



# Enhanced Grid-Interactive Solar & Wind Power Mini-Inverter



- Smart and Scalable
- Four DC Input Channels
- Solar or Wind Input
- MPPT for Each Solar Panel
- Low Per Watt Price
- Outdoor or Indoor Mounting
- High Efficiency and Long Life
- Produces AC at Low Sunlight
- Powerline Communication & Monitoring with CyboBridge


Each CyboInverter (Mini-1000Ae) can connect to 4 solar panels or DC wind generators and produce 1150W, 240V, 60Hz AC to the grid. Multiple CyboInverters can daisy chain. 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>
Scalable Inverter	<i>Possibly</i>	<b>No</b>	<b>Yes</b>
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	<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>	<i>Easy</i>	<b>Easiest</b>
Inverter Per Watt Cost	<b>Lowest</b>	<b>Highest</b>	<i>In between</i>
Installed System Cost	<b>Highest</b>	<i>In between</i>	<b>Lowest</b>
Suitable Application	Large solar system	Small solar system	Small to large systems

**CyboInverter: 4 Channel 1.2KW On-Grid Solar and Wind Power Mini-Inverter**  
**Part No: CI-Mini-1000Ae Maximum CyboInverters per 20A Branch Circuit: 3-4**

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

## Technical Data of CI-Mini-1000A (Rev 3.2 - Jan 2016)

DC Input (per Channel)	60 Cell Panel	72 Cell Panel	DC Wind Gen
Recommended Input Power	220W – 280W	240W – 320W	200W – 300W
Operating Input DC Voltage Range	15V – 58V	20V – 58V	20V – 45V
Peak Power Performance Range	30V – 58V	30V – 58V	20V – 40V
Maximum Input DC Voltage / Current	58V / 9A	58V / 9A	48V / 9A
Maximum Input Power	300W	300W	300W
Minimum Starting Voltage	20V	20V	20V
Compatible Wind Generators	WindStream Tech: SolarMill		
AC Output	Data		
Rated Output Power / Peak Output Power	960W / 1150W		
Minimum Output Power	5W (Under Low Sunlight or Low Wind Speed)		
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 <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 Connectors / AC Connectors	MC-4 or Compatible / Wieland RST 3-Conductor		
Compliance and Features	Data		
Safety and EMC Compliance	UL1741 and IEEE1547 (E113426), CSA 107.1, FCC Part 15 Class A		
Compatibility	60-Cell and 72-Cell PV Solar Panels		
DC Ground Fault Detector Interrupter (GFDI)	Built-In		
Standard Warranty	10 Years (Extended Warranty Available)		
Enclosure Environmental Rating / Safety	Outdoor, NEMA 6 (IP67) / Transformer Isolated Circuits		

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