

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

1. PURPOSE-BUILT

- Batteries designed for residential or light-commercial off-grid or self-consumption renewable energy power demands
- High round trip efficiency—up to 95%
- Partial State of Charge Operation insures long life—increases cycle life versus traditional VRLA batteries
- High amperage recharge acceptance allows for fast recharge
- High carbon surface area on negative active material allows for increased conductivity

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 (200NC 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

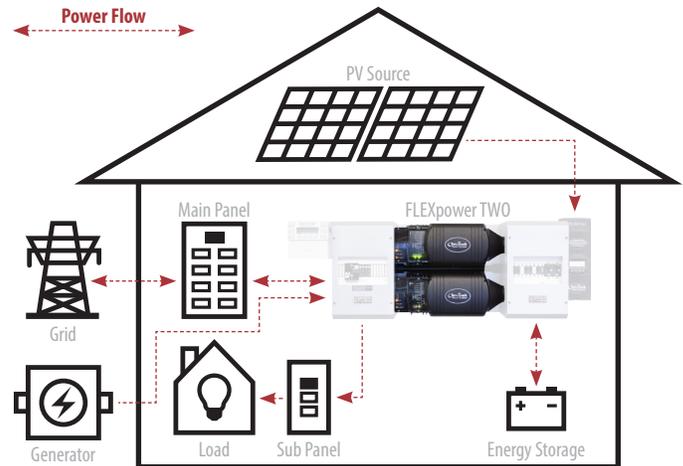


Front Terminal



Top Terminal

OutBack EnergyCell NC 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

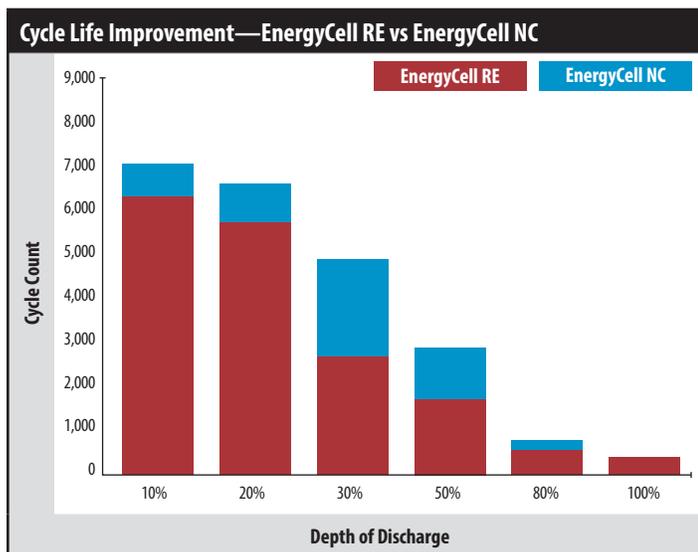
- OPTICS RE System Monitoring and Control
- MATE3 System Display and Communications

EnergyCell Models:	106NC (Top Terminal)	200NC (Front Terminal)
Cells Per Unit	6	6
Nominal Voltage	12VDC	12VDC
Cycle Life (50% DOD, 1.75VPC)	2600	2600
Absorb Voltage (25°C)¹	14.4VDC	14.4VDC
Absorb Time²	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 Voltage³	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

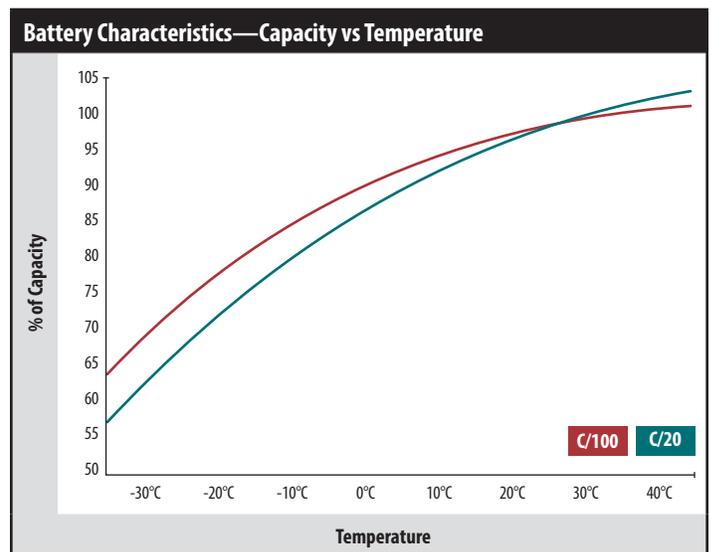
¹ If using both inverter and charge controller, set the charge controller to 0.4V higher (0.2V for 24V systems) to give the charge controller charging priority. ² Will always be 2 hours if charge rate is 10% of battery bank amp-hours. For higher or lower charge rates, use the formula $AR \div (CR \times 0.5) = \text{absorb time}$ where AR = amp-hours remaining after absorb voltage is first reached (10% of battery bank Ah) and CR = amp-hours of current charge. 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.

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 106NC	49.2	61.5	70	76	80.6	89	94.2	100	101	102.6	106
EnergyCell 200NC	103	120	132	139.6	145.5	158.4	168	178	181.4	189.6	200



Note: EnergyCell NC assumes partial state of charge (PSoC) operation at 50-80%.



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