simpliphi POWER

10 Year Limited Warranty

PHI 3.8™, PHI 2.9™, PHI 1.4™ & PHI 730™ Battery Models

© SIMPLIPHI POWER, INC. REV020620

CAUTION: FOR THIS WARRANTY TO BE VALID, THE PHI BATTERY MUST BE INSTALLED ACCORDING TO THE PROCEDURES OUTLINED IN THE INSTALLATION MANUAL AND THE PHI BATTERY MUST OPERATE ACCORDING TO THE SIZING AND SETTINGS OUTLINED IN THE RELEVANT INTEGRATION GUIDE. FAILURE TO ADHERE TO EITHER THE BATTERY INSTALLATION MANUAL OR INTEGRATION GUIDE WILL VOID YOUR WARRANTY.

Refer to SimpliPhi's Product Documentation web page https:/simpliphipower.com/product-documentation/ or contact SimpliPhi Technical Support (TechSupport@SimpliPhiPower.com) for the SimpliPhi Battery Manual or the relevant Integration Guide.

THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE FURTHER LEGAL RIGHTS AND REMEDIES UNDER LOCAL LAWS IN YOUR COUNTRY. THE TERMS OF THIS LIMITED WARRANTY WILL APPLY TO THE EXTENT PERMITTED BY APPLICABE LAW. SOME COUNTRIES DO NOT ALLOW DISCLAIMERS OF IMPLIED WARRANTIES OR LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, MEANING THE DISCLAIMERS AND LIMITATIONS SET FORTH IN THIS LIMITED WARRANTY MAY NOT APPLY TO YOU. SOME COUNTRIES REQUIRE SPECIFIC DISCLOSURES TO BE INSERTED IN AN IMPLIED WARRANTY. PLEASE SEE THE SPECIFIC DISCLOSURES SET FORTH IN THE APPENDIX TO THIS WARRANTY; SPECIFIC DISCLOSURES MAY RELATE TO YOUR COUNTRY. FOR A FULL DESCRIPTION OF YOUR LEGAL RIGHTS YOU SHOULD REFER TO THE LAWS APPLICABLE IN YOUR COUNTRY.

THIS LIMITED WARRANTY AND ANY DISPUTE OR CLAIM ARISING OUT OF OR IN CONNECTION WITH IT (INCLUDING NON-CONTRACTUAL DISPUTES OR CLAIMS) IS GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE COUNTRY OR (IF APPLICABLE) STATE OR PROVINCE WHERE THE WARRANTED PRODUCT IS FIRST INSTALLED. IF ANY PROVISION OF THIS LIMITED WARRANTY IS HELD BY A COURT OF COMPETENT JURISDICTION TO BE UNENFORCEABLE BECAUSE IT IS INVALID OR IN CONFLICT WITH ANY LAW OF ANY RELEVANT JURISDICTION, THE VALIDITY OF THE REMAINING PROVISIONS SHALL NOT BE AFFECTED, AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES SHALL BE CONSTRUED AND ENFORCED AS IF THE UNENFORCEABLE PROVISIONS WERE REPLACED BY VALID, LEGAL AND ENFORCEABLE PROVISIONS THAT COME CLOSEST TO THE INTENT UNDERLYING THE INVALID OR UNENFORCEABLE PROVISION. THE UNITED NATIONS CONVENTIONS ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS (1980) SHALL NOT APPLY TO THIS LIMITED WARRANTY OR ANY ASPECT OF ANY DISPUTE RELATING TO THIS LIMITED WARRANTY.

10 Year Limited Warranty:
PHI 3.8™ | PHI 2.9™ | PHI 1.4™ | PHI 730™

Section 1.0 – Limited Pro-Rated Warranty Coverage

The SimpliPhi Power PHI 3.8™, PHI 2.9™, PHI 1.4™ and PHI 730™ Batteries (the "SimpliPhi Power Product") as manufactured and sold by SimpliPhi Power, Inc., a Delaware corporation, are warranted (the "Limited Warranty") by SimpliPhi Power, Inc. against manufacturing defects in materials and workmanship for a period of ten (10) years (the "Limited Warranty Period") for cycles at the recommended Depth of Discharge listed below on a prorated basis, when installed and operated within the specifications provided in the SimpliPhi Installation Manual and relevant Integration Guide (refer to SimpliPhi's Product Documentation web page for relevant documentation: https://simpliphipower.com/product-documentation/).

