

### Three Reasons to Choose the EnergyCell RE Series from OutBack Power:

#### 1. PURPOSE-BUILT

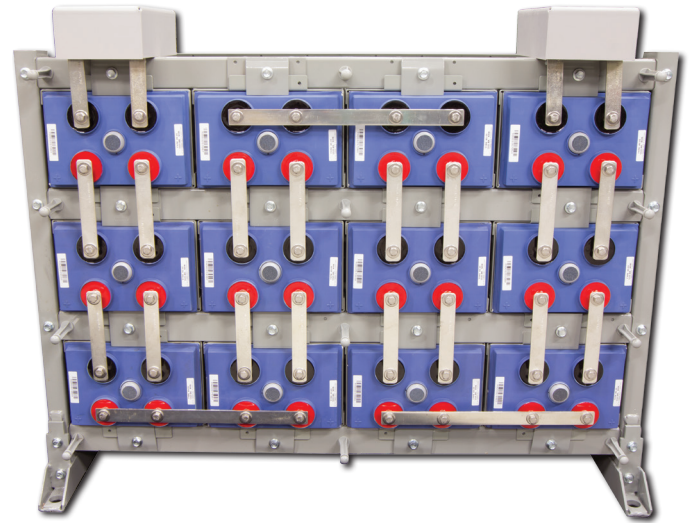
- Designed for off-grid or grid-tied battery backup residential and light commercial applications
- 1,800 cycles @ 50% depth of discharge
- Space-saving 4x6 standard 48V system configuration
- Battery frame design allows for maximum heat dissipation
- 100% out of box initial battery capacity

#### 2. EASY-TO-INSTALL AND MAINTAIN

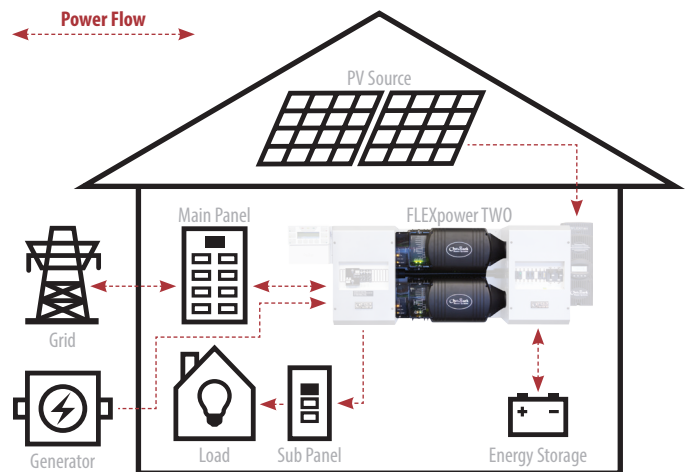
- VRLA-AGM technology means 99% gas recombination efficient, no periodic watering of cells, no re-torquing of terminal connections, and no equalization charge under standard operating conditions.
- Steel module design, cells factory installed in permanent steel modules with 1 or 2 cells per can, allows for ease of replacement
- Standard top termination, optional side termination
- Clear flame retardant front safety shields allow for easy visual inspection without removal of cells
- Flame-retardant battery jars for increased safety
- 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 RE High Capacity Series 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



