

# CMLsolid (30 A)

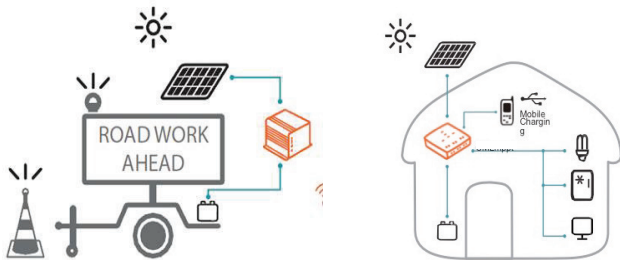
Four-Stage PWM Solar Charge Controller



## Powerful and User-Friendly

- Works in 12 or 24V systems (automatic detection)
- Inverter control port for Go Power! SW Series inverters (1000, 2000, 3000W)
- USB Charging for for mobile devices
- DIP-switch selectable LVD and acoustic alarm functions

### Robust charging solution for PV systems up to 1kW



At 30A 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.

CMLsolid offers additional powerful features such as automatic inverter load control for Go Power! SW Series inverters (GP-SW-1000, GP-SW-2000, and GP-SW-3000) protecting the battery from damage due to deep discharge. An on-board USB port charges mobile phones, tablets and other portable devices from the PV system.

### Fully Protected

- Aluminum housing (class IP20)
- Full electronic protection against reverse battery or solar polarity

### Informative Display

- Three LEDs clearly indicate the battery's charge status
- Equipped with an alarm to signal a low-voltage disconnect

### Dynamic Features

- Automatic inverter low-voltage disconnect feature
- USB charging port for mobile devices

### Application Examples

- Solar Message Boards
- RVs/Campers
- Off-Grid Homes/Cabins
- SCADA Systems



## Technical Data

Type	CMLsolid 30
System voltage	12/24 V (Auto detection)
Max. charge/load current	30 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), for 2 h Activation: battery voltage < 12.3/24.6 V
Equalization	14.8/29.6 V (77°F/25 °C), for 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
Voltage dependent	11.0/22.0 V
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 in 12 V system 50 V in 24 V system
Temperature compensation	–25 mV/K at 12 V
(Charge voltage)	–50 mV/K at 24 V
Remote control for inverter series	Yes (Phocos SI 1500, SI 700, SI 350 inverter)
Idle self-consumption	10 mA
Grounding	Positive ground
Ambient operating temperature	–40 to 140 °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	Up to 6 AWG (16 mm <sup>2</sup> )
Weight	14.8 oz (420 g)
Dimensions (W x H x D)	5.5 x 3.5 x 1.5 in (140 x 90 x 40 mm)
Type of protection	IP20

