

# EQUALINK EXTENDED BATTERY WARRANTY Valve-Regulated Lead Acid (VRLA) Batteries used in Float Service

Storage Battery Systems, LLC ("SBS") warrants that every SBS Valve-Regulated Lead-Acid (VRLA) battery, sold as a new battery to an original user, will be free from defects in material and workmanship under normal and proper use, for the full period as defined in Table A or Table B. If operation of the battery is not within these parameters, the battery warranty shall be null and void.

The warranty period begins on the date of shipment. This extended warranty is valid only if the battery is maintained in accordance with SBS published and supplemental maintenance instructions and managed with an active EquaLink Battery Management System.

#### Extended Warranty Period

S/G-Series = 3 yearsS/G-Series =AFT/GFT-Series = 3 yearsAFT/GFT-Series =UPS-Series = 4 yearsUPS-SeriesAGM/E-AGM-Series = 5 yearsAGM/E-AGMGGM/GEL-Series = 5 yearsGGM/GEL-SeriesVRZ-Series = 5 yearsVRZ-Series

#### Standard Pro Rata Period S/G-Series = 2 years AFT/GFT-Series = 2 years UPS-Series = 2 years AGM/E-AGM-Series = 5 years GGM/GEL-Series = 5 years VRZ-Series = 10 years

TABLE B – Warranted Cycle Life (discharged to 1.75vpc)

Discharge Rate/Duration	Avg. # of Discharges/Year
8 hr.	8
4 hr.	12
1 hr.	16

### **Full Warranty**

In the event of either A or B (below), SBS warrants that it will repair, F.O.B. its factory, or replace without charge F.O.B. its factory, any part of a new battery assembly which is proven to the satisfaction of SBS to be defective so long as the defect is found within **the time period specified in TABLE A above** from the date of shipment to the original Purchaser and SBS is notified within 15 days of the said determination of the defect. SBS will not be responsible for any labor costs associated with these repairs or replacements and all freights costs will be the responsibility of the Purchaser.

A. If initial physical inspection identifies flaws in material or workmanship that would impair life of the battery, as defined by this warranty, or product performance, as defined by SBS' electrical and physical specifications as published at the time of shipment and these flaws are not due to transportation damage or installation abuse;

OR

B. If an initial "Acceptance Test," or "Capacity Test" as defined in IEEE Std. 1188, "IEEE Recommended Practice for Maintenance, Testing, and Replacement of Valve-Regulated Lead Acid (VRLA) Batteries for Stationary Applications," of a properly installed and charged battery string fails to meet the published performance ratings\* per SBS' published catalog data at the time of shipment;

If SBS determines the battery is physically or electrically unsound due to defective materials or workmanship, the defective cell(s) will be repaired or replaced at the option of SBS without charge to the purchaser (user). The costs associated with the replacement installation, including but not limited to: labor, equipment rental, travel expenses, costs of material transportation, temporary battery system, retesting costs, etc. shall be borne by the purchaser (user). The replacement battery shall only complete the remaining unused portion of the original warranty of the replaced battery.

Contact SBS to file a warranty claim. Documented evidence (i.e. pictures and/or test data) clearly showing why the battery in question should be replaced under warranty will be required. The battery may also have to be sent back to SBS (FOB Destination-Freight Collect) for inspection. If the claim is accepted, you will be instructed to either return the battery to SBS (FOB Destination-Freight Collect) or dispose of the battery.

\*Published performance ratings. Initial capacity shall be a minimum of 90 percent of the rated string capacity upon shipment per IEEE-1188.1-800-554-2243N56W1665 Ridgewood Rd. | Menomonee Falls, WI 53051

#### **Pro-Rated Warranty**

After the full warranty period SBS agrees that if the battery is tested in accordance to the guidelines of IEEE Std. 1188 and fails to deliver 80% of its published rated capacity, SBS may, at its sole discretion, either repair the battery at its expense (excluding freight), or credit to the Purchaser (against the purchase of another SBS battery of equal or greater AH capacity) an amount equal in dollars to the list price of the battery, multiplied by the months of undelivered life, divided by the total number of months of expected life (expected life adjusted per operating temperature as defined below).

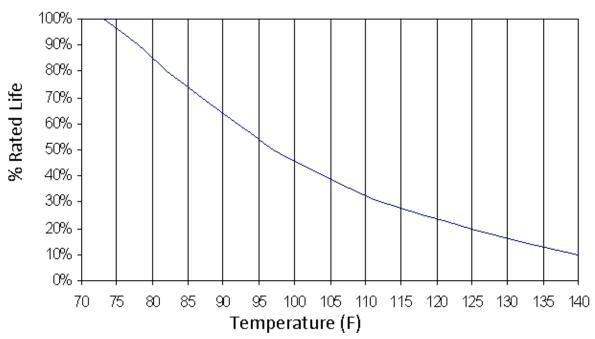
To file a warranty claim user must supply SBS with quarterly maintenance records showing that the system was properly maintained while in operation. The maintenance records must include all of the required testing information as defined in the VRLA operating manual and as recommended by IEEE Std. 1188. This information must include system float voltage, individual cell float voltages and battery room/ambient temperature.

