

### 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

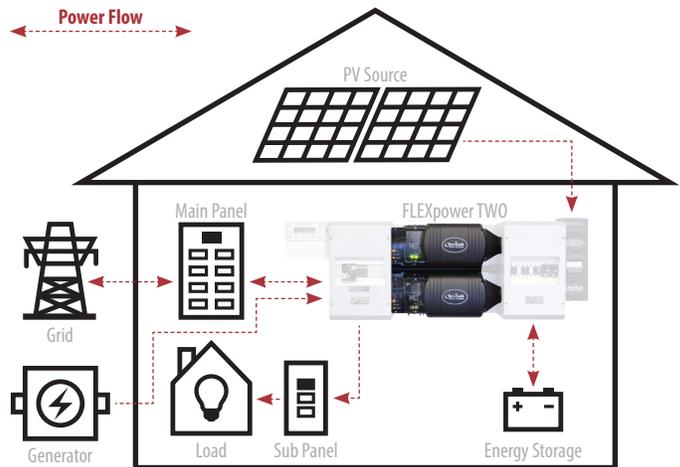
- VRLA Tubular GEL technology means no periodic watering of cells or re-torquing terminal connections
- Space-saving rack design when installed with matching rack
- Includes intercell connects and top access to cell connections
- 3 year full replacement warranty
- OPTICS RE connectivity means real-time 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](http://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



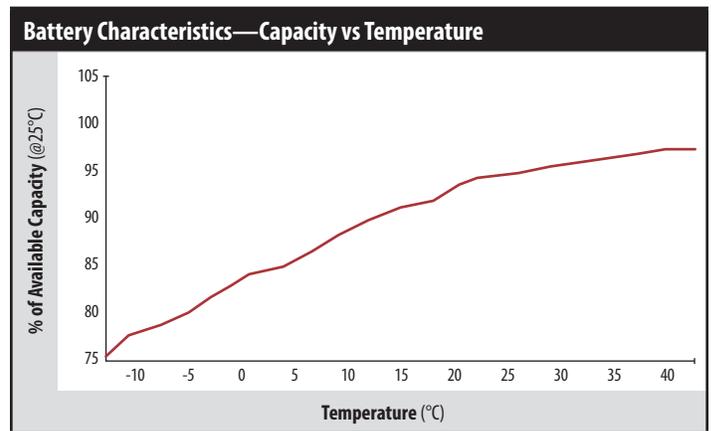
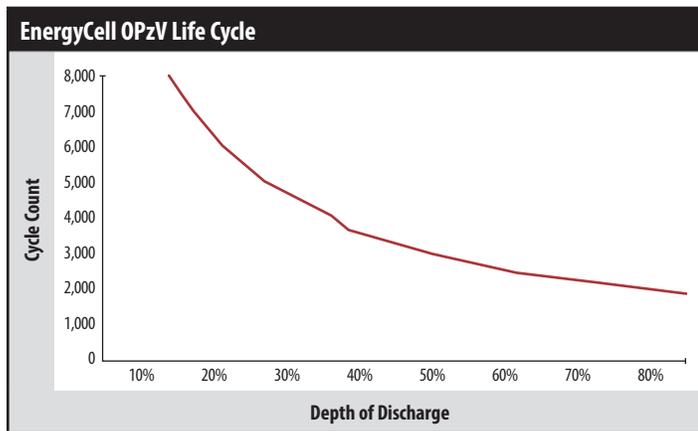
#### MANAGE THE SYSTEM

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

EnergyCell Models:	OPzV-450	OPzV-750	OPzV-2000	OPzV-3000
<b>Nominal Voltage Per Cell</b>	2VDC	2VDC	2VDC	2VDC
<b>Nominal Voltage Per System</b>	24VDC / 48VDC	24VDC / 48VDC	24VDC / 48VDC	24VDC / 48VDC
<b>Cycle Life (50% DOD, 1.75VPC)</b>	3000	3000	3000	3000
<b>Absorb Voltage (25°C)<sup>1</sup></b>	2.45VDC	2.45VDC	2.45VDC	2.45VDC
<b>Absorb Time<sup>2</sup></b>	2hrs	2hrs	2hrs	2hrs
<b>Float Voltage (25°C)<sup>1</sup></b>	2.35VDC	2.35VDC	2.35VDC	2.35VDC
<b>Float Time</b>	= absorb time	= absorb time	= absorb time	= absorb time
<b>Equalize Voltage</b>	—	—	—	—
<b>Re-Bulk Voltage<sup>3</sup></b>	12VDC / 24VDC / 48VDC	12VDC / 24VDC / 48VDC	12VDC / 24VDC / 48VDC	12VDC / 24VDC / 48VDC
<b>Re-Float Voltage<sup>3</sup></b>	12.5VDC / 25VDC / 50VDC	12.5VDC / 25VDC / 50VDC	12.5VDC / 25VDC / 50VDC	12.5VDC / 25VDC / 50VDC
<b>Maximum Charge Current (Per Battery)</b>	100.8A	170A	414A	648A
<b>Operating Temperature Range (w/Temperature Compensation)</b>	-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)
<b>Optimal Operating Temperature Range</b>	68 to 41°F (20 to 5°C)	68 to 41°F (20 to 5°C)	68 to 41°F (20 to 5°C)	68 to 41°F (20 to 5°C)
<b>Temp-Comp Factor (Charging)</b>	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.			
<b>Self-Discharge Time</b>	6 months @ 20°C	6 months @ 20°C	6 months @ 20°C	6 months @ 20°C
<b>Hardware Specification (Intercell Connects)</b>	70mm <sup>2</sup> -160mm copper insulated cable	70mm <sup>2</sup> -185mm copper insulated cable	95mm <sup>2</sup> -160mm copper insulated cable	95mm <sup>2</sup> -160mm copper insulated cable
<b>Terminal Hardware Initial Torque</b>	22Nm	22Nm	22Nm	22Nm
<b>Weight (lb/kg)</b>	16.71 / 28.0	92.57/42.0	213.8/97.0	363.8/165.0
<b>Dimensions H x D x W (in/cm)<sup>4</sup></b>	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
<b>Warranty<sup>5</sup></b>	3 years full replacement	3 years full replacement	3 years full replacement	3 years full replacement

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

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



<sup>6</sup> Consult local and regional electrical code for proper installation of energy storage requirements.