

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. 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
- 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*

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

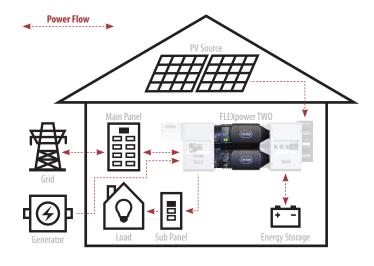




Front Terminal

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 Models:	106RE (Top Terminal)	200RE (Front Terminal)						
Cells Per Unit	6	6						
Nominal Voltage	12VDC	12VDC						
Cycle Life (50% DOD, 1.75VPC)	1800	1800						
Absorb Voltage (25°C) ¹	14.4VDC	14.4VDC						
Absorb Time ²	2hrs	2hrs						
Float Voltage (25°C)¹	13.6VDC	13.6VDC						
Float Time	= absorb time	= absorb time						
Equalize Voltage	Not required	Not required						
Re-Bulk Voltage³	12VDC/24VDC/48VDC	12VDC / 24VDC / 48VDC						
Re-Float Voltage ³	12.5VDC/25VDC/50VDC	12.5VDC/25VDC/50VDC						
Maximum Charge Current (Per Battery)	30A	53.4A						
Operating Temperature Range (w/Temperature Compensation)	Discharge : -40 to 160°F (-40 to 71°C) Charge : -10 to 140°F (-23 to 60°C)	Discharge : -40 to 160°F (-40 to 71°C) Charge : -10 to 140°F (-23 to 60°C)						
Optimal Operating Temperature Range	74 to 80°F (23 to 27°C)	74 to 80°F (23 to 27°C)						
Temp-Comp Factor (Charging)	5mV per °C per cell (2V)	5mV per °C per cell (2V)						
Self-Discharge Time	Batteries can be stored up to 6 months at 25°C (77°F) before a freshening charge is required. Batteries stored at temperature greater than 25°C (77°F) will require recharge sooner than batteries stored at lower temperatures.							
Terminal Type	Threaded 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 (lb/kg)	69/31.3	131/60						
Dimensions H x D x W (in/cm) ⁴	8.52 x 13.42 x 6.80 / 21.64 x 34.09 x 12.27	12.60 x 22.01 x 4.95 / 32.0 x 55.9 x 12.6						
Warranty⁵	U.S. and Canada: 2 year full replacement International: 1 year	U.S. and Canada: 2 year full replacement International: 1 year						
Accessories	Ships with hardware kit	Ships with interconnect bars, terminal covers and hardware kit						

¹ 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.

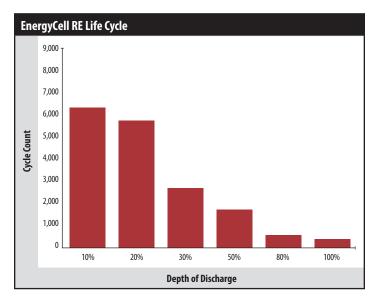
2 Will always be 2 hours if charge rate is 10% of battery bank amp-hours. For higher or lower charge rates, use the formula AR + (CR x 0.5) = absorb time where AR = amp-hours remaining after absorb voltage is first reached (10% of battery bank Ah) and Cr = amp-hours of current charge.

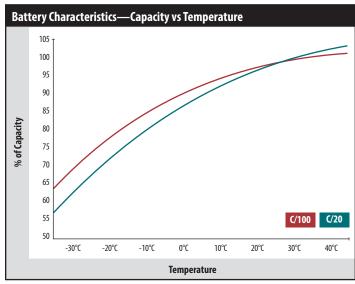
3 Default values for 12/24/48V systems. May need to be adjusted for site application.

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

5 ee OutBack EnergyCell warranty document for full details.

	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





^{*}Consult local and regional electrical code for proper installation of energy storage requirements.