



## The World's First **AC Assisted Off-Grid Solar Inverter** for "all" AC Loads



- Can run AC loads with solar power only, grid power only, or combined power
- Can start heavy loads with assisted AC power and run the loads with only solar power
- Pure Sinewave AC output
- Requires no batteries
- MPPT for each solar panel
- Avoids all the headaches of an on-grid solar system

Each CyboInverter (CIM-1200Za) can connect to 4 solar panels and produce up to 1250W, 240V, 50Hz AC. With assisted AC power from the grid, it can run AC loads including: air-conditioners, refrigerators, chillers, heaters, EV chargers, pumps, motors, appliances, lights, fans, TV, computers, etc

<p><i>Q: What is your special offer?</i></p>	<p>240V, 50Hz AC Input Power from the Grid</p> <p>240V, 50Hz</p> <p>4 DC Input channels with MPPT for each solar panel to maximize solar harvest.</p>
<p><i>A: We enable you to start and run all kinds of AC loads in off-grid mode. No battery is required.</i></p>	
<p><i>Q: Really, no batteries? How?</i></p>	
<p><i>A: The assisted AC from the grid can provide the needed power.</i></p>	
<p><i>Q: Where can I use this?</i></p>	
<p><i>A: Any place where on-grid solar is no longer welcomed.</i></p>	

**Product: CyboInverter - 4 Channel 1.2KW AC Assisted Off-Grid Solar Inverter CIM-1200Za Standalone Off-Grid Model for 240V, 50Hz AC Loads.**

**Never connect the Output of the Off-Grid CyboInverter to the grid. Doing so will damage the unit and void the warranty. Check Input AC Voltage before connecting.**

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

## Technical Data of CIM-1200Za (Rev 6.1 – July 2019)

DC Input (per Channel)	60 / 72 Cell Panel	Battery*
Supported Input Power	250W – 380W	48V, 50AH – 300AH
Operating Input DC Voltage Range	15V – 58V	47V – 58V
Peak Power Performance Range	30V – 58V	48V – 58V
Maximum Input DC Voltage / Current	58V / 10.5A	58V / 10.5A
Maximum Input Power	330W	330W
Minimum Starting Voltage	20V	47V
AC Input	Data	
AC Input for Assisted AC Power	240V, 50Hz AC from the Grid or an AC Generator	
AC Output	Data	
Rated Output Power / Peak Output Power	960W / 1250W	
Maximum Combined Output Power	4500W for a Za Model or its Twin Pack Based System	
Nominal Output Current (RMS)	4A (RMS – Root Mean Square)	
Nominal Output Voltage / Range	240V (204V – 264V, Single-Phase)	
Nominal Frequency / Range	50Hz (47Hz – 52Hz)	
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 Ft DC Wires / 8 Ft AC Wires (THHN), Copper, 30A	
Features and Compliance	Data	
Safety and EMC Compliance	UL1741 and IEEE1547 (E113426), 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	



\* Supports 48V Lead-Acid Battery or 20V-55V Lithium Battery Packs. However, no batteries are required.