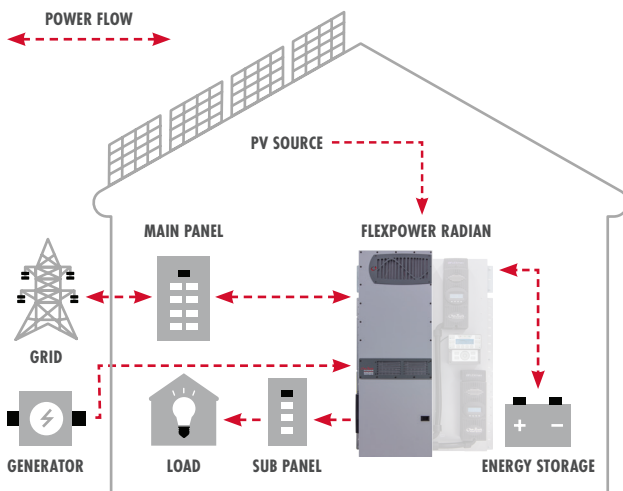


# Radian A-Series™

## 60Hz, 120/240V Inverter/Chargers



- Now supporting SunSpec IEEE 2030.5 with CSIP bridge
- 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, including CA R21 Phase 2 and 3 with optional CSIP bridge product
- Seven different programmable operating modes, with generator assist and seamless reliable backup power
- 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
- Performs AC coupling with both legacy and UL1741 SA inverters, using frequency shifting



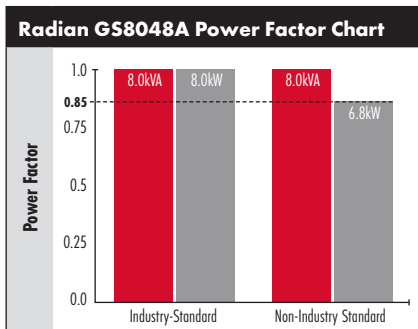
### OutBack Power's acclaimed Radian Series inverter/chargers make solar and backup power available and accessible in one platform.

The Radian GS8048A and GS4048A features dual AC inputs for grid/generator flexibility with no external switching required, unparalleled surge capability and operational stability, easy field upgrade-ability and stacking capability for large system scaling, simplified system commissioning through a powerful, easy to use configuration wizard and multi-mode operational flexibility.

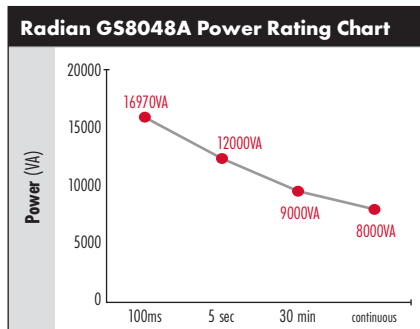
These inverter/chargers incorporate OutBack Power's GridZero technology: energy management for self-generation and self-consumption programs providing precise balancing between using stored energy, solar and utility power, blending-in the latter to overcome surges and load spikes when needed.

# 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 to 260VAC)	120/240VAC (200 to 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 (MATE3s 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), MATE3s and HUB communications	Remote temperature sensor (included), MATE3s 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 × W × D (in/cm)	Unit: 28 × 16 × 8.7 / 71.1 × 40.6 × 22.1 Shipping: 34.5 × 21 × 14.5 / 87.6 × 53.3 × 36.8	Unit: 28 × 16 × 8.7 / 71.1 × 40.6 × 22.1 Shipping: 34.5 × 21 × 14.5 / 87.6 × 53.3 × 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. 1071, UL 778 Annex F, IEC 62109-1 ETL, RoHS compliant per directive 2011/65/EU, FCC Class B, IEEE 1574.1, EN61000-6-1, EN61000-3-2, EN61000-3-3	ETL listed to UL 1741 SA, CE, CSA C22.2 No. 1071, UL 778 Annex F, IEC 62109-1 ETL, RoHS compliant per directive 2011/65/EU, FCC Class B, IEEE 1574.1, EN61000-6-1, EN61000-3-2, EN61000-3-3
Non-Volatile Memory	Yes	Yes
Field Upgradeable Firmware	Yes	Yes
Chassis Type	Vented	Vented



**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.

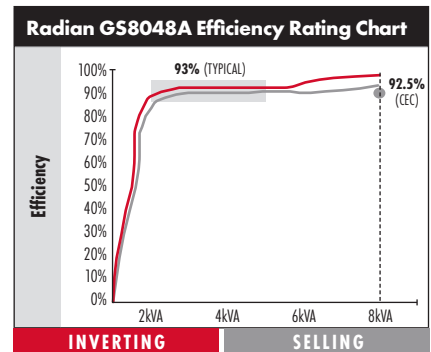


**Instantaneous Power Rating**  
Most stringent, massive load start GS8048A: 16970VA

**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%



an EnerSys® company

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06/2020  
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