

## The World's First 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-1000E) can connect to 4 solar panels or DC wind generators and produce 1150W, 230V, 50Hz AC to the grid. Multiple CyboInverters can daisy chain. Installation is super easy.

Item	Central Inverter	Microinverter	Mini-Inverter	
Arc and Fire Risks	High Voltage DC is Risky	<b>Intrinsically Safe</b>	Intrinsically Safe	
Scalable Inverter	Possibly	No	Yes	
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	
Inverter Per Watt Cost	Lowest	Highest	In between	
Installed System Cost	Highest	In between	Lowest	
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-1000E Maximum CyboInverters per 20A Branch Circuit: 3-4





## Technical Data of CI-Mini-1000E (Rev 3.1 - March 2015)

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 – 48V	20V – 48V		20V – 45V	
Peak Power Performance Range	30V – 48V	30V – 4	48V	20V – 40V	
Maximum Input DC Voltage / Current	48V / 9A	48V /	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)	4.17A (RMS – Root Mean Square)				
Nominal Output Voltage / Range	230V (202.4V – 253V, Single Phase)				
Nominal Frequency / Range	50Hz (49.3 – 50.5) 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°C to +65°C		o +149°F	
Internal Operating Temperature Range	-40°C to +88°C	8°C -40°F to +190°F		o +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"		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), FCC Part 15 Class A (Amendment Pending)				
Compatibility	60-Cell and 72-Cell PV Solar Panels				
DC Ground Fault Detector Interrupter (GFDI)	Built-In (MET)®				
Standard Warranty	5 Years (Extended Warranty Available)				
Enclosure Environmental Rating / Safety	Outdoor, NEMA 6 (IP67) / Transformer Isolated Circuits				

## Made in U.S.A.