Mass Sine Ultra and Mass Sine: For the toughest tasks



Even under the most extreme conditions the products from the Mass series operate faultlessly, giving you round-the-clock output when necessary. With an MTBF of 180,000 hours at full capacity and 24/7 use, the Mass products are ideal for the toughest tasks and any situation that requires a reliable power supply.



Optimal flexibility in system design

Choosing an independent sine wave inverter allows you complete freedom of choice of battery charging equipment. You can freely adapt the rating of these chargers, depending on the desired charge time. In case you want to use renewable energy sources, you may want to choose an MPPT solar charge regulator.

The high efficiency and automatic

High Efficiency

economy mode are designed to allow digital clocks to work properly and ensure you many more hours of operation from your batteries. The application of highfrequency technology prevents any annoying humming and zooming sounds, while the high peak capacity ensures that the high inrush current required for electrical tools, for example, is seamlessly produced.

FEATURES

- For heavy duty work in professional and semiprofessional applications.
- Full capacity at temperatures up to 40 °C.
- Pure sine wave output prevents failures and damage to connected sensitive equipment.
- High peak capacity for the seamless switching on of complex and heavy loads.
- Dynamic, battery-specific input current for an optimal use of every type of battery (Mass Sine Ultra).
- Parallel configuration of up to ten devices for a capacity up to 40 kW (Mass Sine Ultra).

- 3-Phase configuration for a capacity up to 36 kW (Mass Sine Ultra).
- Integrated MasterBus (Mass Sine Ultra) or MasterBus compatible (Mass Sine).
- Suitable for mobile applications.
- Professional connections.
- Automatic, reliable and safe operation.
- Optional: Masterswitch/Systemswitch for automatic selection of the desired energy source.











Mass Sine Ultra



With an AC capacity of 4000 W in one unit, the Mass Sine Ultra can satisfy even the greatest energy

demands. As ten units can be switched in parallel or 3x3 in a three-stage configuration, the Mass Sine Ultra can supply a capacity of up to 40 kW. The inverter provides full power at 40 °C and works smoothly even in extreme conditions such as engine rooms and technical spaces. Like all Mass products, the inverter is supplied in a compact and robust casing. This inverter is the best choice if you are looking for autonomous AC capacity of over 3 kW.

POWER QUALITY

Latest Technology

The extremely efficient power electronics save volume and

weight with minimal sound levels and a very low ripple voltage which extends the lifespan of your batteries. At the same time, digital technology prevents any annoying flickering and voltage fluctuations.



Make the most of your batteries

The Mass Sine Ultra is equipped with a dynamic battery voltage window.

Taking into account the type of battery and current, this function ensures the inverter can supply AC longer without overtaxing the batteries.

Mass Sine

Mastervolt's Mass Sine inverters have been proving their value in the most extreme conditions for over 25 years.

Clear Indicators

The Mass Sine features easy controls on the device itself. As inverters are often built in, we also supply an effective remote control panel, the C4-RI. In addition, the Mass Sine can be controlled via its intuitive display, the

EasyView 5, thanks to the integration of MasterBus communication using a MasterBus Inverter Interface or AC Power Analyser.



Easy and safe connections

The Mass Sine inverters provide robust and professional connections for fast and safe installation.



Specifications Mass Sine (Ultra) sine wave inverters





Mass Sine

24 V

> 50 Ah



Mass Sine



Product code 230 V	
Product code 230 V 60 Hz	

Weight

Approvals

Mass Sine	
12/2000	
24012000	
24112000	

24/800	
24020800	
24120800	

24/1500 24021500 24121500

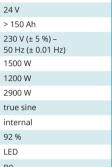
Mass Sine 24/2500 24022500

24122500

Product code 230 V 60 Hz		
GENERAL SPECIFICATIONS		
Nominal battery voltage		
Recommended battery capacity		
Output voltage		
P30 power at 40 °C, cos phi 1		
Continuous power at 40 °C, cos phi 1		
Peak load		
Output waveform		
AC connection		
Efficiency		
Display/read-out		
Parallel configuration		
3-Phase configuration		
Dimensions, hxwxd		

12 V
> 200 Ah
230 V (± 5 %) – 50 Hz (± 0.01 Hz)
2000 W
1800 W
4000 W
true sine
internal
92 %
LED
no
no

230 V (± 5 %) –
50 Hz (± 0.01 Hz)
800 W
650 W
1600 W
true sine
internal
92 %
LED
no
no
325 x 220 x 111 mm 12.8 x 8.7 x 4.4 inch

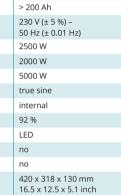


340 x 261 x 130 mm

13.4 x 10.3 x 5.1 inch

CE, E-mark, ABYC A-31

6.2 kg / 13.7 lb



TECHNICAL SPECIFICATIONS		
Technology		
Max. ripple on DC (battery)		
Input current (nominal load)		
No-load power consumption (ON mode)		
No-load power consumption (energy saving mode)		
Minimal DC fuse (slow blow) DC fuse depends on the cable size		
Minimal cable size		
Harmonic distortion typical		

Minimal cable size
Harmonic distortion typical
Power factor control
Transfer system
Temperature range (ambient temp.)
Cooling
Protection degree
Protections

