



PRODUCT OVERVIEW

EV-HC Series is a PWM charge controller with LCD display and two USB ports. Large-screen LCD display with adjustable charge and discharge parameters that allows you to select multiple battery types. Provides flexibility to set the load for day or night. Typically used in off-grid systems where quality and high reliability is paramount.

FEATURES

- 32-bit high speed master control chip
- Large screen LED display
- Allows selection of multiple battery types
- Flexibility to set load for day or night
- Complete multi-stage PWM charge management
- Built in reverse connection protection, open circuit protection, high temperature protection, over-current/short-circuit protection (optional) – all self-recovering, preventing damage to controller
- Double MOS anti-backflow circuit
- Ultra-low heat generation
- Lithium battery activation available
- Dual USB output, maximum current up to 2A supporting high current charging of iPhone, iPad, Android mobile phones and other devices

APPLICATIONS

- Off grid solar systems



Power Storage Control



Solar Power Storage



Off-Grid Power Storage



Home Power Storage

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YEAR WARRANTY

Product Description

| PART# | DESCRIPTION | RATED CURRENT | SYSTEM VOLTAGE | OPERATING VOLTAGE RANGE |
|-------------|----------------|---------------|----------------|-------------------------|
| EV-HC2410-C | PWM Controller | 10A | 12V/24Vdc | 9-32Vdc |
| EV-HC2420-C | PWM Controller | 20A | 12V/24Vdc | 9-32Vdc |
| EV-HC2430-C | PWM Controller | 30A | 12V/24Vdc | 9-32Vdc |
| EV-HC2440-C | PWM Controller | 40A | 12V/24Vdc | 9-32Vdc |
| EV-HC2460-C | PWM Controller | 60A | 12V/24Vdc | 9-32Vdc |
| EV-HC4840-C | PWM Controller | 40A | 12V/48Vdc | 9-64Vdc |

Specifications

| MODEL# | EV-HC2410-C | EV-HC2420-C | EV-HC2430-C | EV-HC2440-C | EV-HC2460-C | EV-HC4840-C |
|---------------------------------|--|----------------------|----------------------|-----------------------|-----------------------|---|
| PV INPUT | | | | | | |
| Maximum Voltage of Open Circuit | 55Vdc | | | | | 100Vdc |
| Maximum PV Input Power | 150W/12V 300W/24V | 300W/12V 600W/24V | 450W/12V 900W/24V | 600W/12V 1200W/24V | 900W/12V 1800W/24V | 600W/12V 1200W/24V 1800W/36V 2400W/48V |
| BATTERY | | | | | | |
| Battery Type | Lead-acid / Li-ion / User Defined | | | | | |
| Rated Battery Voltage | | | | | | |
| Battery Voltage Range | 9-32Vdc | | | | | 9-64Vdc |
| Rated Charging Current | 10A | 20A | 30A | 40A | 60A | 40A |
| Charging Mode | PWM charging is the default mode | | | | | |
| LOAD | | | | | | |
| Rated Load Current | 10A | 20A | 30A | 40A | 60A | 40A |
| Load Working Mode | Light control, Light control + Time control, Manual control (default), Debugging mode, Normal open | | | | | |
| GENERAL | | | | | | |
| Communication | RS485 | | | | | |
| Weight | 130g (0.29lb) | 180g (0.40lb) | 290g (0.64lb) | 322g (0.71lb) | 660g (1.46lb) | |
| Dimensions | 120*75*34mm | 134*85*36mm | 159*100*39mm | | 193*131*55.2mm | |
| Protection Degree | IP32 | | | | | |
| Operating Temperature Range | -35°C ~ +60°C (-31°F ~ 140°F) | | | | | |

Wiring Diagram

