

# Radian E-Series™

## 50Hz, 230V Inverter/Chargers

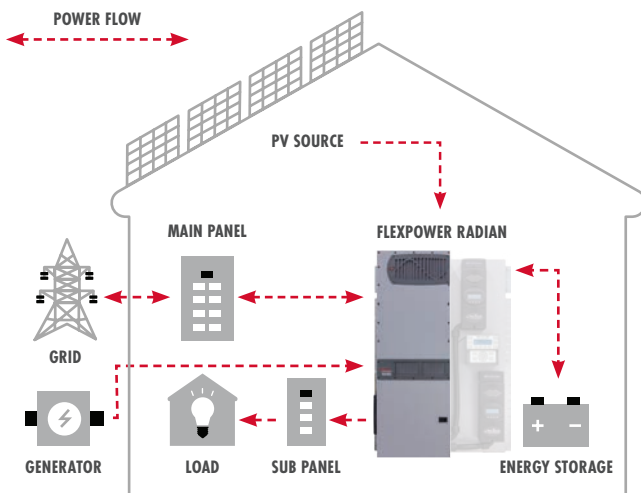


- Modular, stackable: up to nine units can be combined for three-phase operation and ten in parallel, single-phase operation
- Seven different programmable operating modes, with generator assist
- GridZero operating mode minimizes grid dependence in areas where incentives are changing and utility sell-back is limited
- 7000 and 3500VA of continuous power with dual AC inputs and peak operating efficiency of 96%
- Off-grid and grid-tied functionality in one unit
- Integrates both grid and generator with dual inputs

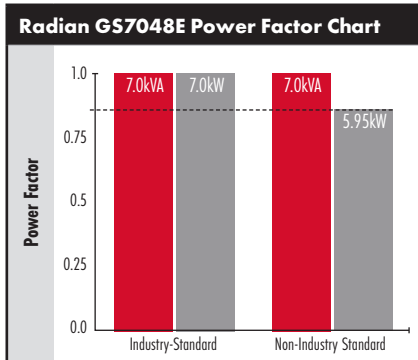
### OutBack Power's acclaimed Radian Series made the benefits of solar technology available and accessible in one platform.

The Radian GS7048E and GS3548E features dual AC inputs for grid/generator flexibility with no external switching required, unparalleled surge capability and operational stability, easy field upgrade-ability and stacking capability for large system scaling, simplified system commissioning through a powerful, easy to use configuration wizard and multi-mode operational flexibility.

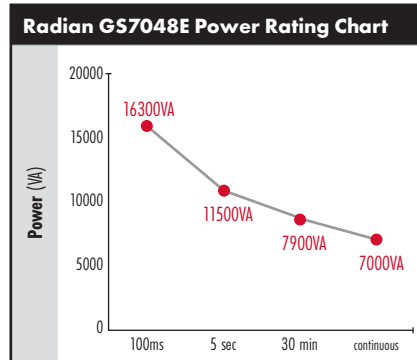
The Radian GS7048E and GS3548E incorporate OutBack's GridZero technology: energy management for self-generation and self-consumption programs providing precise balancing between using stored energy, solar and utility power, blending-in the latter to overcome surges and load spikes when needed.