Table 1.0 –Cycle Life According to Maximum Depth of Discharge (DOD)

Cycles (by DOD)	10,000 Cycles	5,000 Cycles	3,500 Cycles
PHI Battery Model (by Voltage rating)	80% DOD - Recommended	90% DOD	100% DOD
51.2V_{nom}	50.2V	49.5V	48.0V
25.6V_{nom}	25.1V	24.8V	24.0V
12.8V_{nom}	12.55V	12.38V	12.0V

SimpliPhi's batteries are expected to achieve the above cycle life according to their maximum Depth of Discharge (DOD) outlined in the table above and are warrantied for a period of ten years. Discharging PHI batteries to a voltage level below the 100% DOD level Voids the batteries' Warranty.

Over the ten-year Limited Warranty Period, SimpliPhi warrants the SimpliPhi Power Product at 80% or greater of its original-rated capacity. This translates to the following total energy throughput:

Table 2.0 –Total Energy Throughput According to Maximum Depth of Discharge (DOD)

PHI Battery Model	80% DOD	90% DOD	100% DOD
PHI 3.8	26.8 MWH	15 MWH	11.7 MWH
PHI 2.9	20.4 MWH	11.5 MWH	8.9 MWH
PHI 1.4	9.8 MWH	5.5 MWH	4.3 MWH
PHI 730	5.1 MWH	2.8 MWH	2.2 MWH

The term of this Limited Warranty (i) begins on the original date of purchase of the SimpliPhi Power Product(s) as indicated on the Limited Warranty Registration Card submitted to SimpliPhi Power and (ii)

continues through the Limited Warranty Period. This Limited Warranty applies only to the original end-use purchaser of the SimpliPhi Power Product(s) and is transferable only if the SimpliPhi Power Product(s) remain installed in the Original Use Location. SimpliPhi Power does not warrant or guarantee workmanship performed by any person or firm installing the SimpliPhi Power Product(s). 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. Failure to comply with the installation and operating parameters in the Installation Manual will Void the Warranty.

This Limited Warranty applies only to SimpliPhi Power Product(s):

a) purchased from SimpliPhi Power, Inc. or an authorized SimpliPhi Power distributor, dealer or reseller and;

b) installed by a licensed professional. In the event you rent or lease the SimpliPhi Power Product(s), 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.

SimpliPhi Power Products used in the expansion of existing PHI battery banks are subject to the Warranty terms as outlined in Section 4.8 – Battery Bank Expansion of the PHI Battery Installation Manual: The Warranty for the new, additional PHI battery adopts the Warranty and Warranty period for the original PHI batteries.

The liability of SimpliPhi Power under this Limited Warranty shall be limited to the repair or replacement of the SimpliPhi Power Product(s), at SimpliPhi Power's sole discretion. If the SimpliPhi Power Product(s) are found to be defective as a result of any manufacturing defect in materials and workmanship during the Limited Warranty Period, SimpliPhi Power will, at its sole discretion either (i) repair the SimpliPhi Power Product(s) or (ii) replace the SimpliPhi Power Product(s). If a SimpliPhi Power Product(s) is replaced, the returned SimpliPhi Power Product(s) will become the property of SimpliPhi Power and must be sent to SimpliPhi Power free of any third-party ownership claims. The Warranty period of any repaired SimpliPhi Power Product(s) or its replacement is twelve (12) months from the date of shipment from SimpliPhi Power, or the remaining term of the Limited Warranty Period, whichever is greater.

In the event that a replacement Product is no longer available in the market, SimpliPhi Power may offer, at its option, to replace the Product with a new Product of similar function and performance or to credit the remaining depreciated value of the Product to be applied to purchase of new Product. The remaining depreciated value of the Product is determined by the schedule below and the MSRP of the Product at the time that the Product was purchased. For example, if the MSRP of the Product was $2,975 and it had been 61 months since purchase, the remaining depreciated value would be calculated as: $2,975 x 50% = $1,487.50.

