

Off-Grid Solar System for Level 2 EV Charging with Cybolnverter Quad Pack

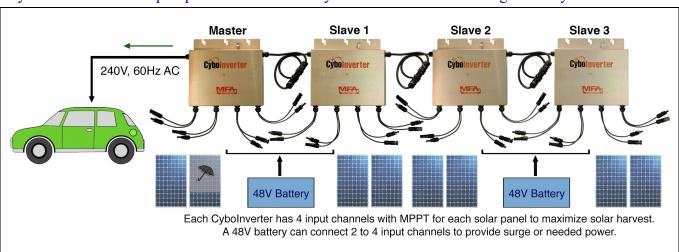




- Pure Sinewave AC Output
- An Off-Grid Solar System to Produce 240V, 60Hz AC for Level 2 EV Charging
- Total of 16 DC Input Channels
- MPPT for Each Solar Panel
- Over Discharge Protection for 48V Lead-Acid Batteries
- Solar or Battery Auto-Detection
- High Efficiency and Long Life

One Master (Y1) and three Slave off-grid CyboInverters (2 x Y3 and Y2) can daisy-chain. The system can produce up to 5000W, 240V, 60Hz AC to perform Level 2 EV charging and power other 240V AC loads. All input channels can connect to solar panels or batteries. Each 48V battery set can connect to 2 to 4 input channels in parallel to provide surge or needed power.

Key Benefits: When there is sufficient solar power to charge the EV or run the loads, the CyboInverters will not pull power from the battery. This ensures a much longer battery life.



Part No: CIM-5000Y with Daisy-Chained CyboInverter Y1, Y3, Y3, and Y2.

Made in U.S.A.





Technical Data of CIM-5000Y (Y1, Y3, Y3, Y2) [Rev 6.6 – Jan 2024]

DC Input (per Channel)	60/66 Cell Panel	72 Cell I	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 (per Inverter)	Data				
Rated Output Power / Peak Output Power	960W / 1250W				
Startup Surge Power for 12 Seconds	1500W (Max Surge DC Power = 400W per Channel)				
Nominal Output Current (RMS)	4A (RMS – Root Mean Square)				
Nominal Output Voltage / Range	240V (216V – 2	240V (216V – 264V, Single-Phase)			
Nominal Frequency / Range	60Hz (59.5Hz – 60.5Hz)				
Power Factor	>0.95				
Efficiency	Data				
Peak Efficiency / MPPT Tracking	96% (99%)				
Mechanical Data	SI	U.S.		U.S.	
Ambient Temperature Range	-40°C to +65°C	-40°F to +14		+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 5.86	em 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 / 12 Feet AC Wires (THHN), Copper				
Features and Compliance	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 (MET)				
Standard Warranty	3 Years (Extended Warranty Available)				
Enclosure Environmental Rating / Safety	Outdoor – NEMA 6 / Transformer Isolated Circuits				
Built-in Battery Over Discharge Protection	Low Voltage Disconnect (LVD) on Battery Channels.				

^{*} Use a Solar Charge Controller with solar panels to charge the battery. CyboInverters do not charge batteries.