

AC Master 12/500 (230V)



Product code: 28010500

Mastervolt offers a complete range of inverters from 300 watt to 40 kwatt in AC Master, Mass Sine and Mass Sine Ultra models. The AC Master is ideal for small and medium-sized applications, while Mass Sine and the advanced Mass Sine Ultra inverters are mainly intended for larger systems and for professional purposes. Mastervolt offers inverters for 230V/50Hz as well as 120V/60Hz (American voltage).

AC Master sine wave inverters

With a compact, lightweight and silent AC Master you can easily convert the voltage of a 12 or 24 V battery into 230 V/50 Hz AC current the same way you would at home or work. From microwave to hairdryer, DVD player to electrical tools, laptop to flatscreen; the pure sine wave preserves your equipment without disruption, humming or lines on the TV screen, while ensuring a longer lifespan of all connected equipment and saving you the costs of all those adapters.

Specifications

General specifications

Output voltage ($\pm 5\%$)	230 V - 50 Hz ($\pm 0.1\%$)
Output waveform	true sine
Nominal battery voltage	12 V
Continuous power at 40 °C / 104 °F, cos phi 1	400 W
Continuous power at 25 °C / 77 °F, cos phi 1	500 W
Peak load	800 W
AC connection	universal
Efficiency	90 %
Display/read-out	LED display
Recommended battery capacity	≥ 100 Ah
Dimensions, h \times w \times d	210 x 130 x 60 mm 8.3 x 5.1 x 2.4 inch
Weight	1.22 kg 2.7 lb
Approvals	CE, E-mark, ABYC A-31

Technical specifications

Technology	HF switch mode
Low battery voltage, switches off at	10 V, ± 0.5 V
Low battery voltage, switches on at	11 V, ± 0.5 V
High battery voltage, switches off at	16 V, ± 0.5 V
High battery voltage, switches on at	14.5 V, ± 0.5 V
Max. ripple on DC (battery)	10% RMS
Input current (nominal load)	37.5 A
No-load power consumption (ON mode)	0.58 A - 7 W
No-load power consumption (energy saving mode)	0.33 A - 4 W
Min. DC fuse (slow blow)	80 A
Min. cable size	included
Harmonic distortion typical	$< 6\%$
Cos phi	all power factors allowed
Temperature range (ambient temp.)	0 °C to 40 °C, derating power ≥ 40 °C 32 to 104 °F
Switch off at (auto recover after cooling down)	50 °C 122 °F
Sound level	53 dBA at 1 mtr
Protection degree	IP23
Protections	over temperature, over load, short circuit, high/low battery voltage
Cooling	natural/forced

MasterBus compatible

no