

# MasterShunt 500



Product code: 77020110

MasterShunt is the heart of every MasterBus energy system. This integrated battery monitor shares information about the battery bank with other Mastervolt devices such as battery chargers, Combis, and displays. No surprises: allowing complete automation of your system, MasterShunt improves comfort, prolongs battery life and extends your runtime.

The MasterShunt 500 provides all information needed for monitoring your battery bank and control of your system, such as voltage, current, state of charge and time remaining. All information is made available to the system by a single MasterBus cable. Extremely accurate measurement of current flow over state of charge enables the MasterShunt to precisely determine the time remaining.

Programmable events and an integrated real time clock make it possible to fully automate your system. Examples are to start your generator automatically when the battery bank is low (or just delaying at night!), or to automatically generate a warning at a certain depth of discharge. The proven MasterShunt design has been upgraded to obtain an even higher level of accuracy and control. Taking into account battery specific parameters, MasterShunt takes reading accuracy to a whole new level.

A new service mode prevents loss of valuable information, such as the state of charge, during system maintenance. A maximum Depth of Discharge (DOD) can be set and time remaining will be adjusted accordingly.

The renewed MasterShunt allows freedom of choice with regards to fuse type, rating and location. The battery monitor is supplied with an internal bus bar, to be used in situations where an external fuse holder is selected. In case the MasterShunt is installed close to the battery, the bus bar may be replaced by either an ANL type or Class T main fuse, saving both space and cost.

## Features

- Digital shunt providing the energy system with extensive information and historical data.
- Very accurate and reliable determination of State of Charge (SOC).
- Easy connection to all MasterBus devices.
- Power saving mode for reduced idle consumption.
- Service mode prevents memory loss during system maintenance.
- Realistic and precise indication of the time remaining.
- Smart MasterBus powering mode reduces idle consumption to a bare minimum.
- For higher current, multiple MasterShunt models may be installed in parallel.
- MasterConnect system makes connecting to the DC Distribution product very easy.
- Straight forward, easy to install.
- Freedom of choice for fuse type, rating and location. Suitable for T-fuse and ANL-fuse (to be ordered separately).
- Robust housing with isolation of the DC connections.

## Applications

Any application in marine, mobile, industrial, infrastructure where batteries need to be monitored for increased reliability, battery life, comfort and runtime.

# Specifications

## General specifications

MasterBus powering	yes, incl. Smart MasterBus Powering
Battery voltage	12, 24 or 48 V DC
Current	300 A continuously, 400 A for 10 min., 500 A for 5 min. and 600 A for 2 min.
Main fuse	bus bar included in MasterShunt, Class T fuse or ANL fuse to be ordered separately
Idle consumption	23 mA (normal operation), <1 mA (power saving, MasterBus off)
System functionality	alarms, timers, auto start/stop for the generator
System information	e.g. time remaining, voltage, current, state of charge
Programmable alarms	warning low voltage, low state of charge, high voltage
Dimensions, hwxwd	150 x 150 x 65 mm
Weight	5.9 x 5.9 x 2.6 inch
Delivered with	0.7 kg 1.5 lb MasterShunt, temperature sensor, MasterBus Terminator, MasterBus cable, isolation cover for DC connections

## Technical specifications

Battery types	Gel, AGM, flooded, Lithium Ion
Protection degree	IP21