

### Three Reasons to Choose the EnergyCell FLA from OutBack Power:

#### 1. PURPOSE-BUILT

- Batteries designed for residential or light-commercial off-grid renewable energy power demands
- Rugged, deep cycle cell construction delivers superior performance and longevity
- Heavy-duty internal connectors and terminal post structures enable unmatched electrical efficiency and durability
- Proprietary plate separators guard against short-circuit to ensure reliability
- Trademarked electrolyte level indicators signal when watering service is required—making service easy and predictable

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

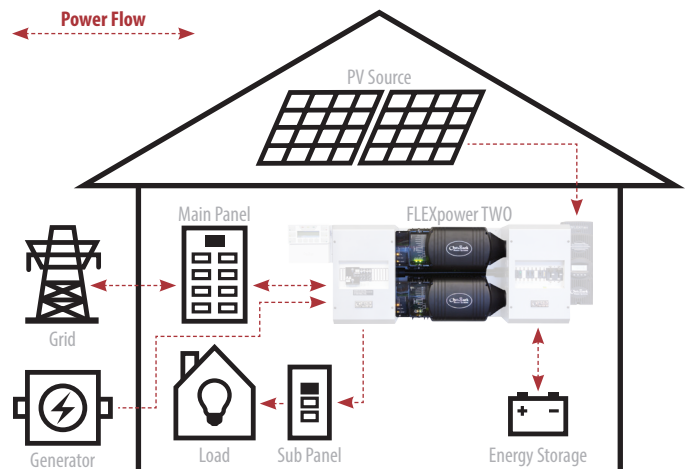
- Proprietary cell construction reduces water loss during charging service
- Additional fluid headspace above battery plates extends performance between watering service intervals
- 2 to 4 year full replacement warranty
- OPTICS RE connectivity means real-time access to critical battery performance data

#### 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](http://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 FLA 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:	290FLA	525FLA	1400FLA
<b>Cells Per Unit</b>	3	3	1
<b>Nominal Voltage</b>	6VDC	6VDC	2VDC
<b>Cycle Life (50% DOD, 1.75VPC)</b>	1200	1550	2800
<b>Absorb Voltage (25°C)</b>	7.26VDC	7.26VDC	2.42VDC
<b>Absorb Time<sup>1</sup></b>	2hrs	2hrs	2hrs
<b>Float Voltage (25°C)</b>	6.75VDC	6.75VDC	2.25VDC
<b>Float Time</b>	= absorb time	= absorb time	= absorb time
<b>Equalize Charge Frequency</b>	Equalize charge every 30 days, systems that are regularly discharged below 50% of stored capacity should be equalized every 14 days.		
<b>Re-Bulk Voltage<sup>2</sup></b>	12VDC / 24VDC / 48VDC	12VDC / 24VDC / 48VDC	12VDC / 24VDC / 48VDC
<b>Re-Float Voltage<sup>2</sup></b>	12.5VDC / 25VDC / 50VDC	12.5VDC / 25VDC / 50VDC	12.5VDC / 25VDC / 50VDC
<b>Maximum Charge Current (Per Battery)</b>	60A	100A	275A
<b>Operating Temperature Range (w/Temperature Compensation)<sup>3</sup></b>	-40 to 120°F (-4 to 49°C)	-40 to 120°F (-4 to 49°C)	-40 to 120°F (-4 to 49°C)
<b>Optimal Operating Temperature Range</b>	40 to 80°F (4 to 27°C)	40 to 80°F (4 to 27°C)	40 to 80°F (4 to 27°C)
<b>Temp-Comp Factor (Charging)</b>	±3mV per °C per cell	±3mV per °C per cell	±3mV per °C per cell
<b>Self-Discharge Time</b>	Fully charged batteries that are stored at a temperature of 80°F (27°C) will self-discharge at a rate of 3.5% per week.		
<b>Terminal Type</b>	Standard type with stainless steel	Standard type with stainless steel	Standard type with stainless steel insert terminal
<b>Terminal Hardware Initial Torque<sup>4</sup></b>	Stainless thread, 100 to 120in-lbs (11 to 14Nm)	Stainless thread, 100 to 120in-lbs (11 to 14Nm)	Stainless thread, 90 to 105in-lbs (10.7 to 11.9Nm)
<b>Weight (lb/kg)</b>	63 / 28.6	122 / 55.3	136 / 62
<b>Dimensions H x D x W (in/cm)<sup>5</sup></b>	10.94 x 7.06 x 10.25/27.8 x 17.9 x 26.0	16.13 x 7.19 x 12.38/41.0 x 18.3 x 31.4	25.75 x 6.56 x 7.56/65.4 x 16.7 x 19.2
<b>Warranty<sup>6</sup></b>	2 years full replacement	2 years full replacement	4 years full replacement
<b>Equalize Voltage</b>	7.74VDC	7.74VDC	2.58VDC
<b>Specific Gravity</b>	<b>Full charge specific gravity (100% state of charge): 1.275    Full discharge specific gravity (100% depth of discharge): 1.125</b>		
<b>Vent Cap</b>	Bayonet	Bayonet	Water-Miser
<b>PROeye™ Electrolyte Level Indicator</b>	No	Yes	No

<sup>1</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  $AR \div (CR \times 0.5) =$  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>2</sup> Default values for 12/24/48V systems. May need to be adjusted for site application.    <sup>3</sup> Maintain a state of charge greater than 60% when operating flooded lead-acid batteries at temperatures below 32°F (0°C).

<sup>4</sup> Do not over-torque terminals. Over-torque can result in terminal damage, breakage, terminal meltdown or fire.    <sup>5</sup> Dimensional height specification references to the tallest point on the battery container (ex: height dimension with handle or terminal).

<sup>6</sup> See OutBack EnergyCell warranty document for full details.

Discharge in Hours:	Ampere Hour Capacity to 1.75 Volts Per Cell at 20°C					
	1	3	4	5	24	100
<b>EnergyCell 290FLA</b>	144	172	197	225	251	290
<b>EnergyCell 525FLA</b>	247	298	343	395	445	525
<b>EnergyCell 1400FLA</b>	580	725	860	1000	1200	1400

