

PRODUCT OVERVIEW

EV-MA Series is a MPPT solar charge & discharge controller. Typically used in home and off grid power systems.

FEATURES

- FOR OFF-GRID APPLICATIONS - Can be connected to both PV, battery and load; multiple load operating modes to meet diverse needs
- ALL-IN-ONE - Supports multiple battery types; highly integrated, helps you save space and wire
- USER-FRIENDLY - Easy to install and simple to use; natural cooling, absolutely quiet
- EFFICIENT - MPPT with up to 99.9% efficiency; supports solar panels, 2 in series/more in parallel
- SAFETY - Complete charge and discharge protection mechanism; high quality components for stable operation
- INTELLIGENT - Supports TTL RS485 and CAN (RV-C protocol); supports Bluetooth with mobile APP

APPLICATIONS

- Off grid solar systems
- Home solar systems



Product Description

PART#	DESCRIPTION	RATED CURRENT	SYSTEM VOLTAGE	OPERATING VOLTAGE RANGE
EV-MA2430N15	MPPT Controller	30A	12V/24Vdc	8-32Vdc
EV-MA2440N15	MPPT Controller	40A	12V/24Vdc	8-32Vdc
EV-MA2460N15	MPPT Controller	60A	12V/24Vdc	8-32Vdc
EV-MA4830N15	MPPT Controller	30A	12V/24Vdc	8-64Vdc

Specifications

MODEL#	EV-MA2430N15	EV-MA2440N15	EV-MA2460N15	EV-MA4830N15
PV INPUT				
Maximum Voltage of Open Circuit	150Vdc			
MPPT Voltage Range	(Battery voltage+2V) ~ 110Vdc			
Maximum PV Input Power	400W/12V, 800W/24V	520W/12V, 1040W/24V	800W/12V, 1600W/24V	400W/12V, 800W/24V, 1200W/36V, 1600W/48V
BATTERY				
Battery Type	USE/FLD/GEL/LI/SLD/ User Defined			
Rated Battery