Table 3.0 – Pro-Rated Warranty Compensation Schedule

Months Since Purchase	MSRP to Depreciated Value
0-12	100%
13-24	90%
35-36	80%
37-48	70%
49-60	60%
61-72	50%
73-84	40%
85-96	30%
97-108	20%
109-120	10%
120 and on	0%

CAUTION: 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 PHI Battery contains both an 80 Amp circuit breaker and an internal BMS with circuitry that protects the Lithium Ferrous Phosphate cells from overcharge, over-discharge and excessive load amperage, the PHI Batteries must always be installed with a charge controller (refer to Tables B or C in the Warranty Appendix) and the appropriate voltage settings to protect the PHI from open PV voltage and other high voltage charging sources. The PHI Battery Management System (BMS) and internal circuit breaker alone will not protect the PHI batteries from these extreme electrical phenomena. Failure to adhere to installation protocol will Void the Warranty. A properly sized PHI battery bank will also be paired with loads that do not exceed the battery bank's maximum continuous power output rating. Refer to Table A in the Warranty Appendix for guidance on the minimum battery bank size to be paired with various inverters. Failure to meet this minimum sizing requirement will Void the PHI battery warranty.

CAUTION: All PHI batteries must be fully charged before commissioning the system (i.e. before connecting loads). Failure to do so will Void the Warranty.

CAUTION: Verify polarity at all connections with a standard voltmeter before:

1) Energizing the system and;

2) in the case of PHI 3.8 and PHI 2.9 models, before switching the breaker to the "ON" position. Reverse polarity at the battery terminals will Void the Warranty and destroy the batteries.

CAUTION: Only use a SimpliPhi approved LFP charger if ancillary charging is required before installation, testing or troubleshooting. Failure to use a SimpliPhi approved LFP charger will damage the battery and Void the Warranty.

CAUTION: Do not attempt to charge the battery below 32° F (0° 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° C), the rate of charge must be at no more than 5% of the battery's rated capacity (C/20).

Section 2.0 – SimpliPhi Power Guide for Operating Parameters

Although SimpliPhi 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, follow all inverter and charge controller sizing (see tables in the Appendix below) and programming guidelines outlined in the relevant SimpliPhi Installation Manual and Integration Guide(s). These documents can be found on SimpliPhi's Product Documentation web page: https://simpliphipower.com/product-documentation/.

Section 3.0 – Obtaining Warranty Service

To activate this Limited Warranty, the attached Limited Warranty Registration Form must be completed and forwarded to SimpliPhi Power pursuant to the instructions set forth in the Limited Warranty Registration Form in order for SimpliPhi Power to know the Original Use Location and the SimpliPhi Power Product(s) involved. It is important that you complete the Limited Warranty Registration Form since that is the only way SimpliPhi Power knows the Original Use Location and the SimpliPhi Power Product(s) involved. This Limited Warranty applies only to the SimpliPhi Power Product(s) that are (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 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 SimpliPhi Power Technical Support in writing at TechSupport@SimpliPhiPower.com within the Limited Warranty Period. Either SimpliPhi Power or its authorized representative will attempt to troubleshoot the SimpliPhi Power Product(s) at the Original Use Location to determine whether the SimpliPhi Power Product(s) are defective. If SimpliPhi Power determines that Warranty service is required, Technical Support will assist in getting

authorization for a Return Material Authorization ("RMA") number and instruct you how to submit the RMA through TechSupport@SimpliPhiPower.com. To be prepared for Technical Support assistance, you need to provide in writing to your Installer/Distributor/Supplier all the following information (at a minimum):

- Proof of date and place of purchase in the form of a copy of the purchase invoice for the original SimpliPhi Power Product(s)
- The SimpliPhi Power Product model number and serial number
- Date of Power Product commissioning
- An electrical single line drawing or Balance of System (BoS) equipment details, including:
    - Solar panel quantity/make/model and wiring configuration (if applicable)
    - Battery-based inverter quantity/make/model
    - Charge controller quantity/make/model (if applicable)
    - Grid-tie inverter quantity/make/model (if applicable)
    - Non-solar charging sources (generator, grid, wind, micro-hydro, etc.)
- Inverter and/or charge controller equipment settings
- Photos of the SimpliPhi Power Product(s) and the overall system installation
- Battery wiring details, including:
    - Battery cables' gauge
    - Battery cables' length
    - DC busbars' make/model/rating
    - DC terminals' torque specifications
- A copy of the installation protocol
- Address where the SimpliPhi Power Product(s) are located
- Description of the problem
    - Events / symptoms leading up to the problem with the SimpliPhi Power Product(s)
    - Resolutions attempted
- System-level monitoring data (to address any battery capacity-related claims)

System monitoring login and password for access to complete system-level monitoring data of all included system components must be provided to SimpliPhi in order to submit any battery capacity related Warranty claim.

