SCM60 MPPT-MB

Product code: 131906000

MASTERVOLT
THE POWER TO BE INDEPENDENT

The SCM60 MPPT-MB is Mastervolt's largest MPPT solar charge regulator. With 600 to 3600 Wp in solar panels, connections for 12, 24 and 48-volt battery banks and an integrated MasterBus connection, this Solar ChargeMaster is perfect for large and medium-sized systems.

The innovative technology in the Mastervolt MPPT charge regulators increases the efficiency of the solar panels. The SCM60 MPPT-MB charges your batteries up to 30% faster than PWM regulators – with the same number of panels.

MPPT charge regulator for all solar panels

Besides the traditional 36 and 72-cell panels, the SCM60 MPPT-MB is also ideal for the inexpensive 60-cell panels. A maximum input voltage of 145 V makes it possible to connect several panels in series, reducing the required cable length, installation time and power loss significantly.

Robust, easy to use, safe and flexible

The SCM60 MPPT-MB is suitable for all battery types, including Mastervolt Lithium Ion. The charging profiles for all types of batteries are pre-programmed and can be selected via the display or via MasterBus. The SCM60 MPPT-MB is very quiet and equipped with a clear and user-friendly display. The built-in protection against overload, high/low battery voltage, overheating, short circuits and reverse polarity ensures that safety comes first. Moreover, the SCM60 MPPT-MB has a sturdy casing and is protected against water spray in conformity with IP23.

The smart logic of MasterBus

The MasterBus platform brings advanced system functions within reach and makes it possible to follow a complete energy system on a single display. The intelligent one-cable system simplifies the cabling, allowing valuable savings in space and weight. What's more, you can automate your systems and adapt them to your needs.

Architects, builders and contractors also benefit, as there is less material, less work and less fiddling, while testing is easy. There is also a choice of ten languages. The user interface is identical for all Mastervolt products, whether battery chargers, inverters, Combis, batteries or other devices.

More comfort and independence

Use the power of MasterBus to switch on your water heater as soon as the battery is fully charged. Or link the Solar ChargeMaster via MasterBus to a Mastervolt Lithium Ion battery, removing the need for the disconnect relays usually required for this type of battery. The possibilities are endless.

Specifications

Specifications battery charger

Max. charge current at 40 °C / 104 °F	60 A
System voltage (battery)	12/24/48 V auto select
Battery types	AGM, gel, wet, Lithium Ion
Battery temperature sensor	yes
Lithium Ion protection	yes, via MasterBus connection
Switchable output (max. current)	via MasterBus
Energy consumption (night)	< 1 mA

Specifications solar input (DC)

Nominal PV current at 40 °C / 104 °F	50 A
PV start voltage (12/24/48 V)	15 V/27 V/51 V
Nominal PV voltage (12 V)	13.2-115 V
Nominal PV voltage (24 V)	26.4-115 V
Nominal PV voltage (48 V)	52.8-115 V
Max. PV voltage (Tmin)	145 V
Max. PV power (12 V)	900 Wp
Max. PV power (24 V)	1800 Wp
Max. PV power (48 V)	3600 Wp
Max. efficiency	> 98 %
Static MPP efficiency	99.9 %

Communication & monitoring

Communication	MasterBus

General specifications

Cooling	passive
Display/read-out	backlit LCD with PV power, load power, battery voltage, charge current, warnings, battery state of charge, battery setting
Grounding	(-) terminal
Alarms	via MasterBus
Protection degree	IP23
Dimensions, hxwxd	398 x 168 x 104 mm 15.7 x 6.6 x 4.1 inch
Weight	5.5 kg 12.1 lb

Technical specifications

Technology	MPPT (Max. Power Point Tracker)
Temperature range (ambient temp.)	-20 °C to 55 °C -4 to 131 °F
Cable size	max. 35 mm² Litz wire
Protections	over temperature, over load, high/low battery voltage, high/low PV voltage, short circuit, reverse polarity & HV transients
Relative humidity	95% non-condensing
MasterBus compatible	yes