In addition to maintenance records the user must provide documentation showing the float voltage of the system prior to the capacity test starting, an equalize charge must have been applied to the batteries within 30 days prior to the test starting, the ambient temperature must be recorded prior to the test starting and individual cell voltages must be recorded at the start of, and during, the capacity test. The information SBS requires is listed in IEEE Std. 1188, in the SBS VRLA manual and on SBS's website: <a href="https://www.sbsbattery.com">www.sbsbattery.com</a>. The determination of actual capacity shall be made in accordance with the "performance test" guidelines of IEEE Std. 1188.

If the battery is properly maintained and tested and fails to deliver 80% of its rated string capacity, the pro-rated warranty will be validated.

#### Adjusted Warranty Length Based on Average Operating/Ambient Temperature

The 20-year warranty is based on a battery operating at an average temperature of  $77^{\circ}F$  (25°C) or below. If the battery system routinely operates at temperatures of  $77^{\circ}F$  or above, the warranty length is adjusted (decreased) based on the temperature vs. design life chart below.



## Derating Factor (DF)

The derating factor (DF) is based on the lead-acid design life vs. temperature chart above.

Adjusted Warranty Length/Expected Life = DF x 180 months (180 months = 15 years which is the example expected life) Example: At 85 % the DF is 75% = .75 x 180 months (normal life) = 135 months is the Adjusted Warranty Length/Expected Life No warranty expressed or implied applies to a battery which, after shipment from SBS has been altered, changed, repaired, treated in any manner by anyone other than SBS, or service personal authorized by SBS or which has performed a duty cycle at

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any time improper for its size, design or capacity or in excess of the duty cycle agreed upon by SBS and the Purchaser, or which has been subjected to misuse, extreme heat or cold, abuse or physical damage other than ordinary wear and tear. The warranty only applies to batteries with regard to which a SBS representative has had right-of access for purposes of inspection, at reasonable hours and intervals.

The Purchaser shall indemnify and save harmless SBS from any claims and liabilities arising out of the use, maintenance, transportation or installation of any equipment warranted hereunder.

This warranty is the only warranty either express, implied or statutory, under which the said battery is sold, the Company's liability in connection with this transaction is expressly limited to the repair, replacement, or credit of equivalent value expressed herein, and all other guarantees and warranties, statutory, legal or otherwise, except as may be compulsory applicable, and any claim for damages, are hereby expressly waived by the Purchaser.

This warranty applies only to the original user of the battery. No warranty of any nature whatsoever applies to any other user or purchaser of the battery.

#### -----EXCLUSIONS AND LIMITATIONS------EXCLUSIONS AND LIMITATIONS------

- 1. The purchaser (user) shall give freshening charges to the battery a minimum of every three (3) months after shipment from the factory and until final installation. Refer to the installation and maintenance instructions for maximum storage intervals.
- 2. Purchaser (user) must take readings and record information per SBS' 'Required Periodic Inspection and Maintenance Activities' as noted in the Valve-Regulated Lead-Acid 'Installation, Operating & Maintenance Instructions' which are sent with the batteries and also available at www.sbsbattery.com. These records must be maintained for warranty claim purposes. If warranty records are not kept, the warranty shall be null and void.
- 3. This warranty applies only to the original United States and Canada domestic purchaser (user) and is non-transferable internationally, except with the expressed written consent from SBS headquarters in Menomonee Falls, WI.
- 4. This warranty does not cover physical damage due to the acts of nature or man which stress the battery beyond design limits and exert undesirable influence aside from normal wear and tear.
- 5. SBS assumes no responsibility for any work accomplished or expenses incurred except with the expressed written consent from SBS headquarters in Menomonee Falls, WI.
- 6. Movement of batteries from original point of installation shall immediately void this product warranty, except with the expressed written consent from SBS headquarters in Menomonee Falls, WI.
- 7. Any storage shall be in a dry area having an average ambient temperature of 77°F (25°C), or less, and in accordance with SBS published installation/maintenance instructions.
- 8. SBS shall not be liable for indirect, incidental or consequential damages arising out of the sale or relating to the use of this product, and the purchaser assumes responsibility for all personal injury and property damage resulting from the handling, possession or use of the product. In no event shall the liability of SBS for any and all claims, including claims of breach of warranty or negligence, exceed the purchase price of the product.
- 9. THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER REMEDIES, INCLUDING BUT NOT LIMITED TO ACTIONS FOR BREACH OF CONTRACT OR NEGLIGENCE. ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXCLUDED.