

EnergyCell FLA FLOODED LEAD ACID BATTERIES

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

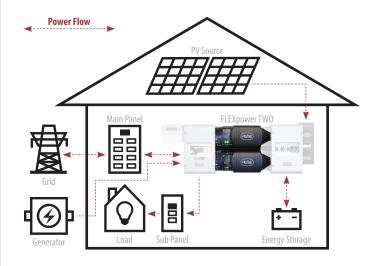
- Proprietary cell construction reduces water loss during charging service
- Additional fluid headspace above battery plates extends performance between watering service intervals
- 2 to 4 year full replacement warranty
- OPTICS RE connectivity means real-time access to critical battery performance data

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

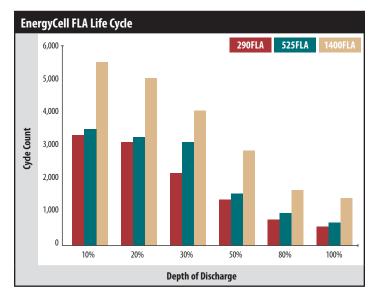


MANAGE THE SYSTEM

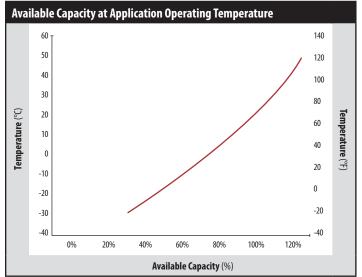
- OPTICS RE System Monitoring and Control
- MATE3 System Display and Communications

Models:	EnergyCell 290FLA	EnergyCell 525FLA	EnergyCell 1400FLA			
Cells Per Unit	3	3	1			
Voltage Per Unit	6V	6V	2V			
Operating Temperature Range ¹	-40°F to 120°F (-4°C to 49°C)	-40°F to 120°F (-4°C to 49°C)	-40°F to 120°F (-4°C to 49°C)			
Optimal Operating Temperature Range	40°F to 80°F (4°C to 27°C)	40°F to 80°F (4°C to 27°C)	40°F to 80°F (4°C to 27°C)			
Specific Gravity	Full charge specific gravity (100% state of charge): 1.275 Full discharge specific gravity (100% depth of discharge): 1.125					
Float Charge Voltage (Unit Average 77°F)	6.75VDC	6.75VDC	2.25VDC			
Absorbed Voltage	7.26VDC	7.26VDC	2.42VDC			
Equalized Voltage	7.74VDC	7.74VDC	2.58VDC			
Maximum Charge Current (@48V)	60A	100A	275A			
Equalization Charge Frequency	Equalize charge every 30 days, systems that are regularly discharged below 50% of stored capacity should be equalized every 14 days					
Self Discharge	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					
Charging Temperature Compensation Factor	±3mV/°C/cell	±3mV/°C/cell	±3mV/°C/cell			
Terminal	Standard type with stainless steel	Standard type with stainless steel	Insert Terminal			
Terminal Torque ²	Stainless thread, 100 to 120in-lbs / 11 to 14Nm	Stainless thread, 100 to 120in-lbs / 11 to 14Nm	90 to 105in-lbs / 10.7 to 11.9Nm			
Vent Cap	Bayonet	Bayonet	Water-Miser			
PROeye [™] Electrolyte Level Indicator	No	Yes	No			
Weight (lb/kg)	63 / 28.6	122 / 55.3	136 / 62			
Dimensions L x D x H (in/mm) ³	10.25 x 7.06 x 10.94 / 260 x 179 x 278	12.38 x 7.19 x 16.13 / 314 x 183 x 410	7.56 x 6.56 x 25.75 / 192 x 167 x 654			
Warranty	2 years	2 years	4 years			

	Ampere Hour Capacity to 1.75 Volts Per Cell at 20°C							
Discharge in Hours:	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		



	VDC	System Voltage			
Voltage Setting	VPC	12V	24V	48V	
Daily Charge (Absorption)	2.42	14.5	29.0	58.1	
Equalize	2.58	15.5	31.0	61.9	
Float	2.25	13.5	27.0	54.0	



Application Note:

Lead-acid batteries contain corrosive battery electrolyte and generate highly flammable hydrogen gas. When working near batteries or battery electrolyte wear personal protective equipment and always work in a well-ventilated area.

¹ Maintain a state of charge greater than 60% when operating flooded lead-acid batteries at temperatures below 32°F (0°C).

² Do not over-torque terminals. Over-torque can result in terminal damage, breakage, terminal meltdown or fire.

 $^{^3}$ Dimensional height specification references are to the tallest point on the battery container (example: height dimension with handle or terminal)