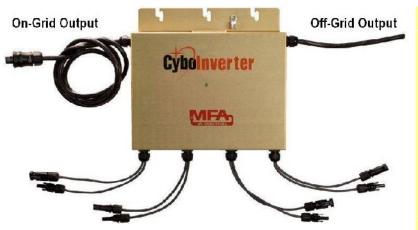


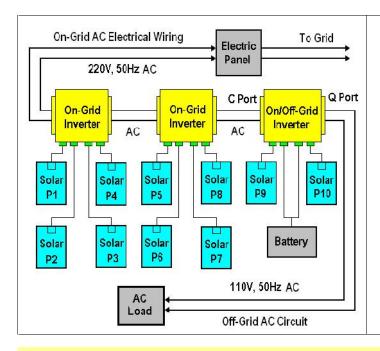
The World's First On/Off-Grid Solar & Hybrid Power Mini-Inverter





- On-Grid or Off-Grid Mode
- Specially Designed to Provide Backup Power When the Grid is Down
- Four DC Input Channels for Solar, Battery, or Wind Input
- Over Discharge Protection for 48V Lead-Acid Batteries
- Pure Sinewave AC Output
- MPPT for Each Solar Panel
- Outdoor or Indoor Mounting

Each CyboInverter (CIM-1200C/Q) can connect to 4 solar, battery, or wind DC sources and produce 1150W, 220V, 50Hz AC to the grid when grid is on, or 110V AC to an off-grid circuit to run AC loads.



When the grid is on, the inverter works like a regular on-grid inverter that meets UL1741 and IEEE1547 standards including: over and under voltage shutdown; over and under frequency shutdown; and anti-islanding.

When the grid is down, the inverter will shutdown immediately and then send a test signal from its off-grid output port to check the status of the connected off-grid AC circuit. If there is no AC present and an AC load is detected, it will generate AC to power the load.

In the off-grid mode, when the inverter detects the grid is back on, it will stop powering the load. After a 5-minute UL mandatory wait, the inverter will send AC power to the grid again.

The drawing shows 2 on-grid and 1 on/off-grid CyboInverters daisy-chained as a group.

Product: 4 Channel 1.2KW On/Off-Grid CyboInverter for Solar, Wind & Battery Part No: CIM-1200C/Q Maximum CyboInverters per 20A Branch Circuit: 3-4





Technical Data of CIM-1200C/Q (Rev 5.0 - April 2017)

DC Input (per Channel)	60/72 Cell Panel	Battery	DC Wind Gen	
Recommended Input Power	250W – 330W	48V, 100AH	200W - 300W	
Operating Input DC Voltage Range	15V – 58V	47V – 58V	20V – 45V	
Peak Power Performance Range	30V – 58V	48V – 58V	20V - 40V	
Maximum Input DC Voltage / Current	58V / 9A	58V / 9A	48V / 9A	
Maximum Input Power	300W	300W	300W	
Minimum Starting Voltage	20V	47V	20V	
Compatible Solar Panels	Most 60-Cell and 72-Cell PV Solar Panels			
Compatible Batteries	48V Lead-Acid Deep-Cycle AGM or Lithium-Ion Pack			
Compatible Wind Generators	WindStream Tech: SolarMill			
AC Output	On-Grid, C Po	ort (Off-Grid, Q Port	
Rated Output Power / Peak Output Power	960W / 1150W	960W	960W / 1150W	
Nominal Output Current (RMS)	4.36A	8.7A	8.7A	
Nominal Output Voltage / Range	220V (193.6V – 2	42V) 110V	110V (99V – 121V)	
Nominal Frequency / Range	50Hz (49.3 – 50.5) Hz 50Hz	50Hz (49.5 – 50.5) 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°I	F to +190°F	
Dimensions w/o mounting bracket (L x H x W)	32cm x 24cm x 5.8	8cm 12.5'	' x 9.5" x 2.3"	
Weight	6.5 kg	14.25	5 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)			
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			

Made in U.S.A.