

# EnergyCell PLC Series ADVANCED PURE LEAD CARBON BATTERY

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

### 1. PURPOSE-BUILT

- · Batteries designed for residential or light-commercial off-grid, backup or self-consumption renewable energy power demands
- 3,000 cycles at 50% DOD
- Pure lead extends the life of the battery versus traditional VRLA and allows for increased float capability for backup applications
- Advanced carbon technology reduces the effect of sulfation and is compatible with Partial State of Charge (PSoC) operation

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

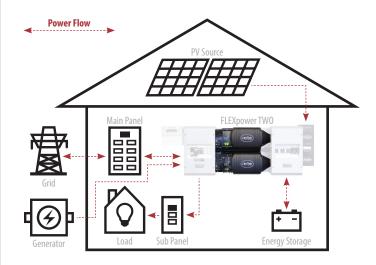
- PLC technology means 99% gas recombination efficient, no periodic watering of cells, no re-torquing of terminal connections, and no equalization charge under standard operating conditions
- Modular space-saving design when installed with IBR rack
- 2 year shelf life
- OPTICS RE connectivity means real-time access to critical battery performance data
- Batteries and power electronics can be installed in the same area\*
- At end of life, lead acid batteries are 96% recyclable
- Full replacement warranty—6 year domestic, 4-5 year global

# 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



# **OutBack EnergyCell PLC 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

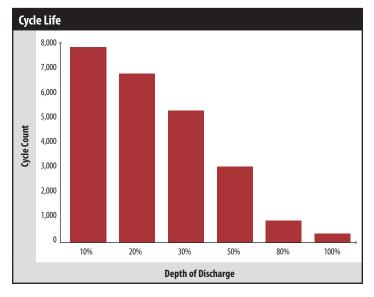
- OPTICS RE System Monitoring and Control
- MATE3 System Display and Communications

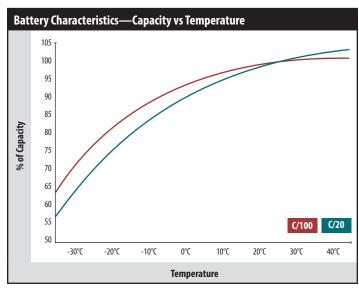
EnergyCell Models:	200PLC								
Cells Per Unit	6								
Nominal Voltage	12VDC								
<b>Cycle Life</b> (50% DOD, 1.75VPC)	3000								
Absorb Voltage (25°C) <sup>1</sup>	14.1VDC								
Absorb Time <sup>2</sup>	6hrs (0.15C)								
Float Voltage (25°C)¹	13.5VDC								
Float Time	6hrs (0.15C)								
Equalize Voltage and Charge Frequency	14.1								
Re-Bulk Voltage³	14.1								
Re-Float Voltage <sup>3</sup>	13.5								
Maximum Charge Current (Per Battery)	40A								
Operating Temperature Range (w/Temperature Compensation)	<b>Discharge</b> : -40 to 149°F (-40 to 65°C)								
Optimal Operating Temperature Range	68 to 86°F (20 to 30°C)								
Temp-Comp Factor (Charging)	-4mV per °C per cell (2V)								
Self-Discharge Time	Batteries can be stored up to 24 months at 25°C (77°F) before a freshening charge is required. For higher temperatures the time interval will be shorter								
Terminal Type	T11								
Terminal Hardware Initial Torque	11 to 14.7Nm								
Weight (lb/kg)	130/59								
Dimensions H x D x W (in/cm) <sup>4</sup>	12.6 x 22 x 4.92 / 32 x 55.88 x 12.50								
Warranty <sup>s</sup>	Domestic: 6 year full replacement Global: 4-5 year full replacement								
Accessories	Ships with interconnect bars, terminal covers and hardware kit								

**Note:** PC-ABS flame retardant jar and cover to UL94V-0 <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 ÷ (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.

<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.

	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 200PLC	104	120	132	140	145	160	168	178	182	191	200	





 $<sup>^{*}</sup>$  Consult local and regional electrical code for proper installation of energy storage requirements.