

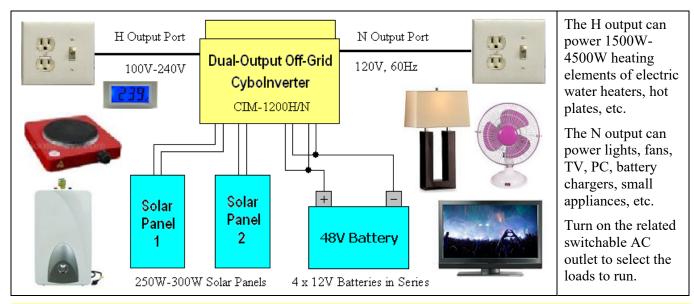
## The World's First Dual-Output Off-Grid Solar Power Mini-Inverter



# Cybølnverter

- Dual Output Ports
- Specially Designed for Powering Electric Water Heaters in Off-Grid Mode 1 or AC Loads in Mode 2
- Pure Sinewave AC Outputs
- Four DC Input Channels For Solar or Battery Input
- MPPT for Each Solar Panel
- Battery Over Discharge
  Protection
- High Efficiency and Long Life

Each CyboInverter (CIM-1200H/N) can connect to 4 solar panels or a 48V battery, and generate up to 1250W AC to power heating elements via H port or produce 120V AC to run AC loads via N port.



## Product: 4 Channel 1.25KW Dual-Output Off-Grid CyboInverter for MicrogridsCIM-1200H/NH Output Port: 100V-240V, N Output Port: 120V, 60Hz

#### Made in U.S.A.





### Technical Data of CIM-1200H/N (Rev 6.6 – January 2024)

DC Input (per Channel)	60/66 Cell Panel	72 Cell Panel*		Battery	
Supported Input Power	250W - 400W	300W - 450W		48V, 50-300AH	
Operating Input DC Voltage Range	18V - 60V	18V - 60V		47V - 60V	
Peak Power Performance Range	30V - 60V	30V - 60V		48V - 60V	
Maximum Input DC Voltage / Current	60V / 11.5A	60V / 11.5A		60V / 11.5A	
Maximum Input Power	330W	330W		330W	
Minimum Starting Voltage	20V	20V		47V	
Compatible Batteries	48V Lead-Acid Deep-Cycle AGM or Lithium-Ion Pack				
AC Output	H Output Po	rt N		Output Port	
Rated Output Power / Peak Output Power	960W / 1250W	960W		/ 1250W	
Nominal Output Current (RMS)	4A - 8A	8A			
Maximum Output Current (RMS)	10.5A		10.5A		
Nominal Output Voltage / Range	100V - 240V (10V)	– 264V)	120V (108V – 132V)		
Nominal Frequency / Range	60Hz (59.5 - 60.5)	Hz	60Hz (	60Hz (59.5 – 60.5) Hz	
Power Factor / Harmonic Distortion	>0.95 (THD < 4%, 2 <sup>nd</sup> Harmonic < 1%)				
Efficiency	Data				
Peak Efficiency / Solar 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 / 8 Feet AC Wires (THHN), Copper				
<b>Compliance and Features</b>	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 (MET)				
Standard Warranty	3 Years (Extended Warranty Available)				
Enclosure Environmental Rating / Safety	Outdoor, NEMA 6 (IP67) / Transformer Isolated Circuits				
Built-in Battery Over Discharge Protection	Low Voltage Disconnect (LVD) on Battery Channels.				

\*Do not use 72-cell solar panels in areas where temperature can get below -10 degrees F (-23 degrees C). CIP-02HN Copyright 2015-2024 by CyboEnergy, Inc., <u>www.cyboenergy.com</u>, <u>info@cyboenergy.com</u>