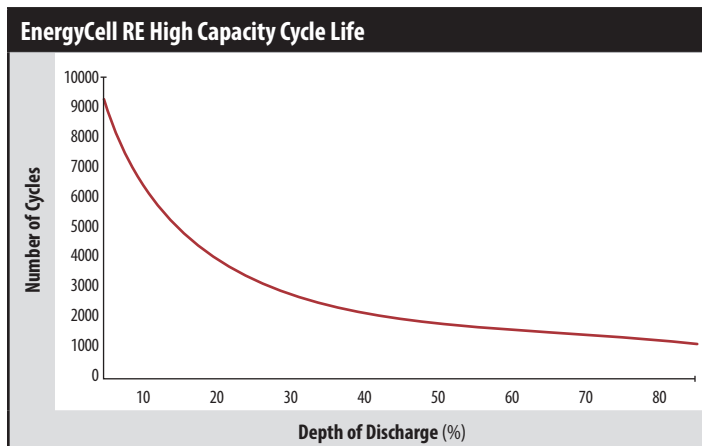
#### MANAGE THE SYSTEM

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

EnergyCell Models:	800RE	1100RE	1300RE	1600RE	2000RE	2200RE	2700RE
Nominal Voltage Per Cell	2V	2V	2V	2V	2V	2V	2V
Nominal Voltage Per System	24VDC / 48VDC	24VDC / 48VDC	24VDC / 48VDC	24VDC / 48VDC	24VDC / 48VDC	24VDC / 48VDC	24VDC / 48VDC
Cycle Life (50% DOD, 1.75VPC)	1800	1800	1800	1800	1800	1800	1800
Absorb Voltage (25°C) <sup>1</sup>	55.6VDC	55.6VDC	55.6VDC	55.6VDC	55.6VDC	55.6VDC	55.6VDC
Absorb Time <sup>2</sup>	2hrs	2hrs	2hrs	2hrs	2hrs	2hrs	2hrs
Float Voltage (25°C) <sup>1</sup>	54VDC	54VDC	54VDC	54VDC	54VDC	54VDC	54VDC
Float Time	= absorb time	= absorb time	= absorb time	= absorb time	= absorb time	= absorb time	= absorb time
Equalize Voltage	2.32VDC	2.32VDC	2.32VDC	2.32VDC	2.32VDC	2.32VDC	2.32VDC
Re-Bulk Voltage <sup>3</sup>	24VDC / 48VDC	24VDC / 48VDC	24VDC / 48VDC	24VDC / 48VDC	24VDC / 48VDC	24VDC / 48VDC	24VDC / 48VDC
Re-Float Voltage <sup>3</sup>	12.5VDC / 25VDC / 50VDC	12.5VDC / 25VDC / 50VDC	12.5VDC / 25VDC / 50VDC	12.5VDC / 25VDC / 50VDC	12.5VDC / 25VDC / 50VDC	12.5VDC / 25VDC / 50VDC	12.5VDC / 25VDC / 50VDC
Maximum Charge Current (Per Battery)	148.75A	212.5A	250A	300A	375A	400A	500A
Operating Temperature Range (w/Temperature Compensation)	-4 to 122°F (-20 to 50°C)	-4 to 122°F (-20 to 50°C)	-4 to 122°F (-20 to 50°C)	-4 to 122°F (-20 to 50°C)	-4 to 122°F (-20 to 50°C)	-4 to 122°F (-20 to 50°C)	-4 to 122°F (-20 to 50°C)
Optimal Operating Temperature Range	68 to 86°F (20 to 30°C)	68 to 86°F (20 to 30°C)	68 to 86°F (20 to 30°C)	68 to 86°F (20 to 30°C)	68 to 86°F (20 to 30°C)	68 to 86°F (20 to 30°C)	68 to 86°F (20 to 30°C)
Temp-Comp Factor (Charging)	—	—	—	—	—	—	—
Self-Discharge Time	6 months @ 25°C	6 months @ 25°C	6 months @ 25°C	6 months @ 25°C	6 months @ 25°C	6 months @ 25°C	6 months @ 25°C
Terminal Type	M8 bolt, lock, flat washer	M8 bolt, lock, flat washer	M8 bolt, lock, flat washer	M8 bolt, lock, flat washer	M8 bolt, lock, flat washer	M8 bolt, lock, flat washer	M8 bolt, lock, flat washer
Terminal Hardware Initial Torque	88in-lbs	88in-lbs	88in-lbs	88in-lbs	88in-lbs	88in-lbs	88in-lbs
Weight (lb/kg)	2262 / 1189.3	3797 / 1722.3	4330 / 1964.1	5082 / 2305.2	6464 / 2932.0	6707 / 3042.2	8266 / 3749.4
48V System Dimensions H x D x W (in/cm) <sup>4</sup>	43.44 x 23.5 x 39.40 / 110 x 59.69 x 10	60.7 x 23.5 x 37.15 / 154.2 x 59.69 x 94.36	77.96 x 26.25 x 33.32 / 198.0 x 66.68 x 84.63	77.96 x 26.25 x 33.32 / 198.0 x 66.68 x 84.63	74.92 x 27.46 x 44.37 / 190.3 x 69.75 x 11.27	77.96 x 26.25 x 56.37 / 198.0 x 66.68 x 14.32	74.92 x 27.46 x 56.37 / 190.3 x 69.75 x 143.2
Warranty <sup>5</sup>	3 years	3 years	3 years	3 years	3 years	3 years	3 years
48V Standard System Configuration <sup>**</sup>	6w x 4h	4w x 6h	3w x 8h	3w x 8h	4w x 6h	3w x 8h	4w x 6h

<sup>1</sup> If using both inverter and charge controller, set the charge controller to 0.4V higher (0.2V for 24V systems) to give the charge controller charging priority. <sup>2</sup> Will always be 2 hours if charge rate is 10% of battery bank amp-hours. For higher or lower charge rates, use the formula  $AR \div (CR \times 0.5) = \text{absorb time}$  where AR = amp-hours remaining after absorb voltage is first reached (10% of battery bank Ah) and Cr = amp-hours of current charge. <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. <sup>6</sup> Equalize in the following conditions if float voltage of any cell is less than 2.17VPC or the float voltage range after 6 months is outside the  $\pm 0.08V$  of nominal setting, 24hrs after current stabilization, (3hrs without charge), at ambient temperatures from 70 to 90°F (21 to 32°C). <sup>\*\*</sup> Other configurations available with longer lead times. Ask your OutBack distributor for details.

Discharge in Hours:	2V Ampere Hour Capacity to 1.75 Volts Per Cell at 77°F (25°C)					
	1	5	8	20	24	100
EnergyCell 800RE	347	555	600	672	676	810
EnergyCell 1100RE	495	790	864	960	984	1150
EnergyCell 1300RE	575	920	1008	1148	1176	1340
EnergyCell 1600RE	690	1105	1208	1378	1416	1600
EnergyCell 2000RE	886	1390	1512	1716	1776	2070
EnergyCell 2200RE	920	1470	1616	1836	1872	2140
EnergyCell 2700RE	1182	1850	2016	2288	2352	2770



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