EnergyCell RE Series

VRLA BATTERIES FOR RENEWABLE ENERGY STORAGE

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

1. PURPOSE-BUILT

- Batteries designed for residential or light-commercial off-grid renewable energy power demands
- High density, thick pasted plates allow for high cycle life
- UL-recognized component
- AGM technology provides efficient gas recombination up to 99%
- Thermally welded case to cover bond prevents leakage

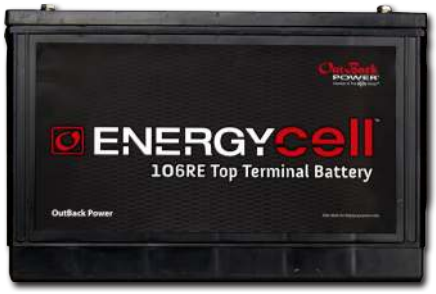
2. EASTY-TO-INSTALL AND MAINTAIN

- VRLA-AGM technology means 99% gas recombination efficient, no periodic watering of cells, no retorquing of terminal connections, and no equalization charge under standard operating conditions
- Modular space-saving design when installed with IBR rack (200RE only)
- IBR racking included with intercell connects and front access to cell connections
- 2 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[1]

3. SINGLE-BRAND SYSTEM SOLUTION

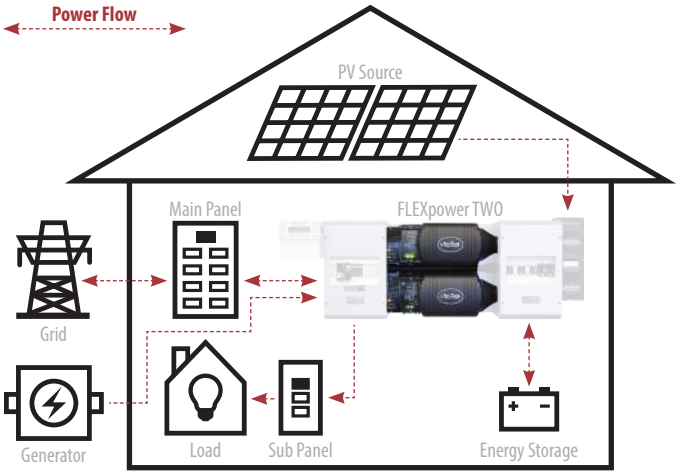
- Optimized to work seamlessly with OutBack power conversion equipment
- Ease of ordering with SystemEdge package configurations—to learn more visit www.outbackpower.com
- Single point of contact for all technical system inquiries
- Quality and reliability from OutBack Power assures customers receive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

Front Terminal



Top Terminal

OutBack EnergyCell RE 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

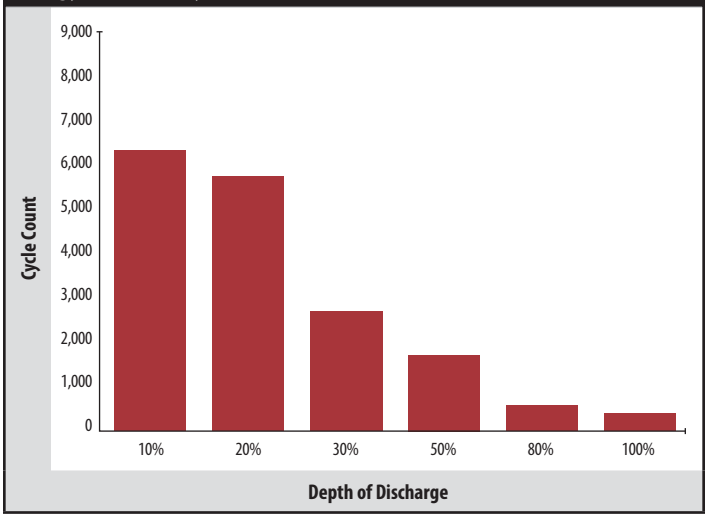
EnergyCell RE Front Terminal/Top Terminal SPECIFICATIONS

