



## Solar Charge Controllers, CML Series

### Features:

- State-of-Charge (SOC) Display with three LEDs
- Battery Charge Level Indication
- Audible Warning prior to Load Disconnect
- Load Disconnect Indication
- Load Short Circuit and Overload Indication
- PWM-Regulation (Series Type)
- Boost, Equalize and Float Charging, also for VRLA
- SOC and Voltage Controlled LVD
- Automatic Voltage Detection (12/24 Volt System)
- Integrated Temperature Compensation
- Large Terminals (max. 16mm<sup>2</sup> conductor size)
- Electronic Protection



The CML Series is a technically advanced range of solar charge controller for low cost applications. State of the art electronics comprising a micro-controller ensure maximum battery charging efficiency together with several critical status display, warning and safety functions.

The temperature-compensated three-stage PWM charging method (boost - equalization - float) is compatible with sealed and vented lead-acid (VRLA) batteries. The latest generation also incorporates a SOC or voltage controlled “low voltage” disconnect function. The battery status is clearly indicated by three LEDs.

Featuring in the low cost price range, the CML Series is the first charge controller on the market that is equipped with acoustic pre-warning for “low voltage” load disconnect.

### Technical Specifications

Specifications / Model	CML05-2	CML10-2	CML15-2	CML20
System Voltage	12/24 V	12/24 V	12/24 V	12/24 V
Solar Module Current	5 A	10 A	15 A	20 A
Max. Load Current	5 A	10 A	15 A	20 A
Boost Voltage	14.5/29V (25°C)	14.5/29V (25°C)	14.5/29V (25°C)	14.5/29V (25°C)
Equalization Voltage	14.8/29.6V (25°C)	14.8/29.6V (25°C)	14.8/29.6V (25°C)	14.8/29.6V (25°C)
Float Voltage	13.7/27.4V (25°C)	13.7/27.4V (25°C)	13.7/27.4V (25°C)	13.7/27.4V (25°C)
Regulation	<1%	<1%	<1%	<1%
Load Disconnect Voltage	11.5-12/23-24V	11.5-12/23-24V	11.5-12/23-24V	11.5-12/23-24V
Load Reconnect Voltage	12.8/25.6V	12.8/25.6V	12.8/25.6V	12.8/25.6V
Temperature Compensation	-3mV/cell*K	-3mV/cell*K	-3mV/cell*K	-3mV/cell*K
Max. Power Consumption	< 4 mA	< 4 mA	< 4 mA	< 4 mA
Ambient Temperature Range	-20 to +50°C	-20 to +50°C	-20 to +50°C	-20 to +50°C
Max. Conductor Size	16mm <sup>2</sup>	16mm <sup>2</sup>	16mm <sup>2</sup>	16mm <sup>2</sup>
Dimensions (W x H x D mm)	80 x 100 x 32	80 x 100 x 32	80 x 100 x 32	80 x 100 x 32
Weight (kg)	0.18	0.18	0.18	0.18
Protection	IP20	IP20	IP20	IP20

The manufacturer reserves the right to change specifications without prior notice.