SCM25 MPPT

Product code: 131902500

MASTERVOLT
THE POWER TO BE INDEPENDENT

The SCM25 MPPT is Mastervolt's smallest MPPT charge regulator and just as powerful as its big brother. With 200 to 700 Wp in solar panels, switchable output and buzzer, this Solar ChargeMaster is very well suited to small and medium systems.

The innovative technology in the Mastervolt MPPT charge regulators increases the efficiency of the solar panels. The SCM25 MPPT 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 SCM25 MPPT is also ideal for the inexpensive 60-cell panels.

Easy to use, safe and flexible

The SCM25 MPPT 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 at the push of a button. The SCM25 MPPT is quiet and equipped with a very user-friendly, clear display. Built-in protection against overload, high/low battery voltage, overheating, short circuits and reverse polarity ensures that safety comes first. Moreover, the SCM25 MPPT has a robust casing and is protected against condensation in conformity with IP23.

Features

- Very high efficiency for faster charging.
- Stable, accurate Mastervolt Maximum Power Point Tracker.
- Up to 30 % faster charging compared with PWM technology.
- Suitable for inexpensive 60-cell panels.
- Capacity for solar panel configurations from 200 to 700 Wp.
- Suitable for all battery types, including Mastervolt Lithium Ion.
- Automatic 12/24 V detection.
- Flexible charging characteristics.
- Battery temperature sensor for long lifespan.
- Large and bright display.
- Secure switchable output.
- Safe operation, audio signal in case of malfunctions.
- Very quiet operation.
- Robust casing, suitable for humid environments (IP23).

Specifications

Specifications battery charger

Max. charge current at 40 °C / 104 °F	25 A
System voltage (battery)	12/24 V auto select
Battery types	AGM, gel, wet, Lithium Ion
Battery temperature sensor	yes
Lithium Ion protection	via Multipurpose Contact Output, product code 77030500
Switchable output (max. current)	25 A
Energy consumption (night)	5 mA

Specifications solar input (DC)

Nominal PV current at 40 °C / 104 °F	18 A
PV start voltage (12/24 V)	15 V/27 V
Nominal PV voltage (12 V)	15-66 V
Nominal PV voltage (24 V)	30-66 V
Max. PV voltage (Tmin)	75 V
Max. PV power (12 V)	360 Wp
Max. PV power (24 V)	720 Wp
Max. efficiency	> 98 %
Static MPP efficiency	99.9 %

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	buzzer
Protection degree	IP23
Dimensions, hxwxd	135 x 190 x 75 mm 5.3 x 7.5 x 3.0 inch
Weight	1.3 kg 2.9 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. 10 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