At any point in the RMA process, SimpliPhi may determine that the SimpliPhi Power Product(s') Warranty is Void due to:

- Improper battery bank sizing
- Improper battery wiring and/or installation
- Incorrect inverter and/or charge controller settings
- SimpliPhi Power Products paired with incompatible equipment
- Other indications of damage due to improper system operation and/or installation

Once all required RMA Request information is gathered, SimpliPhi issues an RMA number and the RMA Request is determined to be either "In Warranty" or "Out of Warranty":

- "In Warranty" – the SimpliPhi Power Product has a manufacturing defect
- "Out of Warranty" – the SimpliPhi Power Product was damaged on site due to improper installation and/or operation

In Warranty RMA

If SimpliPhi determines the RMA Request to be In Warranty, the SimpliPhi Power Product will be replaced at no cost to the customer, either with a refurbished product or a new replacement product. The replacement product may be sized based on a prorated basis outlined in Table 3.0 of this document. In this case, SimpliPhi will pay for the product shipment, but the customer will be required to pack the authorized SimpliPhi Power Product(s) for return, along with the information described in the preceding page and any other information requested on the RMA, in the original SimpliPhi Power Product shipping container or packaging providing equivalent protection with the RMA number marked clearly on the shipping container(s).

If, upon receipt of the SimpliPhi Power Product(s), SimpliPhi Power determines the SimpliPhi Power Product(s) were damaged in conditions not covered under the terms of this Limited Warranty, SimpliPhi Power reserves the right to invoice for the replacement product.

Out of Warranty RMA

After receiving the RMA number, a replacement SimpliPhi Power Product may be purchased at a replacement-level cost. In addition, the Out of Warranty SimpliPhi Power Product may be shipped to SimpliPhi for further evaluation at the customer's discretion and expense as part of a Root Cause Analysis (RCA). The upfront RCA fee is $250. The customer will be required to pack the authorized SimpliPhi Power Product(s) for return, along with the information described above and any other information requested on the RMA, in the original SimpliPhi 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 SimpliPhi Power, and you must insure the shipment and accept the risk of loss or damage during shipment. SimpliPhi Power is not responsible for shipping damage caused by an improperly packaged SimpliPhi Power Product, the repairs this damage might require, or the cost of these repairs.

Section 4.0 – Exclusions and Limitations

This Limited Warranty does not apply to the SimpliPhi Power Product(s) or any SimpliPhi Power Product part (i) if the SimpliPhi Power Product(s) have been in use for a period of 10 years or longer or (ii) if the SimpliPhi Power Product(s) or any SimpliPhi 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
- Operation in a Non-Intended Use, or a Use Which Exceeds the Recommended or Permitted Limits or Loads of the SimpliPhi Power Product outlined in the SimpliPhi Power Product Specification Sheets and Installation Manuals

THIS LIMITED WARRANTY IS THE EXCLUSIVE WARRANTY APPLICABLE TO THE SIMPLIPHI POWER PRODUCT(S). SIMPLIPHI POWER EXPRESSLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTIES OF THE SIMPLIPHI POWER PRODUCT(S), 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.

SIMPLIPHI POWER ALSO EXPRESSLY LIMITS ITS LIABILITY IN THE EVENT OF A PRODUCT DEFECT TO REPAIR OR REPLACE IN ACCORDANCE WITH THE TERMS OF THIS LIMITED WARRANTY. ANY AND ALL LIABILITY FOR INCIDENTIAL OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION ANY LIABILITY FOR SIMPLIPHI POWER PRODUCT(S) NOT BEING AVAILABLE FOR USE OR LOST REVENUES OR PROFITS, EVEN IF SIMPLIPHI POWER HAS BEEN ADVISED OF THE POTENTIAL FOR SUCH DAMAGES, ARE EXPRESSLY EXCLUDED FROM THIS LIMITED WARRANTY. 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.

OEM EXCLUSION: THIS LIMITED WARRANTY DOES NOT COVER PRODUCT SOLD BY SIMPLIPHI POWER OR ANY AUTHORIZED SIMPLIPHI POWER DISTRIBUTOR OR PURCHASED FROM THIRD-PARTY ORIGINAL EQUIPMENT MANUFACTURERS (“OEM”) AS PART OF AN OEM PRODUCT. PLEASE CONTACT THE OEM DIRECTLY FOR WARRANTY CLAIMS REGARDING SUCH OEM PRODUCT THAT FEATURES SIMPLIPHI.

