

LITHIUM IRON BATTERY

for Renewable Energy & Backup Power Applications



SAFEST LITHIUM BATTERY

Iron Edison only uses Lithium Iron Phosphate (LiFePO₄) battery cells, which are the safest lithium-ion battery type for home or commercial use.





SMARTEST CELL MANAGEMENT

An integrated Battery Management System (BMS) actively monitors each cell and optimizes pack performance.



MAXIMUM COMPATIBILITY

Available in 12, 24, and 48 Volt configurations, Iron Edison batteries are compatible with all major brands of inverters.



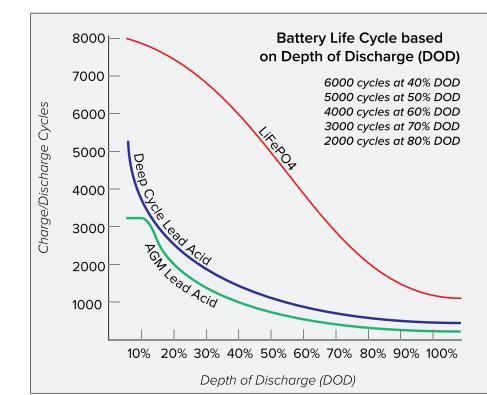
ASSEMBLED IN AMERICA

Designed and assembled in Colorado using the best quality components, every Iron Edison Lithium Iron battery is built to last for decades.



SUPERIOR SUPPORT

Every Lithium Iron battery comes with a 7-year performance guarantee, along with lifetime technical support.



Lithium Iron is the perfect "plug-and-play" replacement for outdated lead-acid batteries.

HIGH ENERGY DENSITY

Lithium Iron batteries pack more energy density than other battery types, which makes for a smaller footprint and flexible installation options.

EFFICIENT & LONG-LASTING

Lithium Iron is more than 95 percent efficient, meaning nearly every drop of sun will be stored in the battery. With three times the life (see chart) and zero maintenance, you'll never go back to lead acid.



BATTERY OPTIONS & DATA

12-VOLT LITHIUM IRON BATTERY (13V Actual, 4 x 3.25V Lithium Iron cells in series)

CAPACITY Amp-hours (Ah) 5-Hr Rate	TOTAL ENERGY Kilowatt-hours (kWh)	USABLE E Kilowatt-ho 50% DOD		ENCLOSURE DIMENSIONS Depth x Width x Height (inches)	TOTAL WEIGHT (lbs)	MAX CHARGE VOLTAGE	DISCHARGE TERMINATION VOLTAGE
180	2.3	1.2	1.9	9.3 x 16.5 x 26.1	120	14.6 V	12.75 V
700	9.1	4.6	7.3	12.8 x 29.9 x 28.1	250	14.6 V	12.75 V
1000	13.0	6.5	10.4	22.7 x 30 x 30.1	450	14.6 V	12.75 V

24-VOLT LITHIUM IRON BATTERY (26V Actual, 8 x 3.25V Lithium Iron cells in series)

CAPACITY Amp-hours (Ah) 5-Hr Rate	TOTAL ENERGY Kilowatt-hours (kWh)	USABLE F Kilowatt-ho 50% DOD		ENCLOSURE DIMENSIONS Depth x Width x Height (inches)	TOTAL WEIGHT (lbs)	MAX CHARGE VOLTAGE	DISCHARGE TERMINATION VOLTAGE
180	4.7	2.3	3.7	9.3 x 27.6 x 27.1	170	29.2 V	25.5 V
360	9.4	4.7	7.5	20 x 27 x 27.2	320	29.2 V	25.5 V
700	18.2	9.1	14.6	23.35 x 29.9 x 28.1	440	29.2 V	25.5 V
1000	26.0	13.0	20.8	27 x 43.2 x 30.1	820	29.2 V	25.5 V

48-VOLT LITHIUM IRON BATTERY (52V Actual, 16 x 3.25V Lithium Iron cells in series)

CAPACITY Amp-hours (Ah) 5-Hr Rate	TOTAL ENERGY Kilowatt-hours (kWh)	USABLE F Kilowatt-ho 50% DOD		ENCLOSURE DIMENSIONS Depth x Width x Height (inches)	TOTAL WEIGHT (lbs)	MAX CHARGE VOLTAGE	DISCHARGE TERMINATION VOLTAGE
180	9.4	4.7	7.5	16.3 x 27.6 x 27.0	270	58.4 V	51 V
360	18.7	9.4	15.0	call for details	540	58.4 V	51 V
540	28.1	14.0	22.5	call for details	810	58.4 V	51 V
700	36.4	18.2	29.1	26.9 x 47.3 x 28.3	840	58.4 V	51 V
1000	52.0	26.0	41.6	2 trays, each 27 x 43.2 x 30.1	1,650	58.4 V	51 V
1400	72.8	36.4	58.2	call for details	1,700	58.4 V	51 V
2100	109.2	54.6	87.4	call for details	2,500	58.4 V	51 V
2800	145.6	72.8	116.5	call for details	3,400	58.4 V	51 V
3500	182.0	91.0	145.6	call for details	call for details	58.4 V	51 V
4200	218.4	109.2	174.7	call for details	call for details	58.4 V	51 V
4900	254.8	127.4	203.8	call for details	call for details	58.4 V	51 V
5600	291.2	145.6	233.0	call for details	call for details	58.4 V	51 V

^{*}Battery options and enclosure dimension sizes are subject to change without notice. Please contact Iron Edison for current availability.

BATTERY TECHNICAL SPECIFICATIONS

Battery Chemistry	Lithium Iron Phosphate (LiFePO4)				
Battery Type	Deep-Cycle Rechargable, Sealed, Maintenance-Free				
Safety Features	Fully integrated battery management system (BMS), automatic DC disconnect, inline fuse				
Enclosure	Indoor-rated steel box with removable lid				
Nominal Voltage	3.25 Volts (per cell)				
Charging Voltage	3.5 Volts (per cell)				
Efficiency	95%				
Cycle Life	7000 Cycles at 30% DOD, 5000 Cycles At 50% DOD, 2000 Cycles at 80% DOD				
State of Charge Usage Window	20% - 95%				
Optimum Charge & Discharge Current	C/4				
Minimum Charging Current	C/20				
Maximum Continuous Charge & Discharge Current	C/2				
Self-Discharge Rate	< 3% per month				
Operating Temperature	-0°C To +45°C (32°F To +113°F)				
Warranty	7 years, full replacement for first 36 months, pro-rated for months 37-84				
Technical Support	Unlimited for life of battery				
Battery Management System	Included; monitors cell and pack voltage, ambient and cell temperature, current sensing				
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