

# 10 YEAR LIMITED WARRANTY for: LFP-5/10, eVault and eFlex Series (US & Canada)

#### LIMITED PRO-RATED WARRANTY COVERAGE

The Fortress Power Lithium Ferrite Phosphate Batteries LFP-5/10/15 and eVault as supplied and distributed by Fortress Power, LLC, a Pennsylvania corporation, is warranted (the "Limited Warranty") by Fortress Power, LLC against manufacturing defects in materials and workmanship for a period of ten (10) years (the "Limited Warranty Period"); or for 6,000 cycles, 80% DOD; or for 2000 cycles, 100% DOD on a prorated basis, whichever comes first, when installed and operated within the Fortress Power Guide for Operating Parameters (page 3).

The term of this Limited Warranty (i) begins on the original date of purchase of the Fortress Power Product as indicated on the Limited Warranty Registration Card submitted to Fortress Power and (ii) continues through the Limited Warranty Period. This Limited Warranty applies only to the original end-use purchaser of the Fortress Power Product and is transferable only if the Fortress Power Product remains installed in the Original Use Location. Fortress Power does not warrant or guarantee workmanship performed by any person or firm installing the Fortress Power Product. This Limited Warranty does not cover the cost of installation, removal, shipping, or reinstallation. This limited Warranty does not cover faults in design or installer error such as reverse polarity or misuse of system wide equipment or inaccurate programming of all ancillary equipment in your system.

This Limited Warranty applies only to a Fortress Power Product (a) purchased from Fortress Power or an authorized Fortress Power distributor, dealer or reseller and (b) installed by a licensed professional. In the event you rent or lease the Fortress Power Product, no end-user purchase takes place; therefore, this Limited Warranty does not apply and you must contact your rental or leasing company to determine whether Warranty coverage is applicable.

The liability of Fortress Power under this Limited Warranty shall be limited to the repair or replacement of the Fortress Power Product, at Fortress Power's sole discretion. Fortress Power will not be responsible for any other types of losses or costs of any type pertaining to the use of its products. If the Fortress Power Product is found to be defective as a result of any manufacturing defect in materials and workmanship during the Limited Warranty Period, Fortress Power will, at its sole discretion either (i) repair the Fortress Power Product or (ii) replace the Fortress Power Product. If a Fortress Power Product is replaced, that Fortress Power Product will become the property of Fortress Power and must be returned to Fortress Power free of any third-party ownership claims. The Warranty period of any repaired Fortress Power Product or its replacement is twelve (12) months from the date of shipment from Fortress Power, or the remaining term of the Limited Warranty Period, whichever is greater.

# **IMPORTANT NOTE:** PLEASE SEE THE IMPORTANT NOTICES (REFERENCE EXHIBIT A)

10- year standard warranty applies install in US and Canada.

#### EXHIBIT A

Important notices: Circuit Breakers, Disconnects and Fuses should be employed throughout several points of a Power storage and generation installation to effectively isolate and protect all components of the system to safeguard against faults, short circuits, polarity reversals or a failure of any component in the overall system. Fuses, breakers, wire ratings and values should be determined by established standards and evaluated by certified electricians, licensed installers, and regional code authorities. Although each Fortress Power Lithium Battery contains an internal BMS with circuitry that protects the Lithium Ferrite Phosphate cells from overcharge, overdischarge and excessive load amperage, the Fortress Power Lithium Batteries must always be installed with a charge controller and the appropriate settings to protect the Fortress Power from open PV voltage and other high voltage charging sources. The Fortress Power Lithium Battery Management System (BMS) alone will not protect the Fortress Power Lithium batteries from these extreme electrical phenomena. Failure to adhere to installation protocol will void the Warranty.

Only use a Fortress Power approved LFP charger if ancillary charging is required before installation, testing or troubleshooting. Failure to use a Fortress Power approved LFP charger will damage the battery and void the warranty.

**CAUTION: Charging LFP batteries at temperatures below freezing.** Do not attempt to charge the battery below 32 F (0 degrees C). Attempts to charge at subfreezing temperatures can adversely affect SOH and cycle life, and will void the Warranty.

If the battery must be charged below 32 F (0 degrees C), the rate of charge must be at no more than 5% of the battery's rated capacity (C/20).