If there is any inconsistency between this Limited Warranty and any other agreement or statement included with or relating to SimpliPhi Power Product(s) 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.

Section 5.0 – 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 SimpliPhi Power Product(s) constitute 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 SimpliPhi Power Product(s) or other document sent to SimpliPhi Power by you relating to the SimpliPhi Power Product(s).

Section 6.0 – Contacting SimpliPhi

To obtain technical support or Warranty service, please contact us as follows:

SimpliPhi Power, Inc.
3100 Camino Del Sol
Oxnard, California, 93030
805.640.6700 x 1

techsupport@simpliphipower.com

Section 7.0 – Warranty Registration

Instructions for Warranty registration:

Please fill out the attached form, detach, affix First Class postage, include your return address, fold and tape shut with clear tape on bottom and sides before mailing to 3100 Camino Del Sol, Oxnard, CA 93030. Alternatively, the form may be printed, filled out, scanned and emailed to info@simpliphipower.com. SimpliPhi recommends that you keep a copy of your completed Warranty Registration Form for your records. This form is for product registration. Failure to complete and return the form does not diminish the consumer's warranty rights.

It is important that you complete the Limited Warranty Registration Form since that is the only way SimpliPhi Power knows the Original Use Location and the SimpliPhi Power Product(s) involved.

Appendix A – Country Specific Disclosures

A.1 – Australia

THIS LIMITED WARRANTY IS PROVIDED IN ADDITION TO, AND DOES NOT EXCLUDE RESTRICT OR LIMIT, ANY RIGHTS A CUSTOMER HAS UNDER THE AUSTRALIAN CONSUMER LAW.

THE PRODUCT, THE SUBJECT OF THIS LIMITED WARRANTY, COMES WITH GUARANTEES THAT CANNOT BE EXCLUDED UNDER THE AUSTRALIAN CONSUMER LAW. YOU ARE ENTITLED TO A

REPLACEMENT OR REFUND FOR A MAJOR FAILURE AND FOR COMPENSATION FOR ANY OTHER REASONABLY FORESEEABLE LOSS OR DAMAGE. YOU ARE ALSO ENTITLED TO HAVE THE PRODUCT, THE SUBJECT OF THIS LIMITED WARRANTY, REPAIRED OR REPLACED IF IT FAILS TO BE OF ACCEPTABLE QUALITY AND THE FAILURE DOES NOT AMOUNT TO A MAJOR FAILURE. THESE CONSUMER GUARANTEE RIGHTS APPLY FOR A "REASONABLE PERIOD", WHICH DEPENDS UPON ALL THE RELEVANT CIRCUMSTANCES INCLUDING THE PRICE OF THE PRODUCT, THE USES TO WHICH IT HAS BEEN PUT AND THE NATURE OF THE PRODUCT.

A.2 – New Zealand

THIS LIMITED WARRANTY IS PROVIDED IN ADDITION TO, AND DOES NOT EXCLUDE, RESTRICT OR LIMIT ANY RIGHTS A CUSTOMER HAS UNDER THE CONSUMER GUARANTEES ACT 1993 AND THE FAIR-TRADING ACT 1986 (THE "NEW ZEALAND CONSUMER LAW").

IF THE PRODUCT IS ACQUIRED FOR THE PURPOSES OF A BUSINESS, THEN THE CONSUMER GUARANTEES ACT 1993 SHALL NOT APPLY.

YOUR RIGHTS UNDER NEW ZEALAND CONSUMER LAW MAY ALSO APPLY TO ANY REPARIED OR REPLACED PRODUCT.

Appendix B – Minimum Battery Bank Sizing

Check with SimpliPhi Technical Support (TechSupport@SimpliphiPower.com) regarding compatibility with any equipment not explicitly listed below.

Assuming the below listed inverter draws its full rated power from the battery bank to power the loads, the following are the minimum quantity of PHI batteries to be paired per listed inverter.

