



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



- **2021 Top Solar Inverter by Solar Power World Magazine.**
- **Specially Designed to Power Electric Water Heaters.**
- **Reduce Electricity Bills, Avoid High Tier Rates, and Quick ROI.**
- **Four DC Input Channels with MPPT for each Channel.**
- **High Efficiency and Long Life.**
- **Much Easier to Install than a Thermal Solar System.**

Each CyboInverter (CIM-1200H) can connect to 4 solar panels and produce up to 1250W pure Sinewave AC to power the lower heating element of a dual-element water heater with easy wiring.


<p>Dual Element Electric Water Heater</p>	<p>4 DC Input channels with MPPT for each solar panel to maximize solar harvest.</p>	<p>Solar Heating for Single Element Water Heaters, Air Heaters.</p>	
<p>Solar Heating for Base Board Heaters, Area Heaters, Floor Heating Cables, Mats, and Carpet.</p>		<p>Solar Cooking with Hot Plates or Electric Cookware.</p>	<p>Solar Cooking with Hot Plates or Electric Cookware.</p>

**Product: 4 Channel 1.25KW Off-Grid CyboInverter for Electric Water Heaters**  
**Part No: CIM-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 CIM-1200H (Rev 6.6 – January 2024)

DC Input (per Channel)	60-66 Cell / 120 Half-Cell	72 Cell Panel*
Supported Solar Panels	250W – 400W	300W – 450W
Operating Input DC Voltage Range	18V – 60V	18V – 60V
Peak Power Performance Range	30V – 60V	30V – 60V
Maximum Input DC Voltage / Current	60V / 11.5A	60V / 11.5A
Maximum Input Power	330W	330W
Minimum Starting Voltage	20V	20V
AC Output	Data	
Rated Output Power / Peak Output Power	960W / 1250W	
Maximum Output Current (RMS)	10.5A (RMS – Root Mean Square)	
Nominal Operating AC Output Voltage / Range	100V – 240V (10V – 264V, Single-Phase)	
Nominal Frequency / Range	60Hz (59.5Hz – 60.5Hz) or 50Hz (49.5Hz – 50.5Hz)	
Efficiency	Data	
Peak Efficiency / MPPT Tracking	96% (99%)	
Mechanical Data	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 Wire / AC Wire	1-2 Feet DC Wires / 4 Feet AC Wires (THHN), Copper	
Features and Compliance	Data	
Safety and EMC Compliance	UL1741 and IEEE1547 (E113426), CSA 107.1, FCC Part 15 Class A	
Rapid Shutdown	Complies with NEC 2014/2017 690.12.	
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	

CyboInverter H Model is designed to run 240V, 1500W-4500W heating elements of dual- or single-element electric water heaters, area heaters, hot plates, etc. To power lights, fans, TV, PC, battery chargers, EV chargers, Mini-Split IAC, and appliances, use standalone or AC assisted off-grid CyboInverters.

\* Do not use 72-cell solar panels in areas where temperature can get below -10 degrees F (-23 degrees C).