



# Why is Lithium-Ion Better than Lead-Acid?

	Lead Acid	Li <sup>3</sup>
Battery/pack specific energy, Wh/kg	30-50	110-190
Discharge cycles 80% D.O.D.	300-600	2000+
Charge time, hours	2-5	0.5-2
Solar charge acceptance, round-trip	36%	98%
Self discharge/month, %	5	1-2
Average operating voltage per cell	2	3.2
Relative battery/pack cost	1X	2-4X
Relative safety	2	1.5
Relative environmental	3	1

OUR LITHIUM-ION-IRON PHOSPHATE CHEMISTRY IS THE SUPERIOR ELECTROLYTE FOR THESE REASONS:

4 TIMES STRONGER OR 4 TIMES LIGHTER (SEE NOTE)

6-8 TIMES LONGER LIFE THAN LEAD ACID

1/2 TO 2 HOUR RECHARGE TIMES: 4 TIMES FASTER!

3 TIMES MORE ENERGY HARVESTED

MAINTAINS 75% OF ITS ENERGY AFTER 1 YEAR

REPLACES: 6.4V, 9.6V, 12.8V, 16V, 24V, 36V, 48V, ETC.

HIGHER INITIAL COST, LOWER COST-OF-OWNERSHIP

SAFER THAN ANY LEAD ACID BATTERY

FINALLY: AN ECO-FRIENDLY GREEN BATTERY!

Note: 1 Pound of Lithium is 3 to 4 Times More Powerful than 1 Pound of Lead-Acid.  
Or, Amp-Hour for Amp-Hour, Lithium is 3 to 4 Times Lighter than Lead-Acid.  
In sum, the User Obtains EITHER an increase Power or Decreased Weight, but not both.