Mac Plus 48/24-30

Product code: 81203305

MASTERVOLT
THE POWER TO BE INDEPENDENT

Boost Your Service Battery

Too often, service batteries don't get the charge they need. This is a problem made worse by smart alternators and start/stop systems, which result in slow and insufficient charges. The Mac Plus 48V and 36V solve that problem. With brand new bi-directional technology, the Mac Plus can use each side as an input or output, delivering a reliable and consistent charge to both service and starter batteries.

Proven Mastervolt Quality

The Mac Plus uses the proven Mastervolt 3-step+ charge algorithm, delivering a quick and easy charge, even to completely flat batteries. By knowing when the engine is running and providing charge, you can also be sure that the Mac Plus will never drain your starter battery.

A robust design holds up in even the harshest conditions, with battery temperature optimized charging and high-quality aluminium housing to ensure superior protection against dust and water ingress. The power efficient design also allows the Mac Plus to operate silently and without a fan.

Total Power Flexibility

With a wide DC input range, the Mac Plus allows all DC sources and can charge two batteries from a single alternator or charger. It supports a full range of chemistries and battery types, including lithium. And it also functions seamlessly with modern alternators such as Euro 5 and 6, ensuring proper charging by providing constant power, even when the alternator is inactive.

Parallel configuration of up to ten units will provide over 100 amperes. And advanced high-frequency technology with modern microprocessors ensures minimal power loss when switching from 36/48V to 12/24V and vice versa.

Analog voltage sense ports are also available to compensate for voltage drop and maintain proper charging.

Superior Monitoring & Control

Compatibility with CZone®, NMEA 2000® and MasterBus delivers truly superior monitoring and control, and ensures Mac Plus integrates easily into complete systems. Achieve the best performance possible via various controllers and high quality MOSFETs. And configure the Mac Plus with ease via MasterAdjust, the CZone configuration tool, or even via the on-board DIP switches.

Features

- Bi-directional technology
- Get either 48V or 36V power from a single unit
- Fast and safe charging, even during short trips
- Fanless design for silent operation
- Suitable for flooded, Gel, AGM and Li-Ion batteries (incl. LiFePO4)
- Even charges fully depleted batteries
- Engine run detection protects starter battery
- Adjustable current limits to meet Euro 5/6 requirements
- Voltage stabilization protects sensitive equipment, lights and loads
- Parallel operation to obtain charging capacities well over 100 Amps
- MasterBus, CZone and NMEA 2000 compatible, for intelligent system monitoring and automation
- Temperature compensation and voltage sense for an optimal charging result
- E-Mark/R10 certification for mobile applications
- Power supply mode offers stable power for sensitive loads
- Heavy duty connections for easy installation and quick set up via DIP switches

MASTERVOLT
THE POWER TO BE INDEPENDENT

MASTERVOLT
THE POWER TO BE INDEPENDENT

Specifications

Specifications battery charger

Battery voltage sense	Yes

General specifications

Status indicator	Yes, 3 color double LED
Communication protocol	MasterBus, CZone & NMEA 2000
Output voltage	20-30 V DC
Nominal output voltage	24 V
Output voltage stabilisation	2 % at extremes of temps, load and input
Output voltage ripple (peak peak)	Max. 1 %
Max. output power	900 W
Max. output current	15 A
Nominal input voltage	36/48 V DC
Input voltage range	32-64 V
Max. input current	50 A
Galvanic isolation	No
Efficiency	> 95 % (at nom. input voltage, full load); 97 % peak %
Parallel configuration	Yes, up to 4
Alarm contact	Yes, through MasterBus, CZone, DIP Switch or remote switch
Engine run signal input	Yes (active high/active low)
DIP switches	Yes, for basic set up
Dimensions, hxwxd	255x165x66 mm 10.0 x 6.5 x 2.6 inch
Weight	2 kg 4.4 lb
Compliance	CE, E-Mark, SAE J1171, ISO 8846 ignition protected, ABYC & UKCA

Technical specifications

Battery types	Gel, AGM, Lithium Ion, user defined
Power consumption	< 5 mA, < 10 mA in CZone, < 1 mA in MasterBus W
Temperature range (ambient temp.)	- 25 °C to 60 °C; derating > 40 °C/104 °F °C 32 to 32 °F
Cooling	Natural cooling
Protection degree	IP23
Protections	Overload, over-temperature, DC short circuit, reversed polarity (fuse)