Table A – Minimum Battery Bank Size According to Load Rate

Inverter		Minimum Quantity of Paired PHI Batteries							
		PHI 3.8 - 51.2V_{nom}	PHI 2.9 - 51.2V_{nom}	PHI 3.8 - 25.6V_{nom}	PHI 2.9 - 25.6V_{nom}	PHI 1.4 - 25.6V_{nom}	PHI 730 - 25.6V_{nom}	PHI 1.4 - 12.8V_{nom}	PHI 730 - 12.8V_{nom}
Magnum / Sensata	MS 4448	3	4	–	–	–	–	–	–
	MS 4048	3	3	–	–	–	–	–	–
	MS 4024	–	–	4	4	6	13	–	–
	MS 2024	–	–	2	2	3	6	–	–
	MS 2812	–	–	–	–	–	–	6	9
	MS 2012	–	–	–	–	–	–	5	6
	MorningStar SureSine-300	–	–	–	–	–	–	1	1
OutBack Power	Radian 8048A	5	6	–	–	–	–	–	–
	Radian 4048A	3	3	–	–	–	–	–	–
	SkyBox SBX 5048	3	4	–	–	–	–	–	–
	VFXR 3648A	2	3	–	–	–	–	–	–
	VFXR 3524A	–	–	4	4	6	11	–	–
	VFXR 2812A	–	–	–	–	–	–	6	9
	FXR 3048A	2	3	–	–	–	–	–	–
	FXR 2524A	–	–	3	3	4	8	–	–
	FXR 2012A	–	–	–	–	–	–	5	6
Samlex	EVO-4024	–	–	4	4	6	13	–	–
	EVO-2224	–	–	2	2	4	7	–	–
	EVO-3012	–	–	–	–	–	–	7	9
	EVO-2212	–	–	–	–	–	–	5	7
SMA	Sunny Island 6048	4	5	–	–	–	–	–	–
	Sunny Island 4548	3	4	–	–	–	–	–	–
Schneider Electric	XW Pro 6848	4	5	–	–	–	–	–	–
	XW+ 6848	4	5	–	–	–	–	–	–
	XW+ 5548	4	5	–	–	–	–	–	–
	SW 4048	3	3	–	–	–	–	–	–
	SW 4024	–	–	4	4	6	13	–	–
	SW 2524	–	–	3	3	4	8	–	–

Assuming the listed charge controller is fully utilized, outputting its maximum Amp Output rating, the following are the minimum quantity of PHI batteries to be paired per listed charge controller

If the charge controller is *not* fully utilized, refer to Table C.

Table B – Minimum Battery Bank Size According to Charge Rate

	Inverter	PHI 3.8 – 51.2V_{nom}	PHI 2.9 - 51.2V_{nom}	PHI 3.8 - 25.6V_{nom}	PHI 2.9 - 25.6V_{nom}	PHI 1.4 - 25.6V_{nom}	PHI 730 - 25.6V_{nom}	PHI 1.4 - 12.8V_{nom}	PHI 730 - 12.8V_{nom}
Selectronic	SP PRO SPMC 481-AU	3	4	–	–	–	–	–	–
	SP PRO SPMC 482-AU	5	6	–	–	–	–	–	–
Sol-Ark	8K	5	6	–	–	–	–	–	–
	12K	6	8	–	–	–	–	–	–
Victron Energy	Quattro 48/3000/35	2	3	–	–	–	–	–	–
	Quattro 48/5000/70	3	4	–	–	–	–	–	–
	Quattro 48/10000/140	6	8	–	–	–	–	–	–
	Quattro 48/15000/200	9	12	–	–	–	–	–	–
	Quattro 24/5000/120	–	–	5	5	8	16	–	–
	MultiPlus 24/2000/50	–	–	2	2	3	6	–	–
	MultiPlus 24/3000/70	–	–	3	3	5	10	–	–
	Quattro 12/5000/220	–	–	–	–	–	–	11	15
	MultiPlus 12/3000/120	–	–	–	–	–	–	7	9
	MultiPlus 12/2000/80	–	–	–	–	–	–	5	6
	BlueSolar or SmartSolar MPPT 100/50	–	–	2	2	2	4	2	2
	BlueSolar or SmartSolar 75/10	–	–	1	1	1	1	1	1
	BlueSolar or SmartSolar 75/15	–	–	1	1	1	2	1	1

