Three Reasons to Choose the Radian Series Inverter/Charger Series from OutBack Power:

1. **ENGINEERED FOR RELIABILITY**
   - Extensive quality and reliability testing, including Highly Accelerated Life Testing (HALT)
   - 15 years of experience manufacturing products for fault-intolerant, mission-critical applications
   - Standard 5 year warranty (extended 10 year warranty available)
   - Field upgradeable software

2. **DESIGNED FOR FLEXIBILITY**
   - Modular, stackable: up to nine units can be combined for three-phase operation and ten in parallel, single-phase operation
   - Seven different programmable operational modes, with generator assist
   - Advanced Battery Charging (ABC) programmability accommodates traditional and advanced chemistry batteries
   - GridZero operating mode minimizes grid dependence in areas where incentives are changing and utility sell-back is limited
   - 8000VA 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

3. **EASY-TO-INSTALL AND MAINTAIN**
   - System configures quickly with smart programming wizards
   - Pre-wired GS load center (GSLC) option allows for quick, easy installation
   - Complete balance-of-system components available
   - Field-serviceable modular design and global technical support
   - Monitor, command and control from any internet-connected device with OPTICS RE

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**OutBack Radian Typical System Integration** (w/ Radian Inverter/Charger):

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## Radian A-Series Specifications

### OutBack Power GS8048A vs GS4048A Models

<table>
<thead>
<tr>
<th>Specification</th>
<th>GS8048A</th>
<th>GS4048A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instantaneous Power</strong> (100ms)</td>
<td>16970VA</td>
<td>8500VA</td>
</tr>
<tr>
<td><strong>Surge Power</strong> (5 sec)</td>
<td>12000VA</td>
<td>6000VA</td>
</tr>
<tr>
<td><strong>Peak Power</strong> (30 min)</td>
<td>9000VA</td>
<td>4500VA</td>
</tr>
<tr>
<td><strong>Continuous Power Rating</strong> ($25^\circ$C)</td>
<td>8000VA</td>
<td>4000VA</td>
</tr>
<tr>
<td><strong>Nominal DC Input Voltage</strong></td>
<td>48VDC</td>
<td>48VDC</td>
</tr>
<tr>
<td><strong>AC Output Voltage</strong> (selectable)</td>
<td>120/240VAC (208-260VAC)</td>
<td>120/240VAC (208-260VAC)</td>
</tr>
<tr>
<td><strong>AC Output Frequency</strong> (selectable)</td>
<td>60Hz (50Hz)</td>
<td>60Hz (50Hz)</td>
</tr>
<tr>
<td><strong>Continuous AC Output Current</strong> ($25^\circ$C)</td>
<td>33.3A @ 240VAC</td>
<td>16.7A AC</td>
</tr>
<tr>
<td><strong>Idle Power</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Typical Efficiency</strong></td>
<td>93%</td>
<td>93%</td>
</tr>
<tr>
<td><strong>CEC Weighted Efficiency</strong></td>
<td>92.5%</td>
<td>92.5%</td>
</tr>
<tr>
<td><strong>Total Harmonic Distortion</strong></td>
<td>Typical: &lt;2%</td>
<td>Maximum: &lt;5%</td>
</tr>
<tr>
<td><strong>Output Voltage Regulation</strong></td>
<td>±2%</td>
<td>±2%</td>
</tr>
<tr>
<td><strong>Power Factor Chart</strong></td>
<td><img src="chart.png" alt="Power Factor Chart" /></td>
<td><img src="chart.png" alt="Power Factor Chart" /></td>
</tr>
</tbody>
</table>

### 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 GS8048A Power Rating Chart

- **Instantaneous Power Rating**
  - Most stringent, massive load start: **GS8048A**: 16970VA
  - Less stringent load start: **GS4048A**: 12000VA

- **Surge Power Rating**
  - Frequent “heavy duty” load requirements: **GS8048A**: 9000VA
  - Standard “real world” load requirements: **GS8048A**: 8000VA

### Radian GS8048A Efficiency Rating Chart

- **Typical Efficiency Rating**
  - Real world efficiency with variable loads: **GS8048A**: 93%

- **CEC Efficiency Rating**
  - Most stringent US rating: **GS8048A**: 92.5%