



The World's First Grid-Interactive Solar Power Mini-Inverter



- **Smart and Scalable**
- **Four DC Input Channels**
- **MPPT for Each Solar Panel**
- **Solar or Battery Input for each Channel**
- **Ideal for Battery Backup and Peak-Power Shaving**
- **Outdoor or Indoor Mounting**
- **High Efficiency and Long Life**
- **Plug and Play Installation**

Each CyboInverter (Mini-1000A) can connect to 4 solar panels and produce 1250W, 240V, 60Hz AC to the grid. Multiple CyboInverters can daisy chain and work well with On/Off-Grid CyboInverters.

Refer to [CyboEnergy On/Off-Grid Solar System Design Guide](http://CyboEnergy.com), Downloadable from cyboenergy.com


Item	Central 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 or wind gen.
Partial Shading	A big problem	No problem	No problem
MPPT	System level	For each panel	For each panel
Design & Installation	Labor intensive	Easy	Easiest
Battery Integration	Easy	Difficult	Easy
Installed System Cost	Highest	In between	Lowest
Suitable Application	Large solar system	Small solar system	Small to large systems

CyboInverter: 4 Channel 1.25KW On-Grid Solar Power Mini-Inverter

Part No: CI-Mini-1000A Maximum CyboInverters per 20A Branch Circuit: 3-4

Made in U.S.A.

Technical Data of CI-Mini-1000A (Rev 6.6 – Jan 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	Data		
Rated Output Power / Peak Output Power	960W / 1250W		
Nominal Output Current (RMS)	4A (RMS – Root Mean Square)		
Nominal Output Voltage / Range	240V (211V – 264V, Single Phase)		
Nominal Frequency / Range	60Hz (59.3 – 60.5) Hz		
Power Factor / Harmonic Distortion	>0.95 (THD < 4%, 2 nd 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 / 9 Feet AC Wires (THHN), Copper		
Compliance and Features	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 (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).