

38898

SunSaver MPPT 15 A Charge Controller for 12 or 24 V Batteries



A Charge Controller Designed for Large Solar Panels

Overview

The 38898 consists of a Morningstar 15 A charge regulator that has been re-configured by Campbell Scientific and includes the mounting hardware to mount it to a 2.54 cm (1 in.) grid back panel. This charge controller is well suited for large power

supplies, which includes an AGM battery (BP84 84 Ah 12 V Sealed Rechargeable Battery) and a large solar panel (SP370-L 370 W Solar Panel). As an additional benefit, Campbell Scientific provides full support of the SunSaver MPPT.

Benefits and Features

- Preconfigured to work with AGM battery types and to prioritize data collection over long-term battery health
- 12 V or 24 V battery charging
- ▶ 60 Vdc maximum input compared with the 50 Vdc on the CH201 and 40 Vdc on the CH150
- > Selectable battery type: gel, sealed, AGM, flooded
- > Programmable low voltage disconnect (LVD)

- Auto-equalization feature for AGM battery types
- Terminals for remote temperature sensor (RTS) to compensate charging based on battery temperature; use pn 38899
- **>** Built-in temperature sensor for use when no RTS is provided
- **)** Battery status LEDs to provide battery state of charge and indicate fault condition
- RS-232 communication with pn 34540

Detailed Description

The 38898 uses maximum power point tracking. While the 38898 is capable of RS-232, Modbus, and USB communications, only RS-232 communication is supported through the hardware. *Note:* When reading parameters off the 38898 using a data logger, you must use the CPI/RS-232 port. This functionality does not work when using the control ports.

The 38898 offers the ability to select the battery type: gel, sealed, AGM, or flooded. To set the battery type, use a jumper and switch #1.

The 38898 offers programmable low voltage disconnect (LVD). From the manufacturer, the 38898 comes with an 11 V LVD when switch #2 is on and an 11.5 V LVD when switch #2 is off. At Campbell Scientific, we prioritize data over battery health and reconfigure the LVD to 8.5 V and the LVR to 10.0 V.



Specifications

Operational Temperature	-40° to +60°C	 ETL Listed (UL-1741 and Canadian CSA C22.2 No.107.1.01) FCC Class B Part 15 compliant CE and RoHS 	
Storage Temperature	-55° to +100°C		
Battery Voltage Range	7 to 36 V (power out)		
Maximum Input Voltage	60 V	Dimensions	 6.43 x 19.1 x 7.26 cm (2.53 x 7.52 x 2.86 in.) with mount foot 6.43 x 16.89 x 7.26 cm (2.53 x 6.65 x 2.86 in.) without mount foot
Quiescent Current	35 mA		
Certifications	Manufactured in a certified ISO 9001 facility.IEC 62109		
		Weight	589.67 g (1.3 lb)