

EnergyCell NC Series

NANO-CARBON, PARTIAL STATE OF CHARGE TECHNOLOGY

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 retorquing 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 area¹

3. SINGLE-BRAND SYSTEM SOLUTION

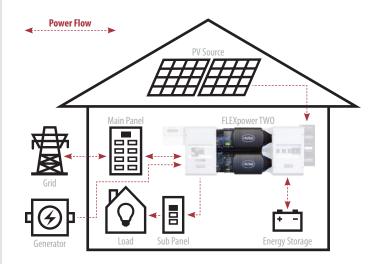
- Optimized to work seamlessly with OutBack power conversion equipment
- Ease of ordering with SystemEdge package configurations to learn more visit www.outbackpower.com
- · Single point of contact for all technical system inquiries
- Quality and reliability from OutBack Power assures customers receive 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

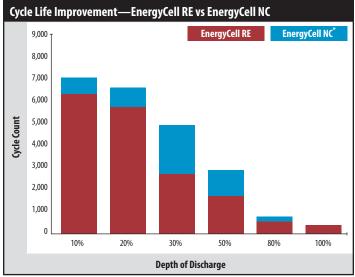
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EnergyCell NC Front Terminal/Top Terminal SPECIFICATIONS

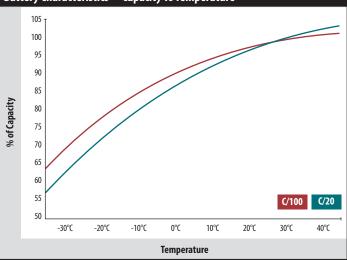
| Models: | EnergyCell 106NC (Top Terminal) | EnergyCell 200NC (Front Terminal) | | | | | | |
|---|--|--|--|--|--|--|--|--|
| Cells per Unit | 6 | 6 | | | | | | |
| Voltage per Unit | 12VDC | 12VDC | | | | | | |
| Operating Temperature Range (w/ Temperature Compensation) | Discharge : -40 to 71°C (-40 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) | | | | | | |
| Recommended Maximum Charging Current Limit per String | 30ADC | 53ADC | | | | | | |
| Float Charging Voltage | 13.62VDC unit average at 25°C (77°F) | 13.62VDC / unit average at 25°C (77°F) | | | | | | |
| Equalization and Cycle Service Charging Limits | 14.4VDC unit average at 25°C (77°F) | 14.4VDC / unit average at 25°C (77°F) | | | | | | |
| 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 ℃ per cell (2V) | | | | | | |
| Terminal | Threaded copper alloy insert terminal to accept ¼"-20 UNC bolt | Threaded copper alloy insert terminal to accept 1/4"-20 UNC bolt | | | | | | |
| Terminal Hardware Initial Torque | 110in-lbs (12.4Nm) | 110in-lbs (12.4Nm) | | | | | | |
| Weight (lb/kg) | 69/31 | 131/60 | | | | | | |
| Dimensions H x D x W (in/cm)* | 8.52 x 13.42 x 6.80 / 216.4 x 340.9 x 172.7 | 12.60 x 22.01 x 4.95 / 32.0 x 55.09 x 12.6 | | | | | | |

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

| | 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 | |







* Assumes partial state of charge (PSoC) operation at 50-80%.

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

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