



# Radian™ Series GS7048E Inverter/Charger

Preliminary Information Sheet | Expected Availability Q3/2012

- 230V/50Hz Grid/Hybrid™  
(Full-Flexibility Grid-Tied/Off-Grid)
- 7,000 Watts of Continuous Power
- Unsurpassed Surge Capacity
- Dual AC Inputs
- 100 Amp DC Charger
- Field Upgradable Firmware
- Field Serviceable Modular Design
- Simplified Parallel Design  
Allows Easy Installation of Systems  
from 7 to 70kW
- GS Load Center Option Allows  
for Quick and Easy Installation
- Advanced Front Venting  
for Optimum Cooling and  
Zero-clearance Installations



OutBack's new Radian Series inverter/charger is engineered from the ground up to make system design and installation easier and faster. A fully-integrated solution compatible in both off-grid and grid-interactive applications, the Radian delivers 7,000 Watts of pure sinewave continuous power with unsurpassed surge capacity. A true multi-country design featuring field-adjustable input/output voltage and frequency boundaries of 50/60Hz and 220-240V nominal, the GS7048E Radian is the latest expression of OutBack's on-going commitment to delivering clean, reliable power to homes, businesses and other facilities around the world.

The Grid/Hybrid™ Radian incorporates OutBack's FLEXgrid™ technology for full operational flexibility. The Radian's Dual AC Inputs automatically switch between an active grid and generator input without the need for a costly external transfer switch. In regions 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 manage power from multiple sources and direct battery functions at the same time. In areas where the grid is inconsistent or unreliable, the Radian seamlessly switches between grid-tied and off-grid operation.

The Radian's high surge power capability will start the most demanding appliances, while its modular system architecture and simplified parallel design supports system scaling from 7 to 70kW. A unique dual-power module design ensures high efficiency in both low and full power operation as well as redundancy in mission-critical applications.

Programming and commissioning of the Radian is made simple with the addition of the MATE3 configuration wizard. Advanced front-vented layout provides optimum cooling in zero-clearance installations (where units are stacked next to each other, for example). A field-serviceable design simplifies maintenance and firmware updates without the addition of specialized equipment. Superior and prompt technical support is available at [www.outbackpower.com](http://www.outbackpower.com).

**OutBack**  
**POWER™**  
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## Radian Series Preliminary Information Sheet

GS7048E		
Nominal DC Input Voltage		48 Vdc
Continuous Output Power at 25°C		7000 VA
AC Output Voltage / Frequency		230 Vac / 50 Hz
Continuous AC RMS Output Current at 25°C		30 Aac at 230 Vac
Idle Power	Full	30 W
	Search	10 W
Typical Efficiency		93%
Total Harmonic Distortion	Total harmonic	<5%
	Maximum single voltage harmonic	<2%
Output Voltage Regulation		± 2%
Maximum Output Current	1 ms peak	100 Aac
	100 ms RMS	70.7 Aac
AC Overload Capability	100 ms surge	16261 Va
	5 seconds	11497 Va
	30 minute	7875 Va
Maximum AC Input Current		50 Aac
AC Input Voltage Range (Adjustable)		140 to 280 Vac
AC Input Frequency Range		45 to 55 Hz
DC Input Voltage Range		40 to 64 Vdc
Continuous Battery Charge Output		100 Adc
Temperature Range	Rated	0 to 50°C (power derated above 25°C)
	Maximum*	-25 to 60°C
Warranty		Standard 5 year Warranty
Weight	Unit	125 lbs / 56.7 kg
	Shipping	140 lbs / 63.5 kg
Dimensions H x W x D	Unit	28 x 16 x 8.7" / 71.1 x 40.6 x 22.1 cm
	Shipping	14.5 x 34.5 x 21" / 36.8 x 87.6 x 53.3 cm
Accessory Ports		Remote Temperature Sensor and MATE3/HUB Communications
Non-volatile Memory		Yes
Field Upgradable Firmware		Yes
Chassis Type		Vented
Certifications (preliminary/pending)		IEC 62109
		IEC 62093
		AS4777

This is an advanced information bulletin. All information, features and specifications are preliminary and subject to change. This product functions, but does not necessarily meet all component specifications.



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