## GUIDE FOR OPERATING PARAMETERS

Although Fortress Power Lithium batteries are capable of performing at very high rates and depths of discharge within a very wide temperature range, in order to achieve extended life cycles and to comply with the Warranty, the following guidelines should be followed:

Schneider/outback/ SMA/Sol-Ark	6000 Cycles	3000 Cycles	2000 Cycles			
Equalized Support	Off	Off	Off			
Capacity Limit	Please refer to the product datasheet					
Equalized Voltage	Every 30 days					
Recharge Voltage	52V	51V	47			
Bulk Voltage	54.4V	54.6V	55.5V			
Absorb Voltage	54.4V	54.6V	55.5V			
Low Battery Cut Out Voltage	50.7V	48.4V	44			
High Battery Cut Out Voltage	61V	61V	61V			
Float Voltage	Turn off, if possible 54.4V					
Max Charge Current	eVault: 100A per battery eFlex: 70A per battery LFP-5: 50A per battery LFP-10: 70A per battery	eVault: 170A per battery eFlex: 70A per battery LFP-5: 50A per battery LFP-10: 80A per battery	eVault: 170A per battery eFlex: 100A per battery LFP-5: 80A per battery LFP-10: 80A per battery			
Max Discharge Current	eVault: 180A per battery eFlex: 70A per battery LFP-5: 50A per battery LFP-10: 100A per battery	eVault: 180A per battery eFlex: 70A per battery LFP-5: 50A per battery LFP-10: 100A per battery	eVault: 180A per battery eFlex: 100A per battery LFP-5: 80A per battery LFP-10: 100A per battery			

#### Charger/Inverter configuration recommendation for best Performance:

The Battery Parameter Setting Guides with various Inverters/Chargers are available to download on www.fortresspower.com/Resource

Recommended operating parameters of charger/Inverters For 2,000 & 3,000 Cycles: • Operating temperature range: 32 F to 120 F (0 °C to 49°C)

Recommended operating parameters of charger/Inverters For 6,000 Cycles:

• Operating temperature range: 50 F to 110 F (10°C to 43°C)

• Storage must be equal to or more than twice the rated output of the Inverter

At the End of Cycle Life capacity is Equivalent to 70% Retained Capacity

Do not expose battery to high temperatures. Fortress Power Lithium Batteries should be stored out of direct sunlight under the following temperature conditions.

Storage Temperature (Min./Max.): 41°F/5°C – 95°F/35°C

Relative Humidity (Min./Max.): 5%~75% RH

#### **OBTAINING WARRANTY SERVICE**

In order to activate this Limited Warranty, the attached Limited Warranty Registration Form must be completed and forwarded to Fortress Power pursuant to the instructions set forth in the Limited Warranty Registration Form. The limited warranty registration form must be authorized and affirmed by Fortress to be effective. Fortress will send confirmation of affirmation within 5 days of receipt of Limited Warranty Registration form. This Limited Warranty applies only to the Fortress Power Product that is (i) registered on the Limited Warranty Registration Form attached to this Limited Warranty and (ii) installed in the Original Use location which shall be described by inserting the address of the Original Use Location in the

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space "Address of Installation" provided in the Limited Warranty Registration Form and name of installer/ distributor or supplier.

To request warranty service, your installer/distributor/supplier must contact Fortress Power in writing within the Limited Warranty Period. Either Fortress Power or its authorized representative will attempt to troubleshoot the Fortress Power Product at the Original Use Location in order to determine whether the Fortress Power Product is

defective. If Fortress Power determines that warranty service is required, Fortress Power will issue a Return Material Authorization ("RMA") number. A request by you for an RMA number requires that you provide in writing to Fortress Power all the following information:

- Proof of date and place of purchase in the form of a copy of the purchase invoice for the original Fortress Power Product.
- The Fortress Power Product model number;
- Description of the problem; and
- Shipping address for the repaired or replaced equipment.

After receiving the RMA number, you must pack the Fortress Power Product authorized for return, along with the information described above, in the original Fortress Power Product shipping container or packaging providing equivalent protection with the RMA number marked clearly on the shipping container(s). You must prepay all shipping charges covering shipment to the location designated by Fortress Power, and you must insure the shipment, or accept the risk of loss or damage during shipment. Fortress Power is not responsible for shipping damage caused by an improperly packaged Fortress Power Product, the repairs this damage might require, or the cost of these repairs.

If, upon receipt of the Fortress Power Product, Fortress Power determines the Fortress Power Product is defective and that the defect is covered under the terms of this Limited Warranty, Fortress Power will then and only then ship a replacement Fortress Power Product to you (subject to receipt of pro-rated payment, where applicable), freight prepaid, non-expedited, using a carrier of Fortress Power's choice for shipment.

