



AC MASTER POWER INVERTER 200W & 350W

For recreational & semi professional use

New inverter generation

We are pleased to introduce a new generation of sine wave inverters, the AC Master range. Main purpose is to offer a better inverter product to recreational and semi professional users with a dramatically improved price/performance ratio. From December 2006 onwards, the new switch mode AC Master inverter models will replace the Mass Sine 250 & 400 models, which are low frequency models based with a 50Hz toroidal transformer. The current range consist of a 200 and 350 Watt model, for 12 or 24V DC and one UL certified 350 Watt 120V/60Hz model.



As a result of the switch mode technology applied (25 kHz), the new inverters are extremely compact and light weight. Surge power is 200%, sufficient to start up inductive loads with high peak powers. The European models have an efficiency of around 90%, while all models have a no-load of 0.8A (stand by mode). The regular protection circuitries have been integrated: short circuit protection, overtemperature shut down, and overload shutdown. The European versions are supplied with Continental CEE 7/7 AC sockets or IEC sockets, and can be fitted with hard wire connections as well (turn page for more information).

Read out

Next to the AC socket you can find a three-color LED that indicates the status of the AC Master. When lid green, the unit is on normal operation. Red or red blinking indicates a fault condition like overload, overtemperature or empty battery.



Remote control

The AC Master is equipped with a connection to switch the unit on and off remotely. You can easily connect any type of switch to the faston connection on the unit and connect it to the to ground (battery minus).

Approvals and compliance

The AC Master is build according to the latest standards applicable to AC-DC inverter products and complies fully to the CE regulation, including E-marking for mobile use. The 120V versions are UL compliant.



Back side of the AC Master power inverter.

- SMALL, LIGHTWEIGHT AND AMAZINGLY SILENT
- PURE SINE WAVE (WITH EXTREME LOW DISTORTION)
- HIGH PEAK POWER CAPABILITY
- ALL LOADS' POWER FACTORS ARE ALLOWED
- ATTRACTIVE DESIGN
- ELECTRONIC COMPONENTS ARE PERFECTLY SHIELDED
- SUITABLE TO BE USED IN HARSH CIRCUMSTANCES
- SIMPLE AND SAFE INSTALLATION, PLUG & PLAY
- CLEAR SIGNALING AND EASY OPERATION
- 2 YEAR PRODUCT WARRANTY
- WORLD WIDE SERVICE

















TECHNICAL SPECIFICATIONS

Model	12/200	12/350	24/200	24/350	12/350
Article number	28010200	28010350	28020200	28020350	28520350
GENERAL SPECIFICATIONS					
Nominal battery voltage	12V	12V	24V	24V	12V
Nom. power Tamb=40°C, cos phi 1	200W	350W	200W	350W	350W
Maximal peak load	400W	700W	400W	700W	700W
Output waveform	true sine wave				
Maximal efficiency	90%	86%	93%	89%	84%
Output voltage	230V (±5%)	230V (±5%)	230V (±5%)	230V (±5%)	120V (±5%)
Frequency	50Hz (±0.03Hz)	50Hz (±0.03Hz)	50Hz (±0.03Hz)	50Hz (±0.03Hz)	60Hz (±0.03Hz)
Dimensions (HxWxD)	74 x 152 x 242 mm / 2.91 x 5.98 x 9.53 inch				
Weight	1.65 kg	1.85 kg	1.65 kg	1.85 kg	1.85 kg
Protection degree	IP21				
TECHNICAL SPECIFICATIONS					
Technology	HF/switch mode (25 kHz)				
Switch off voltage low battery	10.3V (±0.5V)	10.3V (±0.5V)	20.6V (±0.5V)	20.6V (±0.5V)	10.3V (±0.5V)
Switch on voltage low battery	12.3V (±0.5V)	12.3V (±0.5V)	24.6V (±0.5)	24.6V (±0.5V)	12.3V (±0.5V)
Switch off voltage high battery	15.3V (±0.5V)	15.3V (±0.5V)	30.6V (±0.5V)	30.6V (±0.5V)	15.3V (±0.5V)
Switch on voltage high battery	14.6V (±0.5V)	14.6V (±0.5V)	29.2V (±0.5V)	29.2V (±0.5V)	14.6V (±0.5V)
Max. allowable ripple on DC	5% RMS				
Input current (nominal load)	23A	38A	15A	25A	38A
DC fuse required (slow blow)	30A	40A	20A	30A	40A
DC cable	supplied				
AC connection*	continental European socket CEE-7/7 US/NEMA 5-15				
No load power consumption (off mode)	0mA	0mA	0mA	0mA	0mA
ON @ Unom: stand by load	0.8A	0.8A	0.5A	0.5A	0.8A
Operating temperature specified	full spec 0°C to 40°C, ambient temperature 40°C to 60°C, derating with 5%/°C.				
(will meet specified tolerances)	Shutdown @ 80°C heat sink temperature.				
Practical operating temperature	-25°C to 40°C ambient temperature, 40°C to 60°C derating with 5%/°C.				
(may not meet specified tolerances)	Shutdown @ 80°C heat sink temperature.				
Relative humidity	protected against humidity and condensing air by conformal coating on both sides of all PCB's.				
	Max. 95% relative humidity, none condensing.				
Standard and Approvals	CE, E-marking				

^{*} The 230V models are standard equipped with a continental European socket CEE7/7 as printed below. The 120V models with the standard US socket NEMA 5-15. Optionally (volume dependent): we can deliver the inverters also with an IEC-1 socket or a cable gland/hardwiring connection.







US socket NEMA 5/15.



Optional IEC-1 socket.



Optional cable gland/ hardwire connection.

See our web page www.mastervolt.com for an extensive overview of all kinds of Mastervolt inverters.