Radian Series

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

LISTED TO UL 1741 SA
NOW WITH
GRID SUPPORT
FUNCTIONALITY

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 fault-intolerant, 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 OPTICS RE

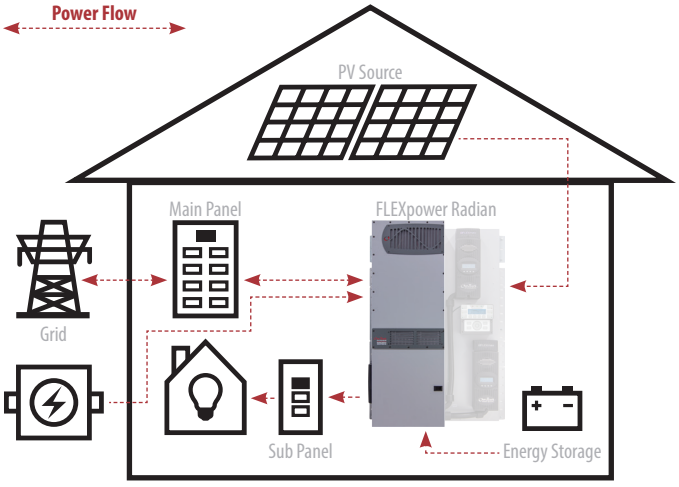


GS8048A/GS4048A



Optional GS Load Center (GSLC)

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

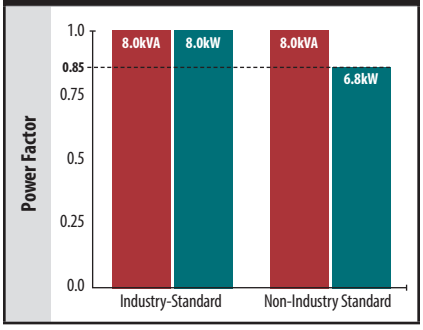
MANAGE THE SYSTEM

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

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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

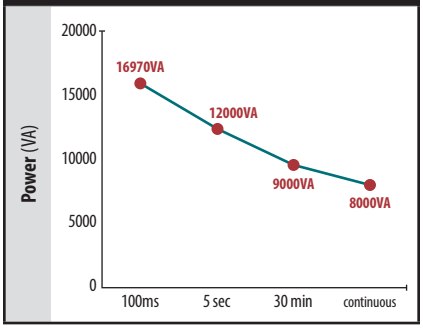
Radian GS8048A Power Factor Chart



Power Rating Notes

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.

Radian GS8048A Power Rating Chart



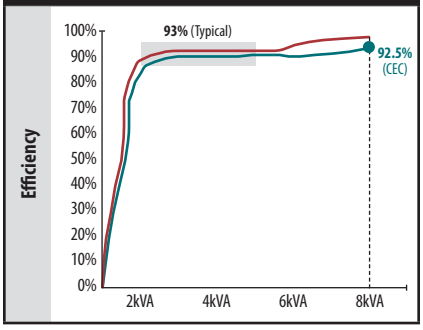
Instantaneous Power Rating
Most stringent, massive load start **GS8048A**: 16970VA

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

Radian GS8048A Efficiency Rating Chart



INVERTING **SELLING**

Typical Efficiency Rating
Real world efficiency with variable loads **GS8048A**: 93%

CEC Efficiency Rating
Most stringent US rating **GS8048A**: 92.5%

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