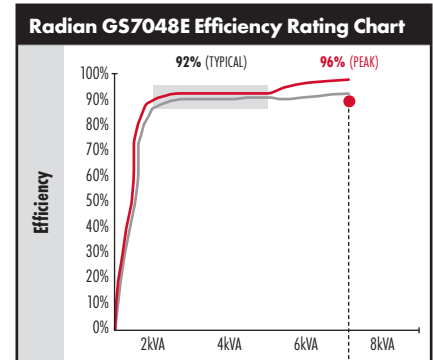
Models:	GS7048E	GS3548E
<b>Instantaneous Power</b> (100ms)	16300VA	8200VA
<b>Surge Power</b> (5 sec)	11500VA	5800VA
<b>Peak Power</b> (30 min)	7900VA	4000VA
<b>Continuous Power Rating</b> (@ 25°C)	7000VA	3500VA
<b>Nominal DC Input Voltage</b>	48VDC	48VDC
<b>AC Output Voltage</b> (selectable)	230VAC (210 to 250VAC)	230VAC (210 to 250VAC)
<b>AC Output Frequency</b> (selectable)	50Hz (60Hz)	50Hz (60Hz)
<b>Continuous AC Output Current</b> (@ 25°C)	30AAC	15.2AAC
<b>Idle Power</b>	<b>Invert mode, no load:</b> 34W <b>Search:</b> 10W	<b>Invert mode, no load:</b> 34W <b>Search:</b> 10W
<b>Typical Efficiency</b>	92%	92%
<b>Peak Efficiency</b>	96%	96%
<b>Total Harmonic Distortion</b>	<b>Typical:</b> <2% <b>Maximum:</b> <5%	<b>Typical:</b> <2% <b>Maximum:</b> <5%
<b>Output Voltage Regulation</b>	±2%	±2%
<b>AC Input Voltage Range</b> (MATE3s Adjustable)	<b>L-N:</b> 170 to 290VAC	<b>L-N:</b> 170 to 290VAC
<b>AC Input Frequency Range</b>	<b>50Hz:</b> 45 to 55Hz <b>60Hz:</b> 54 to 66Hz	<b>50Hz:</b> 45 to 55Hz <b>60Hz:</b> 54 to 66Hz
<b>Grid-Interactive Voltage Range</b>	<b>L-N:</b> 208 to 252VAC	<b>L-N:</b> 208 to 252VAC
<b>Grid-Interactive Frequency Range</b>	<b>50Hz:</b> 47 to 51Hz <b>60Hz:</b> 57 to 61Hz	<b>50Hz:</b> 47 to 51Hz <b>60Hz:</b> 57 to 61Hz
<b>Maximum AC Input Current</b>	50AAC	50AAC
<b>Maximum Utility Interactive Current</b>	30A	15A
<b>Continuous Battery Charge Output</b>	100ADC	50ADC
<b>Advanced Battery Charging</b>	Flooded, gel, AGM, lithium-ion and flow chemistry	Flooded, gel, AGM, lithium-ion and flow chemistry
<b>DC Input Voltage Range</b>	40 to 64VDC	40 to 64VDC
<b>Accessory Ports</b>	Remote temperature sensor (included), MATE3s and HUB communications	Remote temperature sensor (included), MATE3s and HUB communications
<b>Warranty</b>	Standard 5 year, extended 10 year available	Standard 5 year, extended 10 year available
<b>Weight</b> (lb/kg)	<b>Unit:</b> 125 / 56.7 <b>Shipping:</b> 140 / 63.5	<b>Unit:</b> 82 / 37.2 <b>Shipping:</b> 94 / 42.6
<b>Dimensions H × W × D</b> (in/cm)	<b>Unit:</b> 28 × 16 × 8.7 / 71.1 × 40.6 × 22.1 <b>Shipping:</b> 34.5 × 21 × 14.5 / 87.6 × 53.3 × 36.8	<b>Unit:</b> 28 × 16 × 8.7 / 71.1 × 40.6 × 22.1 <b>Shipping:</b> 34.5 × 21 × 14.5 / 87.6 × 53.3 × 36.8
<b>Temperature Range</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>Listings/Certifications</b>	IEC 62477-1, AS4772, AS4773, EN61000-6-1, EN61000-6-3, EN61000-3-2, EN61000-3-3, AS3100, CE, RoHS compliant per directive 2011/65/EU	IEC 62477-1, AS4772, AS4773, EN61000-6-1, EN61000-6-3, EN61000-3-2, EN61000-3-3, AS3100, CE, RoHS compliant per directive 2011/65/EU



**Power Rating Notes**  
 Inverters that specify power in VA but do not use the unity standard Power Factor (PF) could have misleading power specifications. Volt-amps (VA) is a total inverter output, while watts (W) represent the power consumed by the electrical loads. PF, which varies by types of loads, is the ratio of W to VA, and the difference between the two is power in the circuit that does no useful work. At 1.0PF (unity), all power is used. This is the industry standard used by OutBack Power.



**Instantaneous Power Rating**  
 Most stringent, massive load start GS7048E: 16300VA  
**Surge Power Rating**  
 Less stringent load start GS7048E: 11500VA  
**Peak Power Rating**  
 Frequent "heavy duty" load requirements GS7048E: 7900VA  
**Continuous Power Rating**  
 Sustained "real world" load requirements GS7048E: 7000VA



**INVERTING** | **SELLING**  
**Peak Efficiency Rating**  
 Highest efficiency rating achievable GS7048E: 96%  
**Typical Efficiency Rating**  
 Real world efficiency with variable loads GS7048E: 92%



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