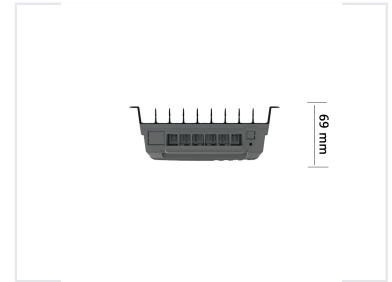
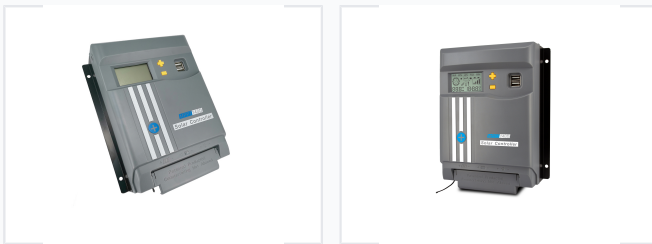


40A MPPT Solar Charge Controller with USB Output

This MPPT solar charge controller efficiently charges 12V and 24V batteries using solar power. It features a 40A charging capacity and a USB output for convenient device charging.



ADDITIONAL IMAGES



Overview

High-Efficiency MPPT Charging Solution

This 40A MPPT solar charge controller utilizes advanced DC/DC converting and MCU technology to intelligently adjust the solar array's working point. By tracking the maximum power point, it significantly improves energy harvesting efficiency by 5% to 30% compared to traditional PWM controllers. Designed for versatility, it supports both 12V and 24V systems and is compatible with a wide range of battery chemistries, ensuring optimal performance for off-grid solar applications.

Performance Metrics

Efficiency Ratings

99 %

MPPT Efficiency

98 %

Peak Conversion Efficiency

40 A

Max Charging Current

Technical Specifications

System Rated Voltage	12V/24V Auto recognized
Battery Voltage Range	8V-32V
Max PV Input Voltage	150 V
Compatible Battery Types	Sealed, Flooded, GEL, LiFePO4, Li(NiCoMn)O2

Features

Charging Stages

- MPPT
- Absorption
- Float
- Equalization

USB Output

5V 1A

Safety & Protection

Protection Mechanisms

High Voltage Protection • Low Voltage Protection • Overload Protection • Short Circuit Protection • Reverse Polarity Protection • Reverse Current Protection • Overheat Protection