

Making use of the water vapor that is present in the air even at low relative humidity levels, SkyWater collects water by absorbing this vapor in a desiccant material suspended in a hydrogel matrix and then, in a second step, desorbing at elevated temperatures followed by condensation of the hot water vapor.

Water is taken up during the colder nighttime when the relative humidity is higher and desorbed during daytime. The necessary heat for desorption is provided by solar radiation while the condensation occurs at ambient temperatures eliminating the need for power beyond that provided by the glass solar tiles integral to the unit.

Spread singly out along trails or arranged in groups to avoid shading each other, SkyWater provides life giving, safe, potable water without harm to the environment or any outside energy inputs once installed.

- A. Glass photovoltaic panel with patterned nanotech opaque coating.
- B. Intake fan and hygroscopic gel matrix.
- C. Electrical system and thermoelectric cooler.
- D. Modular casing system.
- E. Structural support grid.
- F. Topographic Resin Map.
- G. Insulated steel barrel.
- H. 4 Lithium-ion iron-phosphate battery packs.
- J. 600 liter food-grade water tank with bubbler and UV light.
- K. Water filter with mineral infusion.
- L. Circuit board & switchboard.
- M. Cane bolts embedded a minimum of 60cm below grade.
- N. Adjustable leveling feet.

