



## The World's First Off-Grid Solar Mini-Inverter for Water Heaters



- Specially Designed for Powering Dual-Element Electric Water Heaters and Heating Elements.
- Reduces Electricity Bills, Avoids High Tier Rates, and Quick ROI.
- Four DC Input Channels with Maximum Power Point Tracking.
- Easy Installation and Great Price.
- High Efficiency and Long Life.
- Much Easier to Install than Thermal Solar Water Heaters.

Each CyboInverter (CI-Mini-1200H) can connect to 4 solar panels and produce up to 1150W AC to power the lower heating element of a dual-element electric water heater with easy wiring to the heater.


		<p>Solar Heating for Single Element Water Heaters, Air Heaters.</p>	
		<p>Solar Cooking with Hot Plates, Cookware, etc.</p>	
		<p>Solar Heating for Base Board Heaters, Area Heaters, etc.</p>	
		<p>Solar Heating for Electric Floor Heating Cables, Mats, and Carpet.</p>	

**Product: 4 Channel 1.2KW Off-Grid CyboInverter for Electric Water Heaters**  
**Part No: CI-Mini-1200H Standalone Off-Grid Model, 100V-240V, 50/60Hz AC**

**Never connect the Off-Grid CyboInverter to the AC grid. Doing so will damage the unit and void the warranty. Use this inverter for electric heating elements ONLY.**

**Made in U.S.A.**

## Technical Data of CI-Mini-1200H [Rev 5.0 – April 2017]

DC Input (per Channel)	60 Cell Panel	72 Cell Panel
Recommended Input Power	220W – 300W	250W – 330W
Operating Input DC Voltage Range	15V – 58V	20V – 58V
Peak Power Performance Range	30V – 58V	30V – 58V
Maximum Input DC Voltage / Current	58V / 9A	58V / 9A
Maximum Input Power	300W	300W
Minimum Starting Voltage	20V	20V
<b>AC Output</b>	Data	
Maximum Output Power / Rated Output Power	1150W / 960W	
Maximum Output Current (RMS)	9.5A (RMS – Root Mean Square)	
Nominal Operating AC Output Voltage / Range	100V – 240V (10V – 264V, Single-Phase)	
Nominal Frequency / Range	50Hz / 60Hz (49.5Hz – 60.5Hz)	
<b>Efficiency</b>	Data	
Peak Efficiency / MPPT Tracking	96% (99%)	
<b>Mechanical Data</b>	SI	U.S.
Ambient Temperature Range	-40°C to +65°C	-40°F to +149°F
Internal Operating Temperature Range	-40°C to +88°C	-40°F to +190°F
Dimensions w/o mounting bracket (L x H x W)	32cm x 24cm x 5.8cm	12.5" x 9.5" x 2.3"
Weight	6.5 kg	14.25 lbs
Cooling / Enclosure	Natural Convection, No Fan / Potted	
DC / AC Wire and Connectors	1 and 2 Feet DC Wire, MC-4 Connectors / 4 Feet AC wire	
<b>Features and Compliance</b>	Data	
Safety and EMC Compliance	UL1741 and IEEE1547 (E113426), CSA 107.1, FCC Part 15 Class A	
Compatibility	Most 60-Cell and 72-Cell PV Solar Panels	
DC Ground Fault Detector Interrupter (GFDI)	Built-In	
Standard Warranty	3 Years (Extended Warranty Available)	
Enclosure Environmental Rating / Safety	Outdoor – NEMA 6 / Transformer Isolated Circuits	

The CyboInverter H Model should be used for 750W-1500W heating elements of dual- or single-element electric water heaters, area heaters, hot plates, etc. To power lights, fans, TV, PC, battery chargers, food processors, refrigerators, small appliances, etc., please use regular off-grid CyboInverters.

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