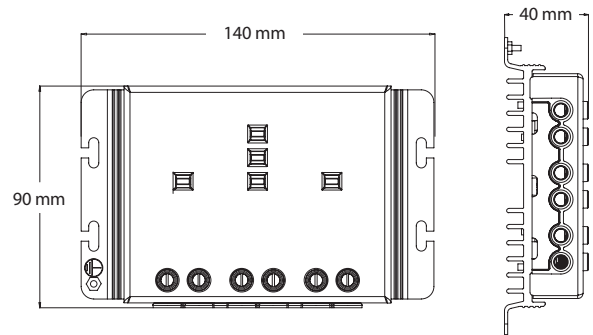


# CMLsolid (30 A)

Solar Charge Controller w/ USB Port and Inverter Control



## Technical Drawing



## Product Introduction

At 30 A max. charge/load current, the CMLsolid is the highest powered version of Phocos' popular CML family. With over a million CML controllers in service all over the world, it is easily one of the most widely deployed controllers on earth.

An on-board USB port charges mobile phones, tablets and other portable devices from the PV system. The battery type, acoustic warning buzzer and LVD settings are selectable via 3-pole DIP switch.

## Product Features

- Battery state-of-charge indication via 3 LEDs
- Load disconnect pre-warning via acoustic signal can be switched ON/OFF
- Up to four-stage PWM charging algorithm with integrated temperature compensation (float, main, boost & equalization)
- Automatic 12/24 V detection
- Large terminals: up to 16 mm<sup>2</sup>
- SOC and voltage-controlled LVD settings
- Full electronic protection
- Rugged anodized aluminum housing
- Charger for external devices via USB port
- Remote output connector for the PSW inverter series

## Optional Accessories



### CMMsolid

- Remote display for Phocos CMLsolid charge controller
- Displays panel current, load current and battery voltage

## Technical Data

Type	CMLsolid 30
System Voltage	12/24 V auto recognition
Max. Charge/Load Current	30 A
Float Charge	13.8/27.6 V (25 °C)
Main Charge	14.4/28.8 V (25 °C), 0.5 h daily
Boost Charge	14.4/28.8 V (25 °C), 2 h; activation: battery voltage <12.3/24.6 V
Equalization Charge	14.8/29.6 V (25 °C), 2 h; activation: battery voltage <12.1/24.2 V (at least every 30 days)
Deep-Discharge Protection	11.4–11.9/22.8–23.8 V (by SOC) 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	30/50 V
Temperature Compensation	-25 mV/K (12 V); -50 mV/K (24 V)
Idle Self-Consumption	10 mA
Grounding	Positive grounded
Ambient Temperature	-40 to +50 °C
Max. Altitude	4,000 m above sea level
Battery Type	Lead acid (gel, AGM, flooded) adjustable
USB Port	5.0 V, 800 mA
Screw Terminal Max. Wire Cross Section	16 mm <sup>2</sup> (AWG 6)
Dimensions (WxHxD)	140 x 90 x 40 mm / 5.5 x 3.5 x 1.6 in
Weight	0.42 kg / 0.93 lbs
Ingress Protection	IP20
Certificates	CE compliant, RoHS compliant
Warranty	2 years