Radian™ Series

GS8048A & GS4048A Inverter/Charger

- Grid-Interactive and Stand-Alone Capability in the same package
- GridZero Technology Optimizes the Balance Between Stored and Renewable Energy Sources, Minimizing Grid Dependence
- Advanced Battery Charging Profile (ABC) Supports Leading-Edge Battery Technologies Including Lithium-Ion
- 8000W and 4000W of Continuous Power, Respectively
- Field-Adjustable Input/Output Voltage and Frequency Boundaries of 50/60Hz, 170-280VAC L-L and 200-260V Nominal, Respectively
- Unsurpassed Surge Capacity
- 120/240V Split-Phase Voltage
- Dual AC Inputs
- Field Upgradeable Firmware
- Field Serviceable Modular Design
- Simplified Stacking Design
- GS Load Center Option Allows for Quick and Easy Installation

GS8048A

GS4048A

GRIDHybrid™

OutBack Power's acclaimed Radian Series made the benefits of Grid/Hybrid technology available and accessible in one agile powerful, platform ideal for nearly all off-grid or grid-connected system architectures.

The new Radian Series inherit the hallmark features of the original design, including: dual AC inputs for grid/generator flexibility with no external switching required, unparalleled surge capability and operational stability, easy field upgradeability and stacking capability for large system scaling, simplified system commissioning through a powerful, easy-to-use configuration wizard, and multi-mode operational flexibility.

In addition, both models have a new Advanced Battery Charging (ABC) profile option to support leading-edge battery technologies such as Lithium-Ion and others, and enhanced diagnostics for improved performance. And both incorporate OutBack's GridZero technology, a superior level of intelligence in 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. GridZero operation makes it possible for a smaller inverter and battery system to perform like a much larger one when required, putting stored and renewable energy sources to work and minimizing grid dependence. GridZero technology make the new Radians ideal for use in complex utility environments such as California and Hawaii.

Both models also support AC-coupling through a compatible OutBack load center to provide an economical solution for upgrading existing grid-tied systems to battery back-up capability. Complete system interfacing using the OutBack MATE3 and HUB communications manager enables the Radian to be connected with other OutBack Power electronics providing industry leading integration and a scalable power solution. Up to 10 units can be connected in parallel for systems up to 80kW continuous power output.

The GS8048A and GS4048A are certified to UL1741 for US applications, and CSA C22.2 No. 107.1 for Canada, and is IEC 62109-1 certified to meet the most stringent worldwide PV safety and emission standards.

This product is for selected North, Central and Latin American markets.

OutBack POWER™
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www.outbackpower.com

Radian Series Specifications

	GS8048A	GS4048A
Nominal DC Input Voltage	48VDC	48VDC
Continuous Output Power at 25°C	8000 VA	4000 VA
AC Output Voltage/Frequency	120/240VAC, 60Hz (50Hz)	120/240VAC, 60Hz (50Hz)
Continuous AC Output Current at 25°C	33.3AAC @ 240VAC	16.7AAC
Idle Consumption (Invert Mode, No Load)	34W	34W
Typical Efficiency	93%	92.5%
CEC Weighted Efficiency	92.5%	92.5%
Harmonic Distortion	Maximum Total Harmonic: <5% Maximum Single Voltage Harmonic: <2%	Maximum Total Harmonic: <5% Maximum Single Voltage Harmonic: <2%
Output Voltage Regulation	± 2%	± 2%
Maximum Output Current	1 ms Peak: 100 AAC @ 240VAC, 200AAC @ 120VAC 1 ms RMS: 70.7 AAC @ 240VAC	1 ms Peak: 50AAC @ 240VAC 1 ms RMS: 35.35 AAC @ 240VAC
Overload Capability	100 ms Surge: 16.97 kVA 5 seconds: 12 kVA 30 minutes: 9 kVA	100 ms Surge: 8.5 kVA 5 seconds: 6.0 kVA 30 minutes: 4.5 kVA
Maximum AC Input Current	50AAC @ 240VAC	50AAC
AC Input Voltage Range (Adjustable)	(L1 or L2) 70 to 280VAC	(L1-N or L2-N) 85 to 140VAC
Grid-Interactive Voltage Range	(L1-N or L2-N) 106 to 132VAC	(L1-N, L2-N) 108 to 132VAC, default
Grid-Interactive Frequency Range	59.3 to 60.5Hz	59.3 to 60.5Hz
AC Input Frequency Range (Default)	54 to 66Hz @ 60Hz (45 to 55Hz @ 50Hz)	54 to 66Hz @ 60Hz (45 to 55Hz @ 50Hz)
DC Input Voltage Range	40 to 64VDC	40 to 64VDC
Continuous Battery Charge Output	115.0 ADC	57.5ADC
Temperature Range	Rated: -20 to 50°C (power derated above 25°C) Maximum: -40 to 60°C*	Rated: -20 to 50°C (power derated above 25°C) Maximum: -40 to 60°C*
Warranty	Standard 5 year Warranty	Standard 5 year Warranty
Weight	Unit: 125 lbs (56.7 kg) Shipping: 140 lbs (63.5 kg)	Unit: 82 lbs (37.2 kg) Shipping: 94 lbs (42.6 kg)
Dimensions (H x W x D)	Unit: 28 x 16 x 8.7" (71.1 x 40.6 x 22.1 cm) Shipping: 34.5 x 21 x 14.5" (87.6 x 53.3 x 36.8 cm)	Unit: 28 x 16 x 8.7" (71.1 x 40.6 x 22.1 cm) Shipping: 34.5 x 21 x 14.5" (87.6 x 53.3 x 36.8 cm)
Accessory Ports	Remote Temperature Sensor and MATE3 & HUB Communications	Remote Temperature Sensor and MATE3 & HUB Communications
Non-volatile Memory	Yes	Yes
Field Upgradable Firmware	Yes	Yes
Chassis Type	Vented	Vented
Certifications	Listed to UL1741, CE, CSA C22.2 No. 107.1, IEC 62109-1, AS4777.2, AS4777.3, EN61000-6-1, EN61000-6-3, EN61000-3-2, EN61000-3-3, AS3100, RoHS compliant per directive 2011/65/EU	Listed to UL1741, CE, IEC-62109-1 ETL, CSA C22.2 No. 107.1, RoHS compliant per directive 2011/65/EU, FCC Class B, EN61000-6-1, EN61000-6-3, EN61000-3-2, EN61000-3-3

*Functions, but does not necessarily meet all component specifications.

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