

ChargeMaster Plus 12/50-3



Product code: 44310505

All-in-one solution for faster and safer charging

The ChargeMaster Plus family is a complete range of battery chargers that provide both efficient and reliable performance in all conditions. This new generation of battery chargers offers multiple functions in one compact device. The ChargeMaster Plus reduces costs and simplifying the system and eliminating the need for additional battery chargers.

The 'Battery's Best Friend' architecture enables the ChargeMaster Plus to charge any battery chemistry using the fast and safe 3-step+ charging method. Different battery sizes can be combined, as the pre-float functionality eliminates the risk of overcharging smaller batteries. The charging profile of the Lithium Ion battery is included, as well as flexibility for a customised, user-defined profile.

Global charging

The ChargeMaster Plus charges almost any combination of two or three batteries quickly and safely and can handle all possible mains voltages and frequencies worldwide.

Plug-and-play battery charger

The new ChargeMaster Plus models can achieve full functionality within a complete MasterBus or CZone system, or can also be used as a convenient plug-and-play standalone battery charger

Optimal performance

The new ChargeMaster Plus can communicate directly with Mastervolt Lithium Ion batteries, MasterShunt or system display for real-time adjustments and optimal performance.

The battery charger can withstand high temperatures and significant voltage fluctuations. That makes this battery charger very suitable for the most harsh, maritime, or mobile environments. In addition, the ChargeMaster Plus has CE, ABYC, UL, cULus, SAE, CEC/DOE, ISO and ACMA certifications.

Key features

- Improved cooling technology results in very low noise levels across the entire power range.
- Use as a standalone charger or as part of a complete system.
- Automatic power distribution, maximum charging current possible on each output.
- All 3 outputs can provide maximum current*
- Pre-float eliminates the risk of overcharging.
- Automatic current distribution - charging current distribution based on the condition of the battery.
- Compatible with worldwide frequencies and mains voltages.
- Smaller and lighter than the previous model.

**The total charging current must not exceed the maximum of the model.*

Specifications

Communication & monitoring

Communication interfaces

MasterBus, CZone, NMEA

General specifications

Nominal output voltage	12 V
Smart In-/Output output voltage	12 V
Total charge current	50 A at 14,25 V
Max. AC current (230 V / 120 V)	3,5 A / 7,1 A
Number of battery outlets	3 (max.)
Battery bank size	200-400 Ah
Nominal input voltage	120/240 V (80-275 V) 50/60 Hz
AC connection	screw terminals, suitable up to max. 6 mm ²
Galvanic isolation	yes
Display/read-out	LED display
Dimensions, hxxwx	291 x 210 x 105 mm 11.5 x 8.3 x 4.1 inch
Weight	2.5 kg 5.5 lb
Compliance	CE, CEC, DOE, ABYC, UL1236, cULus, SAE J1171, ISO 8846, ACMA

Technical specifications

Charge characteristic	IUoUo, automatic / 3-step+ for Gel/AGM/flooded/Lithium Ion + user defined option
Temperature compensation	-30 mV/°C / -38 mV/°F; incl. temperature sensor
DC voltage compensation	Yes, by means of automatic compensation or MasterShunt
Power consumption (DC side)	< 2 mA (MasterBus off)
Current Control function	yes, through MasterBus or CZone
Power factor control	> 0,98
Temperature range (ambient temp.)	-25 °C to 70°C, derating > 40 °C °C -13 to 32 °F
Cooling	vario fan
Protection degree	IP23, vertical mounting
Protections	over-temperature, overload, short circuit, high/low battery voltage, ignition protection
Charger Status Interface (alarm contact)	yes, using a Multipurpose Contact Output (code 77030500)