



PRODUCT OVERVIEW

EV-HP Series is a PWM charge controller with LCD display. Typically used in home and off grid power systems.

FEATURES

- Automatic identification of system voltage
- Supports charging gel batteries, sealed batteries, lead-acid batteries and lithium batteries
- Includes a 3-stage PWM charging algorithm that extends the life of the battery by preventing non-equalization and sulfuration.
- Temperature compensation function automatically adjusts charging parameters
- Multiple working modes to facilitate application to different types of loads
- Overcharge, over-discharge, overload, short-circuit and reverse connection protection
- Advanced startup method allows smooth startup of large capacitance loads
- RJ12 data port (outputs TTL232 level or Bluetooth signals) supports Modbus protocol and can interact with mobile phone app
- Durable industrial grade design
- TVS lightning protection

APPLICATIONS

- Off grid solar systems
- Home solar systems

Product Description

PART#	DESCRIPTION	RATED CURRENT	SYSTEM VOLTAGE	OPERATING VOLTAGE RANGE
EV-HP2410	PWM Controller	10A	12V/24Vdc	9-34Vdc
EV-HP2420	PWM Controller	20A	12V/24Vdc	9-34Vdc
EV-HP2430	PWM Controller	30A	12V/24Vdc	9-34Vdc
EV-HP2440	PWM Controller	40A	12V/24Vdc	9-34Vdc
EV-HP2450	PWM Controller	50A	12V/24Vdc	9-34Vdc
EV-HP2460	PWM Controller	60A	12V/24Vdc	9-34Vdc

Specifications

MODEL#	EV-HP2410	EV-HP2420	EV-HP2430	EV-HP2440	EV-HC2450	EV-HP2460
PV INPUT						
Maximum Voltage of Open Circuit	55Vdc					
Maximum PV Input Power	150W/12V 300W/24V	300W/12V 600W/24V	450W/12V 900W/24V	600W/12V 1200W/24V	750W/12V 1500W/24V	900W/12V 1800W/24V
BATTERY						
Battery Type	Lead-acid / Li-ion / User Defined					
Rated Battery Voltage	12/24Vdc					
Battery Voltage Range	9-34Vdc					
Rated Charging Current	10A	20A	30A	40A	50A	60A
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					
COMMUNICATION						
Optional	Bluetooth, TTL					
GENERAL						
Weight	100g (0.22lb)	160g (0.35lb)	390g (0.86lb)		650g (1.43lb)	
Dimensions	103*71*36mm	130*75*38mm	164*103.5*47mm		189.27*127.2*54mm	
Protection Degree	IP30					
Operating Temperature Range	-25°C ~ +55°C (-13°F ~ 131°F)					

Wiring Diagram