	Charge Controller	PHI 3.8 – 51.2V_{nom}	PHI 2.9 - 51.2V_{nom}	PHI 3.8 - 25.6V_{nom}	PHI 2.9 - 25.6V_{nom}	PHI 1.4 - 25.6V_{nom}	PHI 730 - 25.6V_{nom}	PHI 1.4 - 12.8V_{nom}	PHI 730 - 12.8V_{nom}
Victron Energy	BlueSolar or SmartSolar MPPT 150/60	2	3	2	2	3	5	2	3
	BlueSolar or SmartSolar MPPT 150/70	2	3	2	2	3	5	2	3
	BlueSolar or SmartSolar MPPT 150/85	3	3	2	2	3	7	3	3
	BlueSolar or SmartSolar MPPT 150/100	3	4	3	3	4	8	3	4
	BlueSolar or SmartSolar MPPT 100/15	—	—	1	1	1	2	1	1
	SmartSolar MPPT 100/20	1	1	1	1	1	2	1	1
	BlueSolar or SmartSolar MPPT 100/30	—	—	1	1	2	3	1	2
	BlueSolar or SmartSolar MPPT 100/50	—	—	2	2	2	4	2	2
	BlueSolar or SmartSolar 75/10	—	—	1	1	1	1	1	1
	BlueSolar or SmartSolar 75/15	—	—	1	1	1	2	1	1

PHI battery banks paired with charge controllers that are not fully utilized (i.e. the maximum potential connected solar PV array's output current is less than the charge controller's Amp Output rating) can be sized according to the maximum potential current output of the connected solar PV array. Refer to Table C for the maximum allowable paired PV Power rating per PHI battery.

Table C – Maximum Paired PV Power Per PHI Battery

	Minimum Quantity of Paired PHI Batteries							
MAX PV Power per Battery	PHI 3.8 - 51.2V_{nom}	PHI 2.9 - 51.2V_{nom}	PHI 3.8 - 25.6V_{nom}	PHI 2.9 - 25.6V_{nom}	PHI 1.4 - 25.6V_{nom}	PHI 730 - 25.6V_{nom}	PHI 1.4 - 12.8V_{nom}	PHI 730 - 12.8V_{nom}
Watts	1,920	1,459	1,152	1,152	729	358	512	364

SimpliPhi Power Warranty Registration

To be completed by end-customer:

Customer Information:

Name: _____

Address of Installation: _____

_____

Phone: _____

Email: _____

To be completed by certified installer or licensed electrician:

Certified Installer Contact Information:

Contact: _____

Company Name: _____

Address: _____

Phone: _____

Email: _____

SimpliPhi Product Installation Information:

Product Name / Model: _____

Product Quantity: ,

Serial Numbers:

1._____	8._____	15._____
2._____	9._____	16._____
3._____	10._____	17._____
4._____	11._____	18._____
5._____	12._____	19._____
6._____	13._____	20._____
7._____	14._____	21. _____

For orders that exceed (21) PHI batteries please provide Serial Numbers on a separate page.

Date of Product Purchase (from Distributor or SimpliPhi): _____

Product Purchase Source (check one): ☐ Distributor (specify): _____ ☐ SimpliPhi-direct

Date of Installation: _____

Date of Commissioning: _____

SimpliPhi Power Product Installation Location (i.e. garage, basement, etc.): _____

System Type: ☐ DC Coupled ☐ AC Coupled ☐ AC Charging (no solar PV)

Charging Sources (check all that apply and specify):

☐ Solar PV Array — Solar PV Array Size (Watts): _____

☐ Wind — Wind Turbine Size (Watts): _____

☐ Generator — Generator Size (Watts): _____

AGS Included (Y/N): _____

☐ Grid

Inverter Make & Model: _____ Inverter Quantity: _____

For DC Coupled systems:

Charge Controller Make & Model: _____ CC Quantity: _____

For AC Coupled systems:

Grid-Tie Inverter (GTI) Make & Model: _____ GTI Quantity: _____

System Monitoring Login and Password (if applicable): _____ _____

Installation Quality Control Checklist:

☐ PHI Battery bank sized in accordance with Appendix B of this document or Section 3.2 of the Manual

☐ PHI Battery bank is wired in parallel, using appropriate gauge cables or bussing

☐ PHI Battery terminal connections are tightened to 160 in-lbs

☐ Accompanying equipment (inverter and/or charge controller) is programmed to SimpliPhi's settings

☐ When commissioning, PHI Battery bank is fully charged before connecting loads

Print the SimpliPhi Power Warranty Registration, fill out the form, scan and email to info@simpliphipower.com.

Including a complete single line electrical drawing of the system and/or installation photos as email attachments is appreciated.