Models:	EnergyCell 106RE (Top Terminal)	EnergyCell 200RE (Front Terminal)
Cells per Unit	6	6
Voltage per Unit	12VDC	12VDC
Operating Temperature Range (w/ temperature compensation)	**Discharge**: -40 to 71°C (-40 to 160°F) **Charge**: -23 to 60°C (-10 to 140°F)	**Discharge**: -40 to 71°C (-40 to 160°F) **Charge**: -23 to 60°C (-10 to 140°F)
Optimal Operating Temperature Range	23 to 27°C (74 to 80°F)	23 to 27°C (74 to 80°F)
Float Charging Voltage	13.5 to 13.8VDC / unit average at 25°C (77°F)	13.62VDC / unit average at 25°C (77°F)
Absorbed Voltage	14.4VDC, unit average at 25°C (77°F)	14.4VDC / unit average at 25°C (77°F)
Maximum Charge Current	30.0A	53.40A
Self Discharge	Battery can be stored up to 6 months at 25°C (77°F) before a freshening charge is required. Batteries stored at temperatures greater than 25°C (77°F) will require recharge sooner than batteries stored at lower temperatures.	
Temperature Compensation Factor (Charging)	5mV per °C per cell (2V)	5mV per °C per cell (2V)
Terminal	Copper alloy insert terminal to accept ¼"-20 UNC bolt	Threaded copper alloy insert terminal to accept ¼"-20 UNC bolt
Terminal Hardware Initial Torque	110in-lbs (12.4Nm)	110in-lbs (12.4Nm)
Weight	69 / 31.3	131 / 60
Dimensions H x D x W (in/cm)*	8.52 x 13.42 x 6.80 / 21.64 x 34.09 x 17.27	12.60 x 22.01 x 4.95 / 32.0 x 55.9 x 12.6

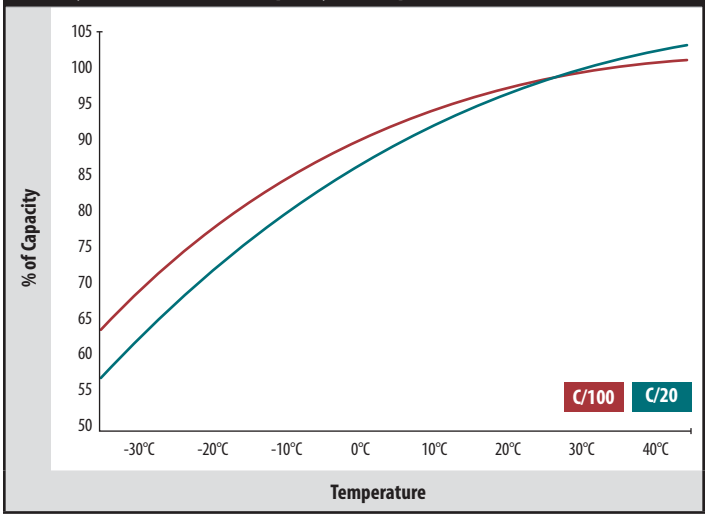
	12V Ampere Hour Capacity to 1.75 Volts Per Cell at 77°F (25°C)										
Discharge in Hours:	1	2	3	4	5	8	12	20	24	48	100
EnergyCell 106RE	49.2	61.5	70	76	80.6	89	94.2	100	101	102.6	106
EnergyCell 200RE	103.0	120.0	132.0	139.6	145.5	158.4	168.0	178.0	181.4	189.6	200.0

*Batteries to be installed with 0.5 in (12.7 mm) spacing minimum and free air ventilation.

EnergyCell RE Life Cycle



Battery Characteristics—Capacity vs Temperature



[1]Consult local and regional electrical code for proper installation of energy storage requirements.