



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



- Pure Sinewave AC Output
- Smart with AC Load Protection
- Four DC Input Channels
- MPPT for Each Solar Panel
- Battery Over Discharge Protection
- Solar or Battery Auto-Detection
- High Efficiency and Long Life
- For Lights, Fans, TV, PC, Battery Chargers, Refrigerators, Food Processors, Small Appliances, etc.

Each CyboInverter (CI-Mini-1000Q) can connect to 4 solar panels or a 36V battery, and produce up to 1150W, 110V, 50Hz AC to power AC loads in an off-grid electrical circuit. Installation is super easy.

Item	Central Inverter	Microinverter	Mini-Inverter
Arc and Fire Risks	<b>High Voltage DC is Risky</b>	<b>Intrinsically Safe</b>	<b>Intrinsically Safe</b>
Inverter vs. Solar Panel	One inverter for all solar panels	One inverter for each solar panel	One inverter for multiple solar panels
Partial Shading	<b>A big problem</b>	<b>No problem</b>	<b>No problem</b>
MPPT	<b>System level</b>	<b>For each panel</b>	<b>For each panel</b>
Design & Installation	<b>Labor intensive</b>	<b>Easy</b>	<b>Easiest</b>
Inverter Per Watt Cost	<b>Lowest</b>	<b>Highest</b>	<b>In between</b>
Installed System Cost	<b>Highest</b>	<b>In between</b>	<b>Lowest</b>

**Product: CyboInverter - 4 Channel 1.2KW Off-Grid Solar Power Mini-Inverter**  
**Part No: CI-Mini-1000Q Standalone Off-Grid Model, 110V, 50Hz AC**

**Never connect the Off-Grid CyboInverter to the AC grid. Doing so will damage the unit and void the warranty. Check motor voltage and current specs before attaching.**

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

## Technical Data of CI-Mini-1000Q [Rev 2.3 – April 2015]

<b>DC Input (per Channel)</b>	60 / 72 Cell Panel	Battery
Recommended Input Power	220W – 320W	36V, 50AH – 300AH
Operating Input DC Voltage Range	15V – 48V	35V – 45V
Peak Power Performance Range	30V – 48V	36V – 48V
Maximum Input DC Voltage / Current	48V / 9A	48V / 9A
Maximum Input Power	300W	300W
Minimum Starting Voltage	20V	35V
<b>AC Output</b>	Data	
Rated Output Power / Peak Output Power	960W / 1150W	
Startup Surge Power for 12 Seconds	1500W (Max Surge DC Power = 400W per Channel)	
Nominal Output Current (RMS)	8.7A (RMS – Root Mean Square)	
Nominal Output Voltage / Range	110V (99V – 121V, Single-Phase)	
Nominal Frequency / Range	50Hz (49.5Hz – 50.5Hz)	
Power Factor	>0.95	
<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 Foot DC Wire, MC-4 Connectors / 3 Feet AC wire	
<b>Features and Compliance</b>	Data	
Safety and EMC Compliance	UL1741 and IEEE1547 (E113426), FCC Part 15 Class A	
Compatibility	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	
Built-in Battery Over Discharge Protection	Low Voltage Disconnect (LVD) on Battery Channels.	



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