failure to provide data access or failure to register your Battery

In order to provide this Limited Performance Warranty, Discover requires the ability to update your Battery's Firmware and Software. If your Battery is not registered with Discover, we may not be able to provide important system updates. System updates, or requests for system data can be performed during regular system maintenance. Any failure to install system updates when provided, or to provide data logged information upon request will void this Limited Performance Warranty.

WARRANTY CLAIM PROCEDURE

In the event of an alleged defect, you must make a warranty/service claim to the original Discover agent, dealer, or distributor that sold the Battery to you within fifteen (15) days of the alleged defect date. If you are unable to contact the original seller, you should contact Discover by visiting www.discoverbattery.com/support.

NOTE: If your Battery was included in a purchase from an Original Equipment Manufacturer (OEM) as part of the equipment, you must contact the OEM for service and support in the event of an alleged defect or Battery failure.

A Battery warranty or parts and service claim must include:

1. Proof of original purchase that includes date and identity of purchaser, name of authorized seller, Battery model number, serial number and purchase price. Please notate the transaction currency, if not in USD.
2. Description of the alleged defect.
3. Battery data logger download for analysis.
4. A description of the installation location and environment.
5. The shipping address for the repaired or replaced product.

After receiving a Return Materials Authorization (RMA), you must pack the authorized Battery, along with copies of the information required (1~5 above), in an appropriate shipping container or packaging with the Discover RMA number clearly marked on the packaging. Unless directed otherwise, you will be required to prepay all shipping charges to the destination designated by Discover. You must insure the shipment, or accept the full risk of loss or damage during shipment. Discover is not responsible for shipping damage caused by an improperly packaged Battery, or the repair costs that might result therefrom. Alternatively, Discover may

require you to hold the Battery on site and permit an examination by a Discover representative.

HELPFUL HINT: Take pictures of the Battery before and after packaging it for shipment.

If Discover determines that the defect is a warranted, Discover at its sole discretion will repair, or replace the defective product with a new or refurbished product. Alternatively, Discover may provide credit towards the purchase of a new Discover product.

In the event that the needed Battery is no longer in production or not available, Discover at its option, may replace it with a different Battery having equivalent function and performance, or provide a prorated refund based on the original purchase price and the remaining portion of the Service Life.

Any repaired, or replacement, Battery will only be warranted for the remaining unused portion of the original Limited Performance Warranty. The cost and responsibility for removal of the defective Battery and its shipment to Discover, and all other costs related to the replacement process, will be the responsibility of the User.

Applicable Law and Effective Period

This Limited Warranty is subject to the laws of the province of British Columbia. This Limited Warranty is effective for sales of Batteries occurring after March 15, 2019.