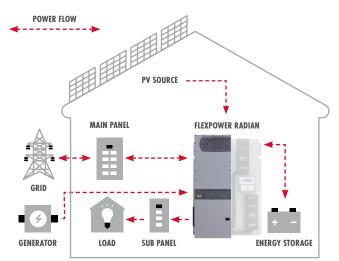


Radian E-Series[™]

50Hz, 230V Inverter/Chargers





- Modular, stackable: up to nine units can be combined for three-phase operation and ten in parallel, singlephase operation
- Seven different programmable operating modes, with generator assist
- GridZero operating mode minimizes grid dependence in areas where incentives are changing and utility sellback 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.

Radian E-Series Specifications

Models	G\$7048E	G\$3548E
Instantaneous Power (100ms)	16300VA	8200VA
Surge Power (5 sec)	11500VA	5800VA
Peak Power (30 min)	7900VA	4000VA
Continuous Power Rating (@ 25°C)	7000VA	3500VA
Nominal DC Input Voltage	48VDC	48VDC
AC Output Voltage (selectable)	230VAC (210 to 250VAC)	230VAC (210 to 250VAC)
AC Output Frequency (selectable)	50Hz (60Hz)	50Hz (60Hz)
Continuous AC Output Current (@ $25^\circ\text{C})$	30AAC	15.2AAC
Idle Power	Invert mode, no load: 34W Search: 10W	Invert mode, no load: 34W Search: 10W
Typical Efficiency	92%	92%
Peak Efficiency	96%	96%
Total Harmonic Distortion	Typical: <2% Maximum: <5%	Typical: <2% Maximum: <5%
Output Voltage Regulation	±2%	±2%
AC Input Voltage Range (MATE3s Adjustable)	L-N: 170 to 290VAC	L-N: 170 to 290VAC
AC Input Frequency Range	50Hz: 45 to 55Hz 60Hz: 54 to 66Hz	50Hz: 45 to 55Hz 60Hz: 54 to 66Hz
Grid-Interactive Voltage Range	L-N: 208 to 252VAC	L-N: 208 to 252VAC
Grid-Interactive Frequency Range	50Hz : 47 to 51Hz 60Hz : 57 to 61Hz	50Hz : 47 to 51Hz 60Hz : 57 to 61Hz
Maximum AC Input Current	50AAC	50AAC
Maximum Utility Interactive Current	30A	15A
Continuous Battery Charge Output	100ADC	50ADC
Advanced Battery Charging	Flooded, gel, AGM, lithium-ion and flow chemistry	Flooded, gel, AGM, lithium-ion and flow chemistry
DC Input Voltage Range	40 to 64VDC	40 to 64VDC
Accessory Ports	Remote temperature sensor (included), MATE3s and HUB communications	Remote temperature sensor (included), MATE3s and HUB communications
Warranty	Standard 5 year, extended 10 year available	Standard 5 year, extended 10 year available
Weight (lb/kg)	Unit : 125 / 56.7 Shipping : 140 / 63.5	Unit: 82 / 37.2 Shipping: 94 / 42.6
Dimensions H × W × D (in/cm)	Unit : 28 × 16 × 8.7 / 71.1 × 40.6 × 22.1 Shipping : 34.5 × 21 × 14.5 / 87.6 × 53.3 × 36.8	Unit : 28 × 16 × 8.7 / 71.1 × 40.6 × 22.1 Shipping : 34.5 × 21 × 14.5 / 87.6 × 53.3 × 36.8
Temperature Range	Rated: -20 to 50°C Maximum: -40 to 60°C	Rated: -20 to 50°C Maximum: -40 to 60°C
Listings/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 62477-1, IS4777.2, IS477.3, EN61000-6-1, EN61000-6-3, EN61000-3-2, EN61000-3-3, IS3100, CE, RoHS compliant per directive 2011/65/EU

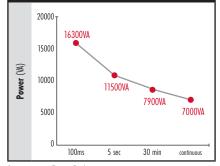
Radian GS7048E Power Factor Chart



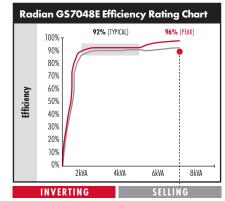
Power Rating Notes

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.

Radian GS7048E Power Rating Chart



Instantaneous Power Rating Mast 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



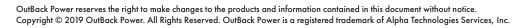
 Peak Efficiency Rating

 Highest efficiency rating achievable
 6S7048E: 96%

 Typical Efficiency Rating
 Real world efficiency with variable loads
 6S7048E: 92%

Out Back

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