

Clip-on wind and solar charger powers your mobile devices

April 8 2008, by Lisa Zyga



The HYmini is a handheld universal charger that captures wind power, solar power, and power from electrical outlets to charge a variety of portable devices.

You're riding your bike, the wind's in your hair - and now it can be in your miniature wind and solar charger clipped to your handlebars or upper arm. A company called miniWIZ has developed a handheld universal charger that captures wind power, solar power, and power from electrical outlets to charge a variety of portable devices.

Although the charger, called HYmini, should be initially charged via an electrical wall outlet (which takes about 4 hours), it can be topped off away from home in windy or sunny conditions. With enough solar batteries, it's possible to fully charge the HYmini without any electrical

power. Wind power is intended solely for supplemental charging, though.

When fully charged, HYmini's 5V/1A lithium ion battery can provide power for cell phones, PDAs, MP3 players, iPods, and even digital cameras. Gadgets are hooked up to the charger via a USB cable and various adapters that are included in the package. miniWIZ claims the charger's battery can be recharged up to 500 times, providing at least 1000mA/h of storage capacity that can be transferred to mobile devices.

HYmini's built-in wind charger consists of a micro wind power generator activated by a tiny fan. At wind speeds between 9 and 40 mph, the turbine can provide up to 1W of power with a 65 mA capacity. A green LED lights up when charging, which can also be used as a night light. The input current depends on the wind speed: in tests, 20 minutes of 19-mph winds could generate enough charge to power an MP3 player for 40 minutes, a cell phone for 4 minutes, or a digital camera for 20 pictures.

The company suggests that the charger would be ideal when biking, skiing, or participating in similar high-speed activities, although it caps off at 40 mph for safety reasons. The charger is moisture-proof, and the turbine is made of soft PVC that breaks on impact to avoid injury. Replacement turbines can be purchased online.

Besides electrical and wind, the HYmini can also be charged by the sun. The package comes with four optional 6-inch solar miniSOLAR panels, which can be linked together to the charger to provide up to 5V. When charging, a side indicator turns red to note that sunlight is being converted into electricity and stored in the device's internal battery.

The HYmini is available starting at USD \$50 in black, white, and green. The miniSOLAR panels are \$25 each, and the site also provides data on

the average percentage of sunlight and wind speeds for various US cities.

More information: <http://www.hymini.com>

via: [Gizmag](#)

Citation: Clip-on wind and solar charger powers your mobile devices (2008, April 8) retrieved 21 September 2024 from <https://phys.org/news/2008-04-clip-on-solar-charger-powers-mobile.html>

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