

The Promise of Faster Device Charging

Written by Marco Attard
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"Revolutionary" battery technologies usually promise longer battery lives, but the "nanodot" technology from Israel-based StoreDot claims something different-- the ability to charge a dying phone in less than a minute.



A Microsoft Think Next symposium demo has a near-empty nanodot battery inside a Samsung Galaxy S4 fully charging up in all of 30 seconds. The company also claims the batteries "withstand thousands of charge/discharge cycles, prolonging battery life expectancy considerably."

Nanodot technology uses "chemically synthesised bio-organic peptide molecules." Peptides are the building blocks of proteins, and possess "diverse physical and electrochemical properties," such as visible luminescence and electrical charging/discharging capabilities, when processed in nanoscale crystal (aka "nanodot") form.

The StoreDot battery uses nanodots in both electrode (stores energy) and electrolyte (transfers energy) segments.

The technology sounds impressive, but comes with a few caveats-- the battery is larger than the device it powers, has less capacity and requires a charger the size of a laptop charger. One also has to modify the phone, since it has to handle high current charging.

These are still early days for the nanodot battery, as StoreDot will only enter commercial production on late 2016. The company recently secured \$6 million in development funding, and

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the technology also finds use in flash memory storage, camera image sensors and paper-thin displays.

Watch [StoreDot Battery Demo](#)

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