# Radian™ Series
## GS8048 Inverter/Charger

➤ Grid-interactive and stand-alone capability in the same package

➤ 8000W of continuous power

➤ Unsurpassed surge capacity

➤ 120/240V split-phase voltage

➤ Dual AC inputs

➤ Field upgradeable firmware

➤ Field serviceable modular design

➤ Simplified parallel design allows easy installation of systems from 8 to 80kW

➤ GS Load Center option allows for quick and easy installation

**The Radian Series GS8048 Grid/Hybrid™ (fully-flexible grid-interactive/off-grid) inverter/charger is engineered from the ground up making system design and installation easier and faster.**

A fully-integrated solution, the Radian delivers 8,000W of pure sinewave continuous power with unsurpassed surge capacity to start the most demanding appliances. The Radian Series simplifies the configuration, distribution, and implementation of energy storage through a standardized approach when integrated with an OutBack GS load center, demonstrating OutBack Power's commitment to delivering clean, reliable power to homes, businesses and other facilities.

The Radian's Dual AC Inputs automatically switch between an active grid and generator input without the need for costly external transfer switch. In areas where the ability to sell energy back to the grid may be restricted or limited, the Radian's offset function enables users to manage their energy consumption by switching between PV, grid and battery energy sources and "off-setting" their dependence on the grid. Advanced technology allows the Radian to seamlessly manage power from multiple sources and direct battery functions at the same time.

A unique dual-power module design ensures high efficiency in both low and full power operation as well as redundancy in both low and full power operation as well as redundancy in mission-critical applications. The Radian's modular system architecture and simplified parallel design supports system scaling of up to ten inverters delivering 80kW.

The 120/240V 60Hz split-phase Radian is an 8,000W power solution that seamlessly integrates with traditional North American wiring practices. System integration and programming is easier with OutBack's MATE3 and HUB communications management devices. Advanced front-vented layout provides optimum cooling in zero-clearance installations. A field-serviceable design simplifies maintenance and firmware updates without the addition of specialized equipment.

| Model: | GS8048 |
|---|---|
| **Nominal DC Input Voltage** | 48VDC |
| **Continuous Output Power** (@ 25°C) | 8000VA |
| **AC Output Voltage** (Selectable) | 120/240VAC |
| **AC Output Frequency** (Selectable) | 60Hz |
| **Continuous AC Output Current** (@ 25°C) | 33.3AAC @ 240VAC |
| **Idle Consumption** (Invert Mode, No Load) | 30W |
| **Typical Efficiency** | 93% |
| **CEC Weighted Efficiency** | 90% |
| **Peak Efficiency** | 95% |
| **Total Harmonic Distortion** | **Max. Total Harmonic**: <5%,    **Max. Single Voltage Harmonic**: <2% |
| **Output Voltage Regulation** | ±2% |
| **Maximum Output Current** | **1ms Peak**: 100AAC @ 240VAC, 200AAC @ 120VAC    **100ms RMS**: 70.7AAC @ 240VAC |
| **Overload Capacity** | **100ms Surge**: 16.97kVA    **5 Seconds**: 12.0kVA    **30 Minutes**: 9.0kVA |
| **AC Input Voltage Range** (Adjustable) | (L1-N or L2-N) 70 to 140VAC |
| **AC Input Frequency Range** (Default) | 54 to 66Hz @ 60Hz |
| **Grid-Interactive Voltage Range** (Default) | (L1-N or L2-N) 106 to 132VAC |
| **Grid-Interactive Frequency Range** | 59.3 to 60.5Hz |
| **Maximum AC Input Current** | 50AAC @ 240VAC |
| **Maximum Utility Interactive Current** | 32A |
| **Continuous Battery Charge Output** | 115.0ADC |
| **DC Input Voltage Range** | 40 to 64VDC |
| **Temperature Range** (Power derated above 25°C) | **Rated**: 0 to 50°C    **Maximum**:-25 to 60°C |
| **Accessory Ports** | Remote Temperature Sensor, MATE3 & HUB Communications |
| **Non-Volatile Memory** | Yes |
| **Field Upgradable Firmware** | Yes |
| **Chassis Type** | Vented |
| **Certifications** | ETL Listed to UL1741, CSA C22.2 No. 107.1 |
| **Warranty** | Standard 5 year, available 10 year |
| **Weight** (lb/kg) | **Unit**: 125 / 56.7    **Shipping**: 140 / 63.5 |
| **Dimensions H x W x D** (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 |

**AVAILABLE FROM**