



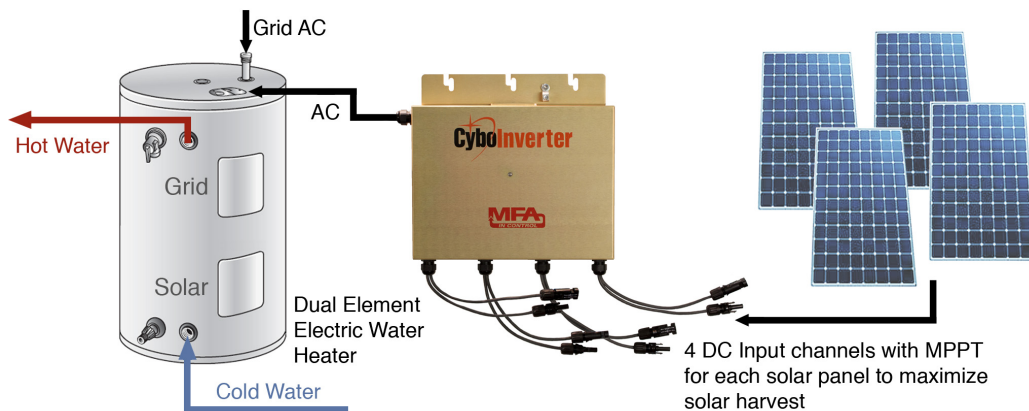
## News Release

### **CyboInverter H Model Selected as a 2021 Top Solar Inverter by Solar Power World Magazine**

March 18, 2022 – CyboEnergy, Inc. (Rancho Cordova, California) announced today that its Off-Grid CyboInverter H model was selected as a 2021 Top Solar Inverter by Solar Power World Magazine.

As stated on the Solar Power World Magazine website for 2021 Top Inverters Products, “An electric water heater consumes a large portion of the electric bill, so taking it off-grid is a no-brainer. Compared to thermal solar, a PV water heating system enabled by the off-grid CyboInverter H model is simple, clean, safe, cost-effective and has no maintenance headaches. CyboInverters have 4-input channels with panel-level MPPT, and can support up to 430W panels.” (See the 2021 Top Solar Inverter Products [here](#)).

CyboEnergy CEO Dr. George Cheng said, “We are very thankful to Solar Power World for this honor 2 years in a row as our AC Assisted Off-Grid CyboInverter was selected as a 2020 Top Solar Inverter. This recognition validates our vision and emboldens us to continue our innovation to help build a better and cleaner world.”

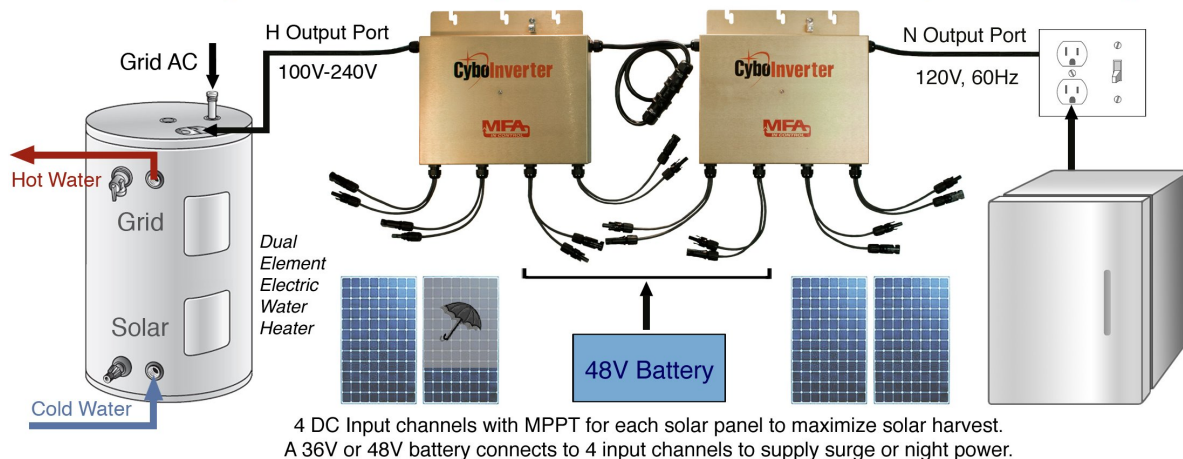


As shown in the above diagram, an off-grid PV water heating system is quite simple. It includes multiple solar panels and an off-grid CyboInverter H model. The inverter can deliver solar energy to the lower heating element of the water heater. The temperature setpoint for the lower element can be purposely set much higher than the upper element. This way, the upper element that consumes grid power does not need to turn on unless a lot of hot water is used within a short period of time. Compared with thermal solar, PV water heating has many advantages: It is simple, clean, safe, cost-effective, and has no maintenance requirements. Packaged PV water heating systems are available on the market. What better way to store solar energy than in the form of hot water?



CyboEnergy also offers a Dual-Output Off-Grid CyboInverter, which can do heating or cooling with the same system. The following diagram illustrates an off-grid solar system enabled by a Dual-Output Off-Grid CyboInverter H/N model twin pack. Four solar panels connect to four input channels of the 2 inverters respectively. One 48V battery connects to the remaining 4 input channels in parallel to provide night-time power and surge power to start the compressor of an air conditioner or refrigerator. In off-grid mode 1 (left side), the system can harvest solar energy from the solar panels for PV water heating. In off-grid mode 2 (right side), the system can run lights, fans, computers, phone chargers, mini-splits, and household appliances. If the solar can provide sufficient power for the inverters to run the loads, the inverters will not pull any power from the battery. This ensures a longer battery life. This system is well suited for cottage homes, mobile microgrids, etc.

### Dual-Output Off-Grid CyboInverter for Heating & Cooling



4 DC Input channels with MPPT for each solar panel to maximize solar harvest.  
A 36V or 48V battery connects to 4 input channels to supply surge or night power.

CyboInverters have been installed at a large scale with happy customers for their unique features and benefits, plug-and-play installation, and cost-effective off-grid solar solutions with or without batteries.

### About CyboEnergy

CyboEnergy Inc., located in California, USA, is an affiliate of CyboSoft, General Cybernation Group Inc., focusing on the development, marketing, and servicing of the product lines in the clean energy field. CyboEnergy received the Frost & Sullivan's 2013 Global Product Differentiation Excellence Award for Solar Inverters and Frost & Sullivan's 2017 Global Solar Inverter Technology Innovation Award. For more information, please contact: CyboEnergy, Tel: (916) 631-6313, e-mail: Josh Bear, JBear@cybosoft.com, Web site: www.cyboenergy.com.

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