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This Solar Hydropanel Can Pull 10 Liters of Drinking Water Per Day Out of the Air

By [Derek Markham](#) Updated November 11, 2020



SOURCE is a solar-powered and self-contained device capable of harvesting up to 10 liters of clean drinking water per day from the air.

By harvesting water vapor from the air and condensing it into liquid, atmospheric water generators can essentially pull water from the air, and these devices hold a lot of promise for providing an independent source of drinking water. And although drought-stricken regions and locations without safe or stable water sources are prime candidates for water production and purification devices such as those, residences and commercial buildings in the developed

world could also benefit from their use, and they make a great fit for off-grid homes and emergency preparedness kits.

Some [water generators](#), such as the WaterSeer, get a lot of hype (and a lot of skepticism) but haven't been able to deliver. Others, like the [Ecoloblue devices](#), are a bit more costly and complex, but they actually exist and can be bought and put to work. Earlier this year, I wrote about Zero Mass Water's SOURCE device, which is a rooftop solar device that produces water instead of just electricity, but the pricing and availability weren't quite clear then. The company recently announced that SOURCE hydropanel arrays are now available in the US, where "It works in almost every climate, and almost every day of the year."

Creating Drinking Water

https://www.youtube.com/watch?v=w_LP3UQDLrc

A standard SOURCE array is made up of two hydropanels, with additional panels added as needed for the water production or the local climate, and this self-contained unit is designed to be mounted onto the roof of a building, where it can then produce an average of 4-10 liters per day. An onboard 30-liter reservoir holds the collected water and mineralizes it with calcium and magnesium, and the outflow of the device can be plumbed right to a tap (or refrigerator or dispenser) inside the building for ease of use. No maintenance is said to be necessary other than annual filter changes and swapping out the mineral cartridge every five years, which a subscription program delivers when it's time.

A Practical Solution

According to Zero Mass Water, even those in low-humidity and arid regions can put SOURCE units to work to generate water, which is a question that many skeptics of the system bring up. "Our array on the Zero Mass Water headquarters in Scottsdale, Arizona makes water year-long despite low relative humidity. The Phoenix-Metro area can get below 5% relative humidity in the summer, and SOURCE still produces water in these incredibly dry conditions."

SOURCE water generators are costly, at least in terms of the initial investment. A standard array with two panels runs about \$4000, plus another \$500 for installation, and is said to be engineered to last at least 10 years. That brings the cost to about \$1.23 per day, or between \$0.12 and \$0.30 per liter, when averaged out over the life of the unit.

At [The Verge](#), Lauren Goode took a closer look at the SOURCE device:

https://www.youtube.com/watch?v=S2Cq_TpNXoQ