

# Mass Sine Ultra 24/4000



Product code: 26024000

## 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.

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.

## 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.

## High Efficiency

The high efficiency and automatic 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 high-frequency 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.

## 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.

## 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.
- Parallel configuration of up to ten devices for a capacity up to 40 kW.
- 3-Phase configuration for a capacity up to 36 kW.
- Integrated MasterBus.
- Suitable for mobile applications.
- Professional connections.
- Automatic, reliable and safe operation.
- Optional: Masterswitch/Systemswitch for automatic selection of the desired energy source.

# Specifications

## General specifications

Output voltage ( $\pm 5\%$ )	230 V - 50 Hz ( $\pm 0.01$ Hz)
Output waveform	true sine
Nominal battery voltage	24 V
Recommended battery capacity	> 350 Ah
Continuous power at 40 °C / 104 °F, cos phi 1	4000 W
Peak load	7000 W
AC connection	internal
Galvanic isolation	yes
Efficiency	> 92 %
Parallel configuration	yes, up to 10 units
3-Phase configuration	yes, up to 3x3
Display/read-out	LED display
Dimensions, hwxwx	472 x 318 x 178 mm 18.6 x 12.5 x 7.0 inch
Weight	15 kg 33.1 lb
Approvals	CE, ABYC, E-mark

## Technical specifications

Technology	HF switch mode
Low battery voltage, switches off at	19-22 V, dynamic window V
Low battery voltage, switches on at	24 V, $\pm 0.5$ V
High battery voltage, switches off at	32 V, $\pm 0.5$ V
High battery voltage, switches on at	29 V, $\pm 0.5$ V
Max. ripple on DC (battery)	5% RMS
Input current (nominal load)	200 A
No-load power consumption (ON mode)	660 mA - 16 W
No-load power consumption (energy saving mode)	300 mA - 7 W
Minimal DC fuse (slow blow)	250 A
Minimal cable size	70 mm <sup>2</sup>
Harmonic distortion typical	< 1%
Cos phi	all power factors allowed
Transfer system	Masterswitch/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
Cooling	natural/forced
Protection degree	IP23
Protections	over temperature, over load, short circuit, high battery, low battery
MasterBus compatible	yes