



### PRODUCT OVERVIEW

EV-HP2420 controller is Pulse Width Management (PWM) charging technology for off-grid photovoltaic systems. With 5V/1.2A USB terminal output, it can charge mobile phones, power DC fans, and other DC electronic devices.

### 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-HP2410	PWM Controller	10A	12V/24V	< 55V
EV-HP2420	PWM Controller	20A	12V/24V	< 55V
EV-HP2420-S	PWM Controller	20A	12V/24V	< 55V

### Specifications

MODEL#	EV-HP2410	EV-HP2420	EV-HP2420-S
Rated Current	10A	20A	20A
Current Display Function	No	No	Yes
System Voltage	Automatic recognition of 12V/24V		
No-Load Loss	< 10mA/12V ; < 12mA/24V		
Max Solar Energy Input Voltage	<55V		
Max Voltage at the Battery End	<35V		
Overvoltage Protection	7.0V ; ×2/24V ;		
Equalizing Charging Voltage	14.6V ; ×2/24V ;		
Boost Charging Voltage	14.4V ; ×2/24V ;		
Floating Charging Voltage	13.8V ; ×2/24V ;		
Charging Recovery Voltage	13.2V ; ×2/24V ;		
Over-Discharge Recovery Voltage	12.6V ; ×2/24V ;		
Over-Discharge Voltage	11.1V ; ×2/24V ;		
Equalizing Charging Interval	30 days		
Equalizing Charging Time	1 hour		
Boost Charging Time	2 hours		
Dimensions	4.05" x 2.79" x 2.34"	5.11" x 2.95" x 1.49"	5.11" x 2.95" x 1.49"
Weight	.28 LBS	.44 LBS	.44 LBS

### Product Images

