

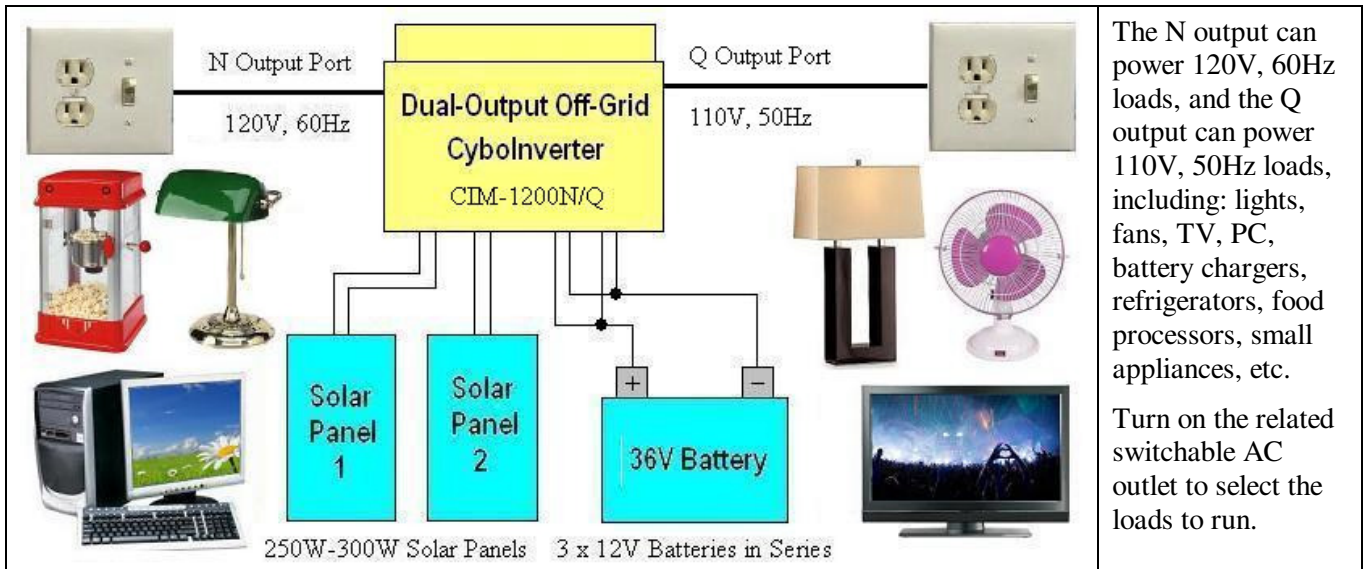


The World's First Dual-Output Off-Grid Solar Power Mini-Inverter




- **Dual Output Ports**
- **Pure Sinewave AC Outputs**
- **Four DC Input Channels**
- **Solar or Battery Input for each Channel**
- **MPPT for Each Solar Panel**
- **Solar or Battery Auto-Detection**
- **Battery Over Discharge Protection**
- **High Efficiency and Long Life**

Each CyboInverter (CIM-1200N/Q) can connect to 4 solar panels or a 36V battery, and generate up to 1150W AC to run 120V 60Hz AC loads via N port or run 110V 50Hz AC loads via Q port.



Product: 4 Channel 1.2KW Dual-Output Off-Grid CyboInverter for Microgrids
Part No: CIM-1200N/Q N Output Port: 120V, 60Hz, Q Output Port: 110V, 50Hz

Technical Data of CIM-1200N/Q (Rev 1.2- June 2016)

DC Input (per Channel)	60 / 72 Cell Panel	Battery
Recommended Input Power	220W – 320W	36V, 50AH – 300AH
Operating Input DC Voltage Range	15V – 48V	35V – 45V
Peak Power Performance Range	30V – 48V	36V – 48V
Maximum Input DC Voltage / Current	48V / 9A	48V / 9A
Maximum Input Power	300W	300W
Minimum Starting Voltage	20V	35V
Compatible Solar Panels	Most 60-Cell and 72-Cell PV Solar Panels	
Compatible Batteries	36V Lead-Acid Deep-Cycle AGM or Lithium-Ion Pack	
AC Output	N Output Port	Q Output Port
Rated Output Power / Peak Output Power	960W / 1150W	960W / 1150W
Nominal Output Current (RMS)	8A	8.7A
Maximum Output Current (RMS)	9.5A	9.5A
Nominal Output Voltage / Range	120V (108V – 132V)	110V (99V – 121V)
Nominal Frequency / Range	60Hz (59.5 – 60.5) Hz	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°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), FCC Part 15 Class A	
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.	

Made in U.S.A.