

CML-MPPT (10 A)

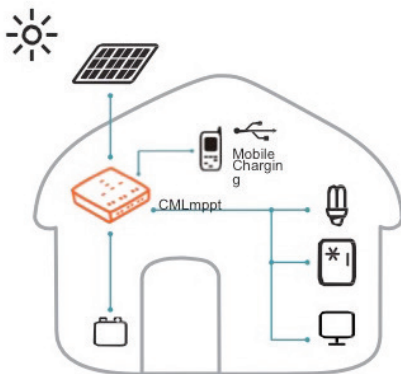
Solar Charge Controller with Maximum Power Point Tracking Technology



Simple. Efficient. User-Friendly.

- Intuitive LED display
- Maximum charging in any condition
- USB port for charging mobile phones and devices

Optimize your PV system with CML-MPPT



The CMLmppt charge controller is equipped with a number of outstanding features such as charge status indication, low-voltage disconnect alarm and safety functions.

The use of MPPT technology can contribute to a considerable boost in energy output from PV modules (up to 30% more), especially in cooler climate areas where PV module voltages tend to be higher.

The built-in USB charging port allows for charging mobile devices from a larger solar home system.

Clear Communication

- LED status indication of the battery's charge level
- Acoustic alarm sounds to signal low voltage disconnect

Extends Battery Lifespan

- 3-stage I/U curve sweep algorithm increases battery lifespan
- Temperature-compensated charging for sealed or vented lead acid batteries

Versatile

- Works in 12 or 24V systems (automatic battery voltage detection)
- Available USB charging port allows charging portable devices from PV system

Application Examples

- Solar Home Systems
- RVs/Boats
- Off-Grid Cabins



Technical Data

Type	CMLmppt 10
System voltage	12/24 V (Auto detection)
Max. charge/load current	10 A
Float charge	13.8/27.6 V (77 °F/25 °C)
Main charge	14.4/28.8 V (77 °F/25 °C), 0.5 h (daily)
Boost charge	14.4 /28.8 V (77 °F/25 °C), 2 h Activation: battery voltage < 12.3/24.6 V
Equalization	14.8/29.6 V (77 °F/25 °C), 2 h Activation: battery voltage < 12.1/24.2 V (at least every 30 days)
Deep discharge protection:	
State-of-charge dependent	11.4 – 11.9 V / 22.8 – 23.8 V by SOC
Voltage dependent	11.0/22.0 V by voltage
Reconnect level	12.8/25.6 V
Overvoltage protection	15.5/31.0 V
Undervoltage protection	10.5/21.0 V
Max. panel voltage	30 V (12 V Systems), 50 V (24 V systems)
Max. panel power	150 W (12 V system), 300 W (24 V system)
Temperature compensation (Charge voltage)	-4.2 mV/K per 2 V cell
Idle self consumption	< 10 mA
Grounding	Positive ground
Ambient temperature	-40 to 122°F (-40 to +50 °C)
Max. elevation	13,000 ft (4,000 m) above sea level
Battery type	Lead acid (GEL, AGM, flooded)
USB port	5.0 V; 800 mA
Wire cross section	Max. 6 AWG (16.0 mm ²)
Weight	11.2 oz (320 g)
Dimensions (W x H x D)	5 x 5 x 1.5 in (127 x 126 x 38 mm)
Type of protection	IP20

Measurements in mm

