



# Radian<sup>™</sup> Series

## GS7048E & GS3548E Inverter/Chargers



- 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 (ABC) supports leading-edge battery technologies including lithium-ion
- 7000 and 3500W of continuous power, respectively
- Field-adjustable input/output voltage and frequency boundaries of 50/60Hz, 170-290VAC and 200-260V nominal, respectively
- Unsurpassed surge capacity
- Dual AC inputs
- Field upgradeable firmware
- Field serviceable modular design
- Simplified stacking design
- GS Load Center option Allows for quick and easy installation

**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 Radian Series GS7048E and all-new GS3548E features 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 new Advanced Battery Charging (ABC) profile options 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.

As truly global products, the Radian Series GS7048E and GS3548E inverter/chargers offer selectable voltage and frequency for use in a wide variety of locations, and innovative grid interface protection, which allows precision programming and control to accommodate shifting utility requirements in areas with high PV penetration or specific interconnection requirements. Complete system interfacing using the OutBack MATE3 and HUB communications manager enables the Radian Series 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 70kW continuous power output.

The GS7048E and GS3548E are IEC certified to meet the most stringent worldwide PV safety and emission standards.

This product is for Europe, Asia and other global markets.

# Radian Series GS7048E and GS3548E Specifications

12/2015

Models:	GS7048E	GS3548E
<b>Nominal DC Input Voltage</b>	48VDC	48VDC
<b>Continuous Output Power (@ 25°C)</b>	7000VA	3500VA
<b>AC Output Voltage (Selectable)</b>	230VAC (210-250VAC)	230VAC (210-250VAC)
<b>AC Output Frequency (Selectable)</b>	50Hz (60Hz)	50Hz (60Hz)
<b>Continuous AC Output Current (@ 25°C)</b>	30AAC	15.2AAC
<b>Idle Consumption (Invert Mode, No Load)</b>	34W	34W
<b>Efficiencies</b>	<b>Typical:</b> 92% <b>Peak:</b> 96%	<b>Typical:</b> 92% <b>Peak:</b> 96%
<b>Total Harmonic Distortion</b>	<b>Max. Total Harmonic:</b> <5%, <b>Max. Single Voltage Harmonic:</b> <2%	<b>Max. Total Harmonic:</b> <5%, <b>Max. Single Voltage Harmonic:</b> <2%
<b>Output Voltage Regulation</b>	±2%	±2%
<b>Maximum Output Current</b>	<b>1ms Peak:</b> 100AAC <b>100ms RMS:</b> 70.7AAC	<b>1ms Peak:</b> 50AAC <b>100ms RMS:</b> 35.35AAC
<b>Overload Capacity</b>	<b>100ms Surge:</b> 16.3kVA <b>5 Seconds:</b> 11.5kVA <b>30 Minutes:</b> 7.9kVA	<b>100ms Surge:</b> 8.2kVA <b>5 Seconds:</b> 5.8kVA <b>30 Minutes:</b> 4.0kVA
<b>AC Input Voltage Range (Adjustable)</b>	(L-N) 170 to 290VAC	(L-N) 170 to 290VAC
<b>AC Input Frequency Range (Default)</b>	45 to 55Hz @ 50Hz (54 to 66Hz @ 60Hz)	45 to 55Hz @ 50Hz (54 to 66Hz @ 60Hz)
<b>Grid-Interactive Voltage Range (Default)</b>	(L-N) 208 to 252VAC	(L-N) 208 to 252VAC
<b>Grid-Interactive Frequency Range</b>	47.0 to 51.0Hz @ 50Hz (57.0 to 61.0Hz @ 60Hz)	47.0 to 51.0Hz @ 50Hz (57.0 to 61.0Hz @ 60Hz)
<b>Maximum AC Input Current</b>	50AAC	50AAC
<b>Maximum Utility Interactive Current</b>	30A	15A
<b>Continuous Battery Charge Output</b>	100.0ADC	50.0ADC
<b>DC Input Voltage Range</b>	40 to 64VDC	40 to 64VDC
<b>Temperature Range (Power derated above 25°C)</b>	<b>Rated:</b> -20 to 50°C <b>Maximum:</b> -40 to 60°C	<b>Rated:</b> -20 to 50°C <b>Maximum:</b> -40 to 60°C
<b>Accessory Ports</b>	Remote Temperature Sensor, MATE3 & HUB Communications	Remote Temperature Sensor, MATE3 & HUB Communications
<b>Non-Volatile Memory</b>	Yes	Yes
<b>Field Upgradable Firmware</b>	Yes	Yes
<b>Chassis Type</b>	Vented	Vented
<b>Certifications</b>	IEC 62477-1, AS4777.2, AS477.3, EN61000-6-1, EN61000-6-3, EN61000-3-2, EN61000-3-3, AS3100, CE, RoHS compliant per directive 2011/65/EU	IEC 62109-1, IEC 62477-1, AS4777.2, AS477.3, EN61000-6-1, EN61000-6-3, EN61000-3-2, EN61000-3-3, AS3100, CE, RoHS compliant per directive 2011/65/EU
<b>Warranty</b>	Standard 5 year, available 10 year	Standard 5 year, available 10 year
<b>Weight (lb/kg)</b>	<b>Unit:</b> 125.0 / 56.7 <b>Shipping:</b> 140.0 / 63.5	<b>Unit:</b> 81.0 / 36.7 <b>Shipping:</b> 93.0 / 42.1
<b>Dimensions H x W x D (in/cm)</b>	<b>Unit:</b> 28 x 16 x 8.7 / 71.1 x 40.6 x 22.1 <b>Shipping:</b> 34.5 x 21 x 14.5 / 87.6 x 53.3 x 36.8	<b>Unit:</b> 28 x 16 x 8.7 / 71.1 x 40.6 x 22.1 <b>Shipping:</b> 34.5 x 21 x 14.5 / 87.6 x 53.3 x 36.8

## Worldwide Corporate Offices

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