

# Mass Sine 12/1200 (230V/50Hz)



Product code: 24011200

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).

### **No humming with HF technology**

Our use of high-frequency switch technology means you can say goodbye to humming transformers and hello to efficiency. Mastervolt inverters are also small and lightweight to ensure easy installation.

### **High peak power during start up**

The Mastervolt sine wave inverter can provide up to 200 % surge capacity to equipment that requires extra power during start up.

### **Efficient use of batteries**

A high efficiency when inverting and an automatic economy mode when there is no consumption gives you longer use of your batteries.

### **Simple and safe to connect**

The inverters feature robust connection technology, internal in the larger models and a plug & play socket with cable for the smaller models.

### **MasterBus compatible**

Every Mass Sine inverter can be easily connected to a MasterBus network with only one cable and one connection. You can also choose central, local or remote monitoring, configuration and control of your system.

# Specifications

## General specifications

Output voltage ( $\pm 5\%$ )	230 V - 50 Hz ( $\pm 0.01$ Hz)
Output waveform	true sine
Nominal battery voltage	12 V
P30 power at 40 °C, cos phi 1	1200 W
Continuous power at 40 °C / 104 °F, cos phi 1	1000 W
Peak load	2400 W
AC connection	internal
Efficiency	92 %
Display/read-out	LED display
Recommended battery capacity	> 150 Ah
Dimensions, hwxwd	340 x 261 x 130 mm 13.4 x 10.3 x 5.1 inch
Weight	8 kg 17.6 lb
Approvals	CE, E-mark, ABYC A-31

## Technical specifications

Technology	HF switch mode
Low battery voltage, switches off at	10 V, $\pm 0.5$ V
Low battery voltage, switches on at	11 V, $\pm 0.5$ V
High battery voltage, switches off at	15.5 V, $\pm 0.5$ V
High battery voltage, switches on at	14.5 V, $\pm 0.5$ V
Max. ripple on DC (battery)	5% RMS
Input current (nominal load)	110 A
No-load power consumption (ON mode)	450 mA - 5 W
No-load power consumption (energy saving mode)	43 mA - 0.5 W
Min. DC fuse (slow blow)	150 A
Min. cable size	50 mm <sup>2</sup>
Harmonic distortion typical	< 5%
Cos phi	all power factors allowed
Transfer system	the Masterswitch and Systemswitch can be connected to all sine wave inverters
Temperature range (ambient temp.)	-25 °C to 80 °C, derating > 40 °C -13 to 176 °F
Sound level	48 dBA at 1 mtr
Protection degree	IP23
Protections	over temperature, over load, short circuit, high/low battery voltage
Cooling	natural/forced

MasterBus compatible

yes, using a MasterBus Inverter Interface or AC power analyser