



Enhanced Off-Grid Solar Power Mini-Inverter



- Pure Sinewave AC Output
- Smart with AC Load Protection
- Four DC Input Channels
- MPPT for Each Solar Panel
- Over Discharge Protection for 48V Lead-Acid Batteries
- 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-1000Ze) can connect to 4 solar panels or a 48V battery, and produce up to 1150W, 240V, 50Hz AC to power AC loads in an off-grid electrical circuit. Installation is super easy.

Item	Central/String Inverter	Microinverter	Mini-Inverter
Arc and Fire Risks	High Voltage DC is Risky	Intrinsically Safe	Intrinsically Safe
Inverter vs. Solar Panel	One inverter for all solar panels	One inverter for each solar panel	One inverter for multiple solar panels
Partial Shading	A big problem	No problem	No problem
MPPT	System level	For each panel	For each panel
Design & Installation	Labor intensive	Easy	Easiest
Off-Grid Inverter	<i>Maybe</i>	No	Yes
Battery Integration	<i>Maybe</i>	No	Yes

Product: CyboInverter - 4 Channel 1.2KW Off-Grid Solar Power Mini-Inverter
Part No: CI-Mini-1000Ze Enhanced Standalone Off-Grid Model, 240V, 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-1000Ze [Rev 2.5 – January 2016]

DC Input (per Channel)	60 / 72 Cell Panel	Battery*
Recommended Input Power	220W – 320W	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 / 9A	58V / 9A
Maximum Input Power	300W	300W
Minimum Starting Voltage	20V	47V
AC Output	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)	4A (RMS – Root Mean Square)	
Nominal Output Voltage / Range	240V (216V – 264V, Single-Phase)	
Nominal Frequency / Range	50Hz (49.5Hz – 50.5Hz)	
Power Factor	>0.95	
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 / AC Wire and Connectors	1 Foot DC Wire, MC-4 Connectors / 3 Feet AC wire	
Features and Compliance	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.	

* The Enhanced Off-Grid CyboInverters support 48V Lead-Acid Battery or 48V-56V Lithium Battery Packs.