RCA's Airenergy charger converts WiFi energy to electricity

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(PhysOrg.com) -- Airenergy is a gadget that can harvest free electricity from WiFi signals such as those from a wireless Internet connection, apparently with enough efficiency to make it practical for recharging devices such as mobile phones.

At the Consumer Electronics Show (CES) in Las Vegas this week a RCA spokesman said they had been able to charge a BlackBerry from 30% charge to fully charged in around 90 minutes using only ambient WiFi signals as the power source, although it was unclear on whether the Airenergy battery was recharged in that time. The Airenergy recharging time depends on the proximity to the WiFi signal and the number of

WiFi sources in the vicinity.

The RCA Airenergy unit converts the WiFi antenna signal to DC power to recharge its own internal lithium battery, so it automatically recharges itself whenever the device is anywhere near a WiFi hotspot. If you have a wireless network at home the Airenergy would recharge overnight virtually anywhere in your home. When you need to recharge your phone or other device you plug the Airenergy battery into the phone via USB to transfer the charge.

Harvesting electricity from signals in the air is not new, as anyone who ever built a crystal radio running only on the radio signals it received can testify, but until now no device has been able to harvest enough electricity to make it of practical use. In most modern cities WiFi signal hotspots abound, which might make the Airenergy device a viable option, although in rural areas WiFi sources are less widespread.

A USB charger costing around $40, and about the size of a phone, is expected to be released later this year, with a WiFi-harvesting battery around the same size and price as an OEM battery available shortly after.