

EnergyCell[™] FLA

Flooded Lead Acid Batteries



- Ideal use for deep cycling applications
- Up to 1550 cycles @ 50% DoD
- Heavy-duty internal connectors and terminal post structures
- Built-in electrolyte level indicators (525FLA)
- Proprietary plate separators guard against short-circuit
- BCI group sizes GC2 and 903



The EnergyCell[™] FLA is a top terminal 6VDC flooded lead-acid battery offering a rugged construction delivering superior performance and longevity.

EnergyCell FLA is an innovative solution specially designed for residential or light-commercial, off-grid renewable power demands. These batteries are built using a robust cell construction and heavy-duty internal connectors and post structures, maximizing life expectancy and enabling unmatched electrical efficiency and durability. In addition, the EnergyCell 525FLA offers a proprietary electrolyte level indicator that signal when watering service is required—making service easy and predictable. At the end of life, these batteries are 96% recyclable.

EnergyCell[™] FLA Specifications

EnergyCell Models:	290FLA	525FLA				
Cells per Unit:	3	3				
Nominal Voltage:	6VDC	6VDC				
Cycle Life (50% DoD):	1200	1550				
Absorb Voltage (25°C):	7.26VDC	7.26VDC				
Absorb Time ¹ :	2hrs	2hrs				
Float Voltage (25°C):	6.75VDC	6.75VDC				
Float 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 Voltage ² :	12VDC / 24VDC / 48VDC	12VDC / 24VDC / 48VDC				
Re-Float Voltage ² :	12.5VDC / 25VDC / 50VDC	12.5VDC / 25VDC / 50VDC				
Maximum Charger Curretn (per Battery):	60A	100A				
Operating Temperature Range (with Temperature Compensation) ³ :	-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)				
Temp-Comp Factor (Charging):	±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				
Terminal Hardware Initial Torque4:	Stainless thread, 100 to 120in-lbs (11 to 14Nm)	Stainless thread, 100 to 120in-lbs (11 to 14Nm)				
Weight (lb/kg):	63 / 28.6	122 / 55.3				
Dimensions H × W × D (in/cm) ⁵ :	10.94 × 7.06 × 10.25 / 27.8 × 17.9 × 26.0	16.13 × 7.19 × 12.38 / 41.0 × 18.3 × 31.4				
Equalize Voltage:	7.74VDC	7.74VDC				
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				
PROeye [™] Electrolyte Level Indicator:	No	Yes				

¹ Will be 2 hours if darge 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. 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 $32^{\circ}F(0^{\circ}C)$. 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).

	Ampere Hour Capacity to 1.75 Volts per Cell at 20°C							
Discharge in Hours:		3	4	5	24	100		
EnergyCell 290FLA:	144	172	197	225	251	290		
EnergyCell 525FLA:	247	298	343	395	445	525		



Available Capacity at Application Operating Temperature





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