

This Briefcase Is Actually A Complete Offgrid Micro Solar Power System

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In the event of an emergency, or in the case of an offgrid adventure, this little micro power plant can help keep the lights on and the gear charged.

If you need reliable offgrid power, whether it's to prepare for an emergency or to juice up your devices while you're beyond the power lines, solar can be an excellent choice. For the average person, there really aren't that many viable methods of producing your own electricity either at home or out in nature, because small-scale wind generators aren't usually reliable enough or easy to deploy in most locations, and while gas generators are widely available for emergency power and can produce a lot of electricity, they do require a steady supply of fuel and are heavy to move around.

Small-scale solar power, on the other hand, is quiet and clean, doesn't require any fuel other than sunshine, and can handle much, if not all, of an individual's personal electricity needs in the case of a power outage or for offgrid adventures. Granted, they're not really an option for powering electric ovens, water heaters, most refrigerators, or major appliances, but when coupled with an adequately-sized battery pack, these micro solar systems can provide plenty of electricity for keeping smaller devices charged.

There are quite a few personal-sized solar chargers on the market now, and they're great for handling the daily recharging of a single person's cellphone, but aren't really geared to the power needs of a family or small group of people. In the event of an emergency, a much better solution than several smaller chargers might be to use a more powerful portable solar power setup, with bigger panels and a battery pack large enough to let the device serve as a micro power plant for a number of people.

That's essentially what the team at Kalisaya set out to build. Instead of yet another tiny solar charger, they worked to create a portable energy device that could essentially replace the diesel generator as the first choice for offgrid power, whether it's for disaster relief or for emissions-free personal power for the great outdoors. They came up with the KaliPAK, which is complete solar power system in a briefcase, capable of being set up quickly and easily, yet providing an ample supply of electricity for everything from lights to laptops.

The KaliPAK, which comes in three different models, ranging from the entry-level 201 (20W solar panels & 192Wh battery) to the more powerful 601 (40W solar panels & 562Wh battery), all fitting within a rugged square case measuring 33.7cm across and 14.7cm deep (13.26" x 5.74") and weighing in at 6.9kg (15.2 lb) for the heaviest model. The solar panels, which are stored folded-up inside the case, can be quickly positioned using the included directional fixture to angle them toward the sun, optimizing the feed of electricity into the device.

The units feature multiple USB ports (5V, 2.1A) and 12V outputs for charging or powering devices, a Bluetooth system that pairs with a smartphone for controlling or monitoring the unit, and a weatherproof cover. Along with the basic system, KaliPAK units also come with an LED light, an inverter for running AC devices, a car lighter adapter, a waterproof light with 7800 mAh battery pack, and a USB splitter for charging multiple devices from a single port.

[Kalisaya](#) is currently seeking crowdfunding on Kickstarter, and it looks like they'll easily meet their initial goal of raising production funding for the initial run of the [KaliPAK](#) models and accessories. Backers can have first dibs on the new units, depending on the amount of the pledge, for less than the expected retail cost, [while the campaign is running](#). According to the company website, Kalisaya is also working on developing a portable wind turbine, a hand-crank charger, and a fuel cell option for powering the KaliPAK units.
