



Radian[™] 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 Profile (ABC) Supports Leading-Edge Battery Technologies Including Lithium-Ion
- 7000 and 3500 Watts 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.

Models	GS7048E	GS3548E
Nominal DC Input Voltage	48VDC	48VDC
Continuous Output Power (@ 25°C)	7000VA	3500VA
AC Output Voltage (Selectable)	230VAC (210-250VAC)	230VAC (210-250VAC)
AC Output Frequency (Selectable)	50Hz (60Hz)	50Hz (60Hz)
Continuous AC Output Current (@ 25°C)	30AAC	15.2AAC
Idle Consumption (Invert Mode, No Load)	34W	34W
Typical Efficiency	92%	92%
CEC Weighted Efficiency	—	—
Total Harmonic Distortion	Max. Total Harmonic: <5% Max. Single Voltage Harmonic: <2%	Max. Total Harmonic: <5% Max. Single Voltage Harmonic: <2%
Output Voltage Regulation	±2%	±2%
Maximum Output Current	1ms Peak: 100AAC 100ms RMS: 70.7AAC	1ms Peak: 50AAC 100ms RMS: 35.35 AAC
Overload Capacity	100ms Surge: 16.3kVA 5 seconds: 11.5kVA 30 minutes: 7.9kVA	100ms Surge: 8.2kVA 5 seconds: 5.8kVA 30 minutes: 4.0kVA
AC Input Voltage Range (Adjustable)	(L-N) 170 to 290VAC	(L-N) 170 to 290VAC
AC Input Frequency Range (Default)	45 to 55Hz @ 50Hz (54 to 66Hz @ 60Hz)	45 to 55Hz @ 50Hz (54 to 66Hz @ 60Hz)
Grid-Interactive Voltage Range (Default)	(L-N) 208 to 252VAC	(L-N) 208 to 252VAC
Grid-Interactive Frequency Range	57.0 to 61.0Hz	57.0 to 61.0Hz
Maximum AC Input Current	50AAC	50AAC
Maximum Utility Interactive Current	30A	15A
Continuous Battery Charge Output	100.0ADC	50.0ADC
DC Input Voltage Range	40 to 64VDC	40 to 64VDC
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
Accessory Ports	Remote Temperature Sensor, MATE3 & HUB Communications	Remote Temperature Sensor, MATE3 & HUB Communications
Non-Volatile Memory	Yes	Yes
Field Upgradable Firmware	Yes	Yes
Chassis Type	Vented	Vented
Certifications	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
Warranty	Standard 5 year	Standard 5 year
Weight (lb/kg)	Unit: 125.0 / 56.7 Shipping: 140.0 / 63.5	Unit: 81.0 / 36.7 Shipping: 93.0 / 42.1
Dimensions H x W x D (in/cm)	Unit: 28 x 16 x 8.7 / 71 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 x 40.6 x 22.1 Shipping: 34.5 x 21 x 14.5 / 87.6 x 53.3 x 36.8

Worldwide Corporate Offices