Review: XD Design's Window and Port Solar Chargers

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Gizmag reviews the Window and Port Solar Chargers from XD Design

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This time last year, we covered an interesting new solar charger that sought to avoid troublesome shadows from window frames, potted plants and household ornaments by sticking to the glass of the window itself. The Window Solar Charger from XD Design has now been joined by a new, slightly less capacious sibling called the Port Solar Charger, and I've been given the chance to take both for a test drive.

First on the review bench is the Window Solar Charger.

In the box

- Window Solar Charger
- Silicone ring
- USB cable, with mini-USB connector at one end and full-size at the other
- User guide

The Window charger features a 110 mA rated 7.8 x 7.8 mm PV panel

This 11 x 11 x 1.75 cm (4.3 x 4.3 x 0.68 inch), 95 g (3.35 oz) device features a 1,400 mAh Li-ion battery housed within an ABS plastic case. There's a full-size USB port for dumping charge onto a connected device at 5 V (500 mA) and a mini-USB port to charge up its own battery in about three hours, if you can't wait around for the claimed 13 hours needed by the 110 mA-rated 7.8 x 7.8 mm (3 x 3 inch) PV panel to soak up enough sun to provide a full charge. The unit has over-charge and short circuit protection built in.

An LED status indicator glows red when receiving charge, and turns green when the onboard battery is full. You can just lay it flat on a table near the window – or you could use the supplied 3 mm thick silicone ring to stick it to the glass of the inside of a window. Both sides of the ring are tacky, and when its ability to stick is reduced by the inevitable accumulation of dust and dirt, you can refresh it by washing in soapy water and allowing to drip dry.

A not-so-sticky situation

When I first tried to stick this charger to a window, I have to report a distinct lack of success. I had thought that this was due to the window-facing surface of the unit not actually being flat (there's an ever-so-slight curve) but have since discovered that the silicon ring which came with the Window Solar Charger was not, in fact, sticky enough. XD Design rushed another out to me and I'm happy to report that the replacement has kept the unit firmly stuck to the inside of my front room window for the whole of the review period.

The curve to the PV face caused the charger to pull away from the supplied silicone ring, and fall

The device is of a solid build, though, and can withstand a few knocks (which is just as well since it once fell down behind my radiator, and using a wire hanger to retrieve it is an experience I could have done without).

All's well that ends well

The Window Solar Charger is said to need a good 13 hours in bright (sun)light to fully charge its battery using PV only. As with other solar chargers, the quality of the incoming light determines the actual charge time. It's coming to the end of winter here in France at the moment, but we've had a good deal of day-long sunshine over the past few weeks. It's not quite as high, as bright or as powerful as it is in summer but it's been enough to secure a strong red glow from the unit's LED.

In my tests, the charger actually took at least twice as long to reach capacity, but as such a juice-up is essentially free-of-charge (if you'll excuse the pun), I'm not going to split hairs. The PV panel does what it's supposed to do, it provides the built-in battery with clean energy – even if you have to wait a while before it's full.

Apart from the charging/full LED, however, there's no way of determining how much charge is remaining in the Li-ion battery. When at capacity, it proved sufficient to fully charge my smartphone, with some room to spare (though there's not enough for a tablet in one sitting).

The bottom line

There are a vast number of options to choose from if you're looking for a portable backup power source to juice up your mobile device while you're out and about, many of which feature solar panels. The fact that the Window Solar Charger sticks to the inside of a window and in so doing effectively avoids the shadows of the frames (or shades, drapes, plants, and knick-knacks) is, in the opinion of this reviewer, enough to set this product apart from the rest of the field, and makes it a good deal more useful in the process.

When at capacity, the Li-ion battery proved sufficient to fully charge my smartphone, with some room to spare

The Window Solar Charger proved an excellent way to harness the power of the sun to charge up my growing collection of mobile devices. Realistically, you're not going to be able to completely avoid handing some of your hard-earned cash over to the utility company. Device batteries drain a whole lot quicker than the PV panel can top up this Window Solar Charger's own power pack. But it could well save you a few pennies.

It can just be left sunbathing while you're out and about, or is small and light enough to throw in a backpack and take with you. At €49.95 (US$65), it's not going to break the bank to buy one either.

The Port Solar Charger

Many of the minor niggles encountered while testing the Window Solar Charger have been effectively dealt with in XD Design's Port Solar Charger. Though at just 1,000 mAh, its built-in Li-ion battery is a touch on the small side to make it anything but a quick top-up device for most of today's big-battery smartphones.

In the box

- Port Solar Charger
- User guide

When charging by bright (sun)light, the green LED will light up

The Port has a round two-tone plastic body that's 8.4 cm (3.3 inch) in diameter and 1.8 cm (0.7 inch) tall. Its 8 cm (3.1 inch) PV panel is edged with a 1 cm (0.3 inch) thick transparent PVC suction cup. Where the Window charger needed the help of a silicone ring to stick to the glass, the Port just needs to be pushed against the pane to secure it in place. Job done.

The bright white upper face is home to five small LED lights. When charging by bright (sun)light, the green LED will light up. The other four lights are blue and come on at the press of the button topping the row, to indicate remaining charge or when the unit's being charged via USB. This device has an integrated USB charging cable that folds into the side of the body. This, and the weight of the suction cup, makes it a tad heavier than the Window charger at 108 g (3.8 oz).

One thing that is lacking is a cable to charge your mobile device from the full-size USB output on the side of the Port charger, but since you're likely to already have a device-specific one, the decision not to supply a generic one with the unit makes a lot of sense. The Port's output has a bit more grunt to it than the Window charger, at 800 mAh (5 V), but its battery is, of course, smaller.

Suck it up

Like the Window charger, the Port effectively avoids shadows cast by frames and the like by attaching directly to the glass – in this case courtesy of the built-in suction cup. Its grip on the window is excellent, staying put until released with the smallest of tugs on the tab jutting out from the edge of the cup.

The Port's battery wasn't capacious enough to charge a Kindle 2 in one sitting

XD Design says that it will take two hours to fully charge the Port's Li-ion battery from empty via USB. I actually found this to be a little on the generous side. Charging from my laptop took between 2.5 and three hours. Likewise, 20 hours is the quoted time for charging by PV, but real-world juicing took more than twice that during the (admittedly end-of-winter) review period. Though getting to 75 percent can be a fairly brisk affair, waiting for that last status light to come on can prove to be a lesson in patience.

The Port's internal battery didn't prove capacious enough to fully charge either of our household smartphones in one go. My Kindle 2 and my music player also required more than one visit, though the Zo 2 and my compact camera were both satisfied with one LED remaining. If that last blue light starts to flash, though, the Port's battery is almost out.

The bottom line on this one ... as an emergency top-up charger, it's difficult to fault. But if your charging needs are on the large side, you may have to look elsewhere. The recommended retail for the Port model has been set at €59.95 (US$78).

Product pages: Window Solar Charger in silver, blue, or green; Port Solar Charger