### **EXCLUSIONS AND LIMITATIONS**

This Limited Warranty does not apply to the Fortress Power LFP-5/10, eVault, eFlex batteries or any Fortress Power Products part (i) if the Fortress Power Product has logged in excess of 6,000 cycles, 80% DOD; or 2,000 cycles, 100% DOD; or a period of 10 years or (ii) if the Fortress Power Product or any Fortress Power Product part has been modified or damaged by the following:

- Installation or Removal
- Alteration or Disassembly
- Normal Wear and Tear
- Accident or Abuse (Being Dropped, etc.)
- Corrosion Inappropriate Environmental Exposure
- Repair or Service Provided by an Unauthorized Repair Facility
- Lightning
- Operation Contrary to Manufacturer Product Instructions
- Fire, Flood, or Acts of God
- Excessive Heat or Cold Conditions
- Water Damage
- Shipping or Transportation

- Incidental or Consequential Damage Caused by Other Components of the Power System Including but not Limited to Inverters, Charge Controllers, Breakers, Bypass Switches, Fuses, etc.
- Any Product Whose Serial Number has been Altered, Defaced, or Removed
- continually used and maintained in temperatures below 32°F (0°C) or above 90°F (32°C).
- Operation in a Non-Intended Use, or a Use Which Exceeds the Recommended or Permitted Limits or Loads of the Fortress Power Product.

THIS LIMITED WARRANTY IS THE EXCLUSIVE WARRANTY APPLICABLE TO THE FORTRESS POWER PRODUCT. FORTRESS POWER EXPRESSLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTIES OF THE FORTRESS POWER PRODUCT, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NO WARRANTIES WHETHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE SHALL APPLY AFTER THE LIMITED WARRANTY PERIOD.

FORTRESS POWER ALSO EXPRESSLY LIMITS ITS LIABILITY IN THE EVENT OF A PRODUCT DEFECT TO REPAIR OR REPLACEMENT IN ACCORDANCE WITH THE TERMS OF THIS LIMITED WARRANTY, AND EXCLUDE ALL LIABILITY FOR INCIDENTIAL OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION ANY LIABILITY FOR THE FORTRESS POWER PRODUCT NOT BEING AVAILABLE FOR USE OR LOST REVENUES OR PROFITS, EVEN IF FORTRESS POWER HAS BEEN ADVISED OF THE POTENTIAL FOR SUCH DAMAGES. SOME STATES (OR JURISDICTIONS) MAY NOT ALLOW THE EXCLUSION OR LIMITATION OF CERTAIN WARRANTIES OR DAMAGES, SO SOME OF THE ABOVE EXCLUSIONS MAY NOT APPLY TO YOU.

If there is any inconsistency between this Limited Warranty and any other agreement or statement included with or relating to the Fortress Power Product or services, this Limited Warranty shall govern. If any provision of this Limited Warranty is found invalid or unenforceable, it shall be deemed modified to the minimum extent necessary to make it enforceable and the remainder of this Limited Warranty shall remain valid and enforceable according with its terms.

#### CONSUMER PROTECTION AND OTHER LAWS MAY APPLY

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. Some states may provide for additional warranty rights and remedies, and the provisions contained in this Limited Warranty are not intended to limit, modify, take away from, disclaim or exclude any mandatory Warranty requirements provided by states, including certain implied Warranties. This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Your acceptance and use of the Fortress Power Product constitutes acceptance of the terms, conditions, and limitations of this Limited Warranty. The terms, conditions and limitations of this Limited Warranty will supersede any other agreement or document relating to the subject matter hereof, including, but not limited to, the terms and conditions that are part of a purchase order covering the Fortress Power Product or other document sent to Fortress Power by you relating to the Fortress Power Product.

#### **CONTACTING Fortress Power**

To obtain Warranty service, please contact us: Fortress Power, LLC 505 Keystone Road, Southampton, Pennsylvania, 18966 877.497.6937 sales@fortresspower.com www.FortressPower.com

**Instructions for Warranty registration:** 

You must register your product to validate your 5 Year Limited Warranty. Please fill out the attached form and send to our warranty service manager within 30days of your purchase. Please include a copy of your purchase invoice with registration form.

## **Fortress Power Warranty Registration**

**Customer Information** 

Name:					
Email:					
Phone:					
Address of Installatio	on:				
Product Model					
Serial No.:					
Date of Installation:	Qı	uantity:	Date of Co	ommissioning:	
First time Purchase, H	Replacement or A	Additional?			
Date of Purchase:					
Where did you purch	ase this product?				
Licensed Installe	er Contact Inf	formation:			
Company Name:				-	
Contact:				_	
Phone:				_	
Address:				_	
Email:				_	
Your energy stor	rage system co	onfiguration:			
Your PV array size, i		0	stem operating te	emperature range	:
Charge Controller: Type	Quantity	Max. Charging	Absorb	Float Voltage	Re-charge
		Current	Voltage	1 Iour + olluge	Voltage
		1		1	1

#### **Inverter:**

Туре	Quantity	Max. Charging Current	Max. Discharging Current	High Cut-off Voltage	Low Cut-off Voltage