

Radian Series

A-SERIES 60HZ, 120/240V INVERTER/CHARGERS

Three Reasons to Choose the Radian Series Inverter/Charger Series from OutBack Power:

1. ENGINEERED FOR RELIABILITY

- Extensive quality and reliability testing, including Highly Accelerated Life Testing (HALT)
- 15 years of experience manufacturing products for faultintolerant, mission-critical applications
- Standard 5 year warranty (extended 10 year warranty available)
- Field upgradeable software

2. DESIGNED FOR FLEXIBILITY

- Modular, stackable: up to nine units can be combined for three-phase operation and ten in parallel, single-phase operation
- Compliant with California Rule 21 and Hawaii 14H grid support requirements
- Seven different programmable operational modes, with generator assist
- Advanced Battery Charging (ABC) programmability accommodates traditional and advanced chemistry batteries
- GridZero operating mode minimizes grid dependence in areas where incentives are changing and utility sell-back is limited
- 8000 and 4000VA of continuous power with dual AC inputs and peak operating efficiency of 96%
- Off-grid and grid-tied functionality in one unit.
- Integrates both grid and generator with dual inputs

3. EASY-TO-INSTALL AND MAINTAIN

- · System configures quickly with smart programming wizards
- Pre-wired GS load center (GSLC) option allows for quick, easy installation
- Complete balance-of-system components available
- · Field-serviceable modular design and global technical support
- Monitor, command and control from any internet-connected device with $\ensuremath{\mathsf{OPTICS}}\xspace{\mathsf{RE}}$



GS8048A/GS4048A

Optional GS Load Center (GSLC)

LISTED TO 🕕 UL 1741 SA

OutBack FLEXpower Radian Typical System Integration (w/ Radian Inverter/Charger):



OUTBACK POWER—MASTERS OF THE OFF-GRID. FIRST CHOICE FOR THE NEW GRID.



MAKE THE POWER

- FLEXpower Integrated Systems
- Inverter/Chargers & Charge Controllers



STORE THE ENERGY

EnergyCell RE, GH, NC and OPzV Batteries
Battery Enclosures and Racking



MANAGE THE SYSTEM

• OPTICS RE System Monitoring and Control
• MATE3 System Display and Communications

OutBack reserves the right to make changes to the products and information contained in this document without notice. Copyright © 2017 OutBack Power. All Rights Reserved. OutBack is a registered trademark of The Alpha Group.

Radian A-Series SPECIFICATIONS

Models:	GS8048A	GS4048A
Instantaneous Power (100ms)	16970VA	8500VA
Surge Power (5 sec)	12000VA	6000VA
Peak Power (30 min)	9000VA	4500VA
Continuous Power Rating (@ 25°C)	8000VA	4000VA
Nominal DC Input Voltage	48VDC	48VDC
AC Output Voltage (selectable)	120/240VAC (200-260VAC)	120/240VAC (200-260VAC)
AC Output Frequency (selectable)	60Hz (50Hz)	60Hz (50Hz)
Continuous AC Output Current (@ 25°C)	33.3AAC @ 240VAC	16.7AAC
Idle Power	Invert mode, no load: 34W Search: 10W	Invert mode, no load: 34W Search: 10W
Typical Efficiency	93%	93%
CEC Weighted Efficiency	92.5%	92.5%
Total Harmonic Distortion	Typical: <2% Maximum: <5%	Typical: <2% Maximum: <5%
Output Voltage Regulation	±2%	±2%
AC Input Voltage Range (MATE3 Adjustable)	L1-N or L2-N: 85 to 140VAC	L1-N or L2-N: 85 to 140VAC
AC Input Frequency Range	@ 60Hz: 54 to 66Hz @ 50Hz: 45 to 55Hz	_
Grid-Interactive Voltage Range	L1-N or L2-N: 85 to 140VAC	L1-N or L2-N: 108 to 132VAC
Grid-Interactive Frequency Range	59.3 to 60.5Hz	59.3 to 60.5Hz
Maximum AC Input Current	50AAC @ 240VAC	50AAC @ 240VAC
Maximum Utility Interactive Current	30A	15A
Continuous Battery Charge Output	115ADC	57.5ADC
Advanced Battery Charging	Flooded, gel, AGM, lithium-ion and flow chemistry	Flooded, gel, AGM, lithium-ion and flow chemistry
DC Input Voltage Range	40 to 64VDC	40 to 64VDC
Accessory Ports	Remote temperature sensor (included), MATE3 and HUB communications	Remote temperature sensor (included), MATE3 and HUB communications
Warranty	Standard 5 year, extended 10 year available	Standard 5 year, extended 10 year available
Weight (lb/kg)	Unit : 125 / 56.7 Shipping : 140 / 63.5	Unit: 82/37.2 Shipping: 94/42.6
Dimensions H x W x L (in/cm)	Unit : 28 x 16 x 8.7 / 71.1 x 40.6 x 22.1 Shipping : 34.5 x 21 x 14.5 / 87.6 x 53.3 x 36.8	Unit: 28 x 16 x 8.7 / 71.1 x 40.6 x 22.1 Shipping: 34.5 x 21 x 14.5 / 87.6 x 53.3 x 36.8
Temperature Range	Rated: -20 to 50°C Maximum: -40 to 60°C	Rated: -20 to 50°C Maximum: -40 to 60°C
Listings/Certifications	ETL listed to UL 1741 SA, CE, CSA C22.2 No. 107.1, UL 778 Annex F, IEC 62109-1 ETL, RoHS compliant per directive 2011/65/EU, FCC Class B, IEEE 1574.1, EN61000-6-1, EN61000-6-3, EN61000-3-2, EN61000-3-3	ETL listed to UL 1741 SA, CE, CSA C22.2 No. 107.1, UL 778 Annex F, IEC 62109-1 ETL, RoHS compliant per directive 2011/65/EU, FCC Class B, IEEE 1574.1, EN61000-6-1, EN61000-6-3, EN61000-3-2, EN61000-3-3
Non-Volatile Memory	Yes	Yes
Field Upgradeable Firmware	Yes	Yes
Chassis Type	Vented	Vented



Inverters that specify power in VA but do not use the unity standard Power Factor (PF) could have misleading power specifications. Volt-Amps (VA) is a total inverter output, while Watts (W) represent the power consumed by the electrical loads. PF, which varies by types of loads, is the ratio of W to VA, and the difference between the two is power in the circuit that does no useful work. At 1.0PF (unity), all power is used. This is the industry-standard used by OutBack Power.



Instantaneous Power Rating Most stringent, massive load start GS8048A: 16970VA Surge Power Rating Less stringent load start GS8048A: 12000VA Peak Power Rating Frequent "heavy duty" load requirements **GS8048A**: 9000VA Continuous Power Rating Sustained "real world" load requirements **GS8048A**: 8000VA



Typical Efficiency Rating Real world efficiency with variable loads **GS8048A**: 93% **CEC Efficiency Rating** Most stringent US rating GS8048A: 92.5%