

## NanoSafe battery tests show minimal loss of charge capacity

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A few months ago, we first heard word of [Altair Nanotechnologies](#) because of an innovative new battery cell design they're now calling NanoSafe. They say that the graphite used in standard lithium-ion batteries is replaced with a nano-structured negative electrode material called nano lithium titanium oxide. The result could very well be ground-breaking.

Recently, the company conducted an in-house test on their NanoSafe batteries and found that after 15,000 (not a typo) deep charge and discharge cycles, the product retained over 85 percent of its charge capacity. In theory that would push the life of these batteries beyond 40 years if you recharged everyday, though, the company admits that under real-world wear and tear a battery life of 20 years is more realistic.

Altair also says that even though their test involved full charges and discharges (100 percent to zero and back again), they say that partial charging and discharging does not appear to affect the battery's abilities to hold their charge.

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