

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





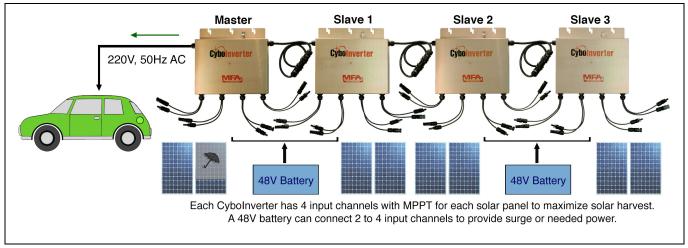
 An Off-Grid Solar System to Produce 220V, 50Hz AC for EV Charging or Run Heavy Loads

Cýbølnverter

- 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 (S1) and three Slave off-grid CyboInverters (2 x S3 and S2) can daisy-chain. The system can produce up to 5000W, 220V, 50Hz AC to perform EV charging and power other 220V 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-5000S with Daisy-Chained CyboInverter S1, S3, S3, and S2.

Made in <mark>U.S.A.</mark>

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## **Technical Data of CIM-5000S (S1, S3, S3, S2)** [Rev 6.6 – Jan 2024]

DC Input (per Channel)	60/66 Cell Panel	72 Cell	l 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)	4.36A (RMS – Root Mean Square)			
Nominal Output Voltage / Range	220V (198V - 2	(198V – 242V, Single-Phase)		
Nominal Frequency / Range	50Hz (49.5Hz – 50.5Hz)			
Power Factor	>0.95			
Efficiency	Data			
Peak Efficiency / MPPT Tracking	96% (99%)			
Mechanical Data	SI	L		U.S.
Ambient Temperature Range	-40°C to +65°C	-40°F to +1		o +149°F
Internal Operating Temperature Range	-40°C to +88°C -40°F to		o +190°F	
Dimensions w/o mounting bracket (L x H x W)	32cm x 24cm x 5.8	x 24cm x 5.8cm 12.5"		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.