

PRODUCT OVERVIEW

EV-SR-HP Series is a PWM charge controller with LCD display. Includes models EV-HP230/EV-HP2440/EV-HP2450/EV-HP2460/EV-HP4830/EV-HP4840. 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	MAX SOLAR INPUT VOLTAGE
EV-HP2430/2440	PWM Controller	30A/40A	12V/24V	< 55V
EV-HP2450/2460	PWM Controller	50A/60A	12V/24V	< 55V
EV-HP4830/4840	PWM Controller	30A/40A	12V/24V/36V/48V	< 110V

Specifications

MODEL#	EV-HP2430/2440		EV-HP2450/2460		EV-HP4830/4840	
Rated Current	30A/40A		50A/60A		30A/40A	
System Voltage	Automatic recognition of 12V/24V				Automatic recognition of 12V/24V/36V/48V	
Rated Power	12V/450W 24V/900W	12V/600 W24V/1200W	12V/750W 24V/1500W	12V/900W 24V/1800W	12V/450W 24V/900W 36V/1350W 48V/1800W	12V/600W 24V/1200W 36V/1800W 48V/2400W
No-Load Loss	< 13mA/12V ; < 15mA/24V				< 30mA	
Max Solar Energy Input Voltage	C34V				C68V	
USB Function	Yes		No		No	
Operating Temperature	-13°F ~ 131°F					
IP Protection	IP30					
Net Weight	13.75oz		22.92oz		22.92oz	
Protection Functions	Battery reverse connection protection, solar panel reverse connection protection, reverse charging protection at night Charging overload protection, overcurrent protection, short circuit protection					
Dimensions	6.45" x 4.07" x 1.85"		7.45" x 5" x 2.12"		7.45" x 5" x 2.12"	
PARAMETERS						
Battery Type	Flooded FLD	Sealed SLD	GEL GEL	Lithium LI		
Overvoltage Protection	16V					
Equalizing Charging Voltage	14.8V	14.6V	-	-		
Boost Charging Voltage	14.6V	14.4V	14.2V	14.4V		
Floating Charging Voltage	13.8V	13.8V	13.8V	-		
Charging Recover Voltage	13.2V					
Over-Discharge Recovery Voltage	12.5V (settable with keys)					
Over-Discharge Voltage	11.0V (settable with keys)					
Equalizing Charging Time	1H		-		-	
Boost Charging Time	2H				-	
Temperature Compensation	-3.0mV/°C/2V				-	
Light Control Voltage	Light control on 5V, light control off 6V (light control on plus 1V)					
Light Control Judgment Time	10 minutes					

Product Images

