

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

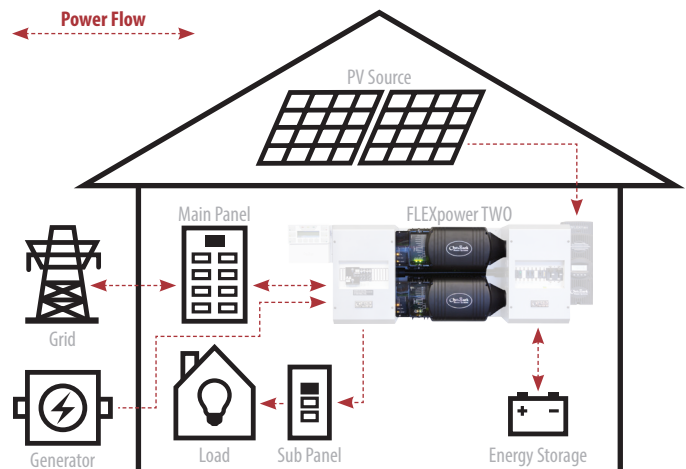
- Proprietary cell construction reduces water loss during charging service
- Additional fluid headspace above battery plates extends performance between watering service intervals
- 2 to 4 year full replacement warranty
- OPTICS RE connectivity means real-time access to critical battery performance data

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
- 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
Cells Per Unit	3	3	1
Nominal Voltage	6VDC	6VDC	2VDC
Cycle Life (50% DOD, 1.75VPC)	1200	1550	2800
Absorb Voltage (25°C)	7.26VDC	7.26VDC	2.42VDC
Absorb Time¹	2hrs	2hrs	2hrs
Float Voltage (25°C)	6.75VDC	6.75VDC	2.25VDC
Float Time	= absorb time	= absorb time	= absorb time
Equalize Charge Frequency	Equalize charge every 30 days, systems that are regularly discharged below 50% of stored capacity should be equalized every 14 days.		
Re-Bulk Voltage²	12VDC / 24VDC / 48VDC	12VDC / 24VDC / 48VDC	12VDC / 24VDC / 48VDC
Re-Float Voltage²	12.5VDC / 25VDC / 50VDC	12.5VDC / 25VDC / 50VDC	12.5VDC / 25VDC / 50VDC
Maximum Charge Current (Per Battery)	60A	100A	275A
Operating Temperature Range (w/Temperature Compensation)³	-40 to 120°F (-4 to 49°C)	-40 to 120°F (-4 to 49°C)	-40 to 120°F (-4 to 49°C)
Optimal Operating Temperature Range	40 to 80°F (4 to 27°C)	40 to 80°F (4 to 27°C)	40 to 80°F (4 to 27°C)
Temp-Comp Factor (Charging)	±3mV per °C per cell	±3mV per °C per cell	±3mV per °C per cell
Self-Discharge Time	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.		
Terminal Type	Standard type with stainless steel	Standard type with stainless steel	Standard type with stainless steel insert terminal
Terminal Hardware Initial Torque⁴	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)
Weight (lb/kg)	63 / 28.6	122 / 55.3	136 / 62
Dimensions H x D x W (in/cm)⁵	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
Warranty⁶	2 years full replacement	2 years full replacement	4 years full replacement
Equalize Voltage	7.74VDC	7.74VDC	2.58VDC
Specific Gravity	Full charge specific gravity (100% state of charge): 1.275 Full discharge specific gravity (100% depth of discharge): 1.125		
Vent Cap	Bayonet	Bayonet	Water-Miser
PROeye™ Electrolyte Level Indicator	No	Yes	No

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

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

⁶ 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
EnergyCell 290FLA	144	172	197	225	251	290
EnergyCell 525FLA	247	298	343	395	445	525
EnergyCell 1400FLA	580	725	860	1000	1200	1400

