

When you need to measure the benefit of Lithium batteries compared to Lead Acid batteries, you must consider all factors. The initial cost of the Lithium may well be the cheapest in your application.

Specifications	Lithium 110Ah	Lead Acid 210Ah
Real Capacity	110Ah	210Ah
Useable Capacity	105Ah	105Ah
Life cycles	>2000 Charge cycles	500 Charge Cycles
Weight	15.8Kg	76Kg 5 times heavier
Cubic Capacity	26cmx17.2cmx22.5cm = 10.0L	52.1cmx26.9cmx23.3cm = 32.7L 3 times bigger.
Charging	Fast to 100%	Fast to 80%
Power Wasted	0%	15 à 20% wasted
Peukert's Losses *	Nil	Yes
Voltage sag	Nil	Yes
Maintenance	Nil	Yes

*Peukert's law, presented by the German scientist W. Peukert in 1897, expresses the [capacity](#) of a battery in terms of the rate at which it is discharged. As the rate increases, the battery's available capacity decreases. [From Wikipedia]