

Three Reasons to Choose the EnergyCell OPzV from OutBack Power:

1. PURPOSE-BUILT

- Batteries designed for residential or light-commercial off-grid renewable energy power demands
- Tubular gel plate design maximizes high cycle life in demanding off-grid environments
- 3,000 cycles at 50% DOD

2. EASY-TO-INSTALL AND MAINTAIN

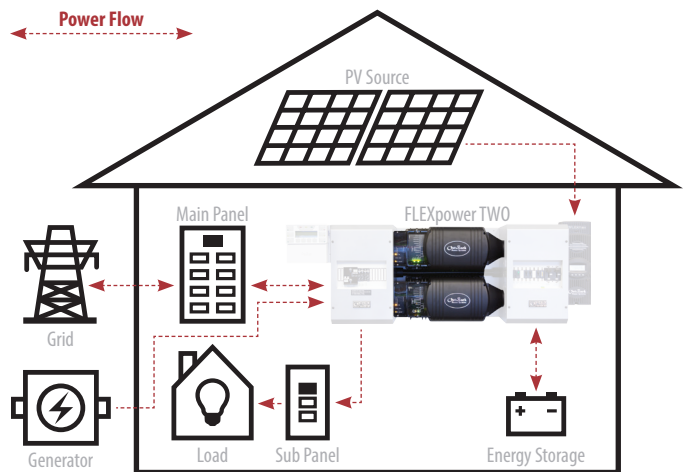
- VRLA Tubular GEL technology means no periodic watering of cells or re-torquing terminal connections
- Space-saving rack design when installed with matching rack
- Includes intercell connects and top access to cell connections
- 3 year full replacement warranty
- OPTICS RE connectivity means real-time access to critical battery performance data
- Batteries and power electronics can be installed in the same area*

3. SINGLE-BRAND SYSTEM SOLUTION

- Optimized to work seamlessly with OutBack power conversion equipment
- Ease of ordering with SystemEdge package configurations—to learn more visit www.outbackpower.com
- Single point of contact for all technical system inquiries
- Quality and reliability from OutBack Power assures customers receive the best technologies for renewable energy systems in the market today



OutBack EnergyCell OPzV Typical System Integration:



OUTBACK POWER — MASTERS OF THE OFF-GRID. FIRST CHOICE FOR THE NEW GRID.



MAKE THE POWER

- FLEXpower Integrated Systems
- Inverter/Chargers & Charge Controllers



STORE THE ENERGY

- EnergyCell RE, GH, NC and OPzV Batteries
- Battery Enclosures and Racking



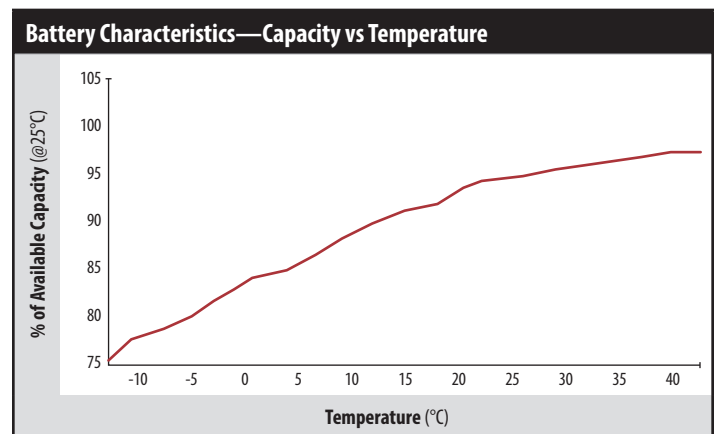
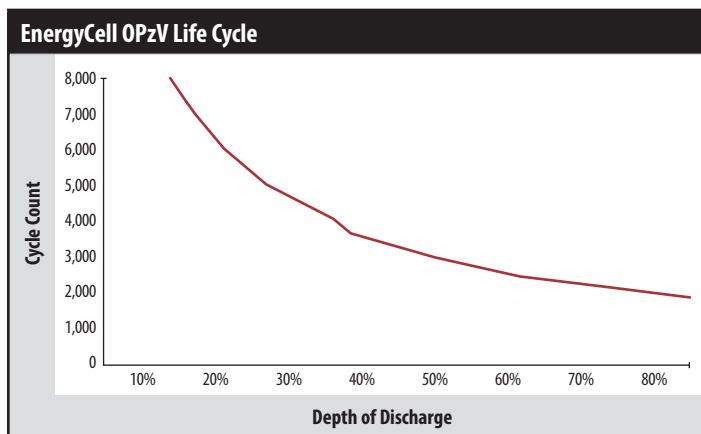
MANAGE THE SYSTEM

- OPTICS RE System Monitoring and Control
- MATE3 System Display and Communications

| EnergyCell Models: | OPzV-450 | OPzV-750 | OPzV-2000 | OPzV-3000 |
|---|--|---|---|---|
| Nominal Voltage Per Cell | 2VDC | 2VDC | 2VDC | 2VDC |
| Nominal Voltage Per System | 24VDC / 48VDC | 24VDC / 48VDC | 24VDC / 48VDC | 24VDC / 48VDC |
| Cycle Life (50% DOD, 1.75VPC) | 3000 | 3000 | 3000 | 3000 |
| Absorb Voltage (25°C)¹ | 2.45VDC | 2.45VDC | 2.45VDC | 2.45VDC |
| Absorb Time² | 2hrs | 2hrs | 2hrs | 2hrs |
| Float Voltage (25°C)¹ | 2.35VDC | 2.35VDC | 2.35VDC | 2.35VDC |
| Float Time | = absorb time | = absorb time | = absorb time | = absorb time |
| Equalize Voltage | — | — | — | — |
| Re-Bulk Voltage³ | 12VDC / 24VDC / 48VDC | 12VDC / 24VDC / 48VDC | 12VDC / 24VDC / 48VDC | 12VDC / 24VDC / 48VDC |
| Re-Float Voltage³ | 12.5VDC / 25VDC / 50VDC | 12.5VDC / 25VDC / 50VDC | 12.5VDC / 25VDC / 50VDC | 12.5VDC / 25VDC / 50VDC |
| Maximum Charge Current (Per Battery) | 100.8A | 170A | 414A | 648A |
| Operating Temperature Range (w/Temperature Compensation) | -4 to 113°F (-20 to 45°C) | -4 to 113°F (-20 to 45°C) | -4 to 113°F (-20 to 45°C) | -4 to 113°F (-20 to 45°C) |
| Optimal Operating Temperature Range | 60 to 41°F (20 to 5°C) | 60 to 41°F (20 to 5°C) | 60 to 41°F (20 to 5°C) | 60 to 41°F (20 to 5°C) |
| Temp-Comp Factor (Charging) | No change for temperatures of 10°C up to 45°C. Below monthly average 10°C, the charging voltage should be increased (-0.003V/°C per cell) for a faster recharging. | | | |
| Self-Discharge Time | 6 months @ 20°C | 6 months @ 20°C | 6 months @ 20°C | 6 months @ 20°C |
| Hardware Specification (Intercell Connects) | 70mm ² -160mm copper insulated cable | 70mm ² -185mm copper insulated cable | 95mm ² -160mm copper insulated cable | 95mm ² -160mm copper insulated cable |
| Terminal Hardware Initial Torque | 22Nm | 22Nm | 22Nm | 22Nm |
| Weight (lb/kg) | 16.71 / 28.0 | 92.57/42.0 | 213.8/97.0 | 363.8/165.0 |
| Dimensions H x D x W (in/cm)⁴ | 15.04 x 5.71 x 8.11 / 38.2 x 14.5 x 20.6 | 19.61 x 6.54 x 8.11 / 49.8 x 16.6 x 20.6 | 26.5 x 10.82 x 8.27 / 67.3 x 27.5 x 21.0 | 31.46 x 15.71 x 8.43 / 79.9 x 39.9 x 21.4 |
| Warranty⁵ | 3 years full replacement | 3 years full replacement | 3 years full replacement | 3 years full replacement |

¹ For operating temperature of 15-35°C. See owner's manual for other temperature ranges. ² Two hours maximum per day. ³ Default values for 12/24/48V systems. May need to be adjusted for site application. ⁴ Batteries to be installed with 0.5in (12.7mm) spacing minimum and free air ventilation. ⁵ See OutBack EnergyCell warranty document for full details.

| Ah Capacity (1.75VPC @ 20°C) | 8Hr | 10Hr | 12Hr | 20Hr | 24Hr | 48Hr | 72Hr | 100Hr | 120Hr | 240Hr |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| OPzV-450 | 334.24 | 348.4 | 359.76 | 389.8 | 399.84 | 434.4 | 451.44 | 463.0 | 468.0 | 482.4 |
| OPzV-750 | 567.4 | 592.9 | 613.2 | 667.4 | 685.7 | 749.3 | 780.5 | 802.0 | 813.6 | 844.8 |
| OPzV-2000 | 1387.0 | 1449.5 | 1499.0 | 1632.2 | 1677.8 | 1840.3 | 1925.3 | 1987.0 | 2017.2 | 2100.0 |
| OPzV-3000 | 2171.0 | 2264.0 | 2337.2 | 2529.4 | 2593.4 | 2813.4 | 2923.9 | 3001.0 | 3038.4 | 3141.6 |



⁶ Consult local and regional electrical code for proper installation of energy storage requirements.