14.6 kg / 32.2 lb
CE, E-mark, ABYC A-31, RRR
HF switch mode
5 % RMS
183 A

all power factors allowed

420 x 318 x 130 mm

16.5 x 12.5 x 5.1 inch

480 mA - 6 W 50 mA - 0.6 W 250 A 70 mm²

HF switch mode
5 % RMS
36 A
240 mA – 5.6 W
35 mA – 0.8 W
63 A
16 mm ²
< 5 %

Masterswitch/Systemswitch compatible, see page 134 for more information

3.8 kg / 8.4 lb

CE, E-mark, ABYC A-31

HF switch mode	HF sw
5 % RMS	5 % R
68 A	115 A
200 mA – 5 W	250 m
25 mA – 0.6 W	25 m/
100 A	160 A
25 mm ²	50 mr
< 5 %	< 5 %

HF switch mode	HF switch mode	HF switch mode
5 % RMS	5 % RMS	5 % RMS
36 A	68 A	115 A
240 mA – 5.6 W	200 mA – 5 W	250 mA – 6 W
35 mA – 0.8 W	25 mA – 0.6 W	25 mA – 0.6 W
63 A	100 A	160 A
16 mm ²	25 mm ²	50 mm ²
< 5 %	< 5 %	< 5 %
all power factors allowed	all power factors allowed	all power factors allowed

10.1 kg / 22.3 lb

CE, E-mark, ABYC A-31

-25 °C to 80 °C; > 40 °C derating / -13 °F to 176 °F; > 104 °F derating			
natural/forced	natural/forced	natural/forced	natural/forced
IP23	IP23	IP23	IP23
over-temperature, overload, short circuit, high battery, low battery			

MasterBus compatible y	yes, using a MasterBus Inverter Interface or AC Power Analyse



77010310
MasterBus USB Interface 77030100

77010310	In combination with MasterBus Inverte to show the key system information at home button gives access to favorite p	a glance. There is a
MasterBus USB Interface 77030100	option	option
	In combination with MasterBus Inverter Interface. Commu configuration of your MasterBus system on the PC when co	
MasterBus Inverter Interface	option	option
77030700	Integrates the Mass Sine inverter in a MasterBus network.	
AC Power Analyser	option	option

option	option
Remote control on/off for the Mass Sin	e sine wave inverter.
option	option
In combination with MasterBus Inverter Interface. Waterpr to show the key system information at a glance. There is a	



option

option



option

option





C Power Analyser	option	option	option
7031200	Integrates the Mass Sine inverter in a MasterBus network and visualizes the AC voltage, current and power		

CHECK THE MASTERVOLT SITE FOR



24/4000

n.a.

Mass Sine Ultra 26024000



Mass Sine 24/5000

24095100 24195100

24 V	24 V
> 350 Ah	> 400 Ah
230 V (± 2 %) – 50/60 Hz selectable (± 0.005 %)	230 V (± 5 %) – 50 Hz (± 0.01 Hz)
	5000 W
4000 W	4000 W
7000 W	9000 W
true sine	true sine
internal	internal
≥ 92 %	92 %
LED	LED
yes, up to 10 standard	no
yes, up to 3x3	no
472 x 318 x 178 mm 18.6 x 12.5 x 7 inch	470 x 315 x 254 mm 18.5 x 12.4 x 10 inch
15 kg / 33.1 lb	19 kg / 41.9 lb
CE, E-mark, ABYC A-31	CE, E-mark, ABYC A-31

HF switch mode	HF switch mode
5 % RMS	5 % RMS
200 A	230 A
660 mA – 16 W	250 mA – 6 W
300 mA – 7 W	50 mA – 1.2 W
250 A	1x 250 A of 2x 125 A
70 mm ²	2x 70 mm ²
< 1 %	< 5 %
all power factors allowed	all power factors allowed

Masterswitch/Systemswitch compatible, see page 128 for more information

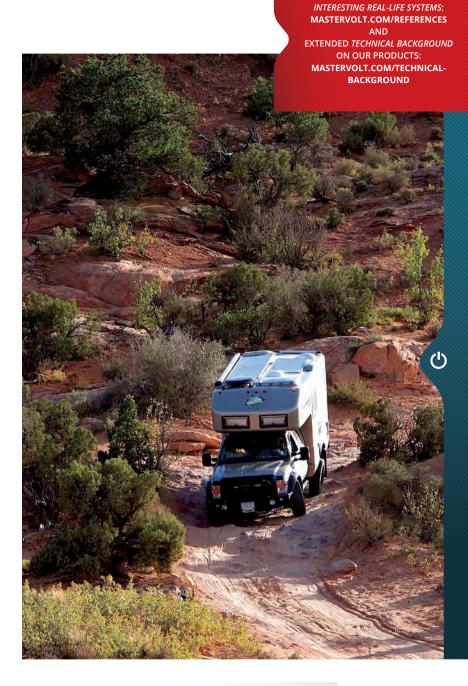
-25 °C to 80 °C; > 40 °C derating
-13 °F to 176 °F; > 104 °F derating

natural/forced natural/forced IP23 over-temperature, overload, short circuit,

high battery, low battery

yes, using a MasterBus Inverter Interface or AC Power Analyser

n.a.	option
option	option
option	option
n.a.	option
n.a.	option



The following model is also available in Quick Connect (OEM) version with a WAGO 770-103 connector and 25 cm cable:

■ Mass Sine 12/2000 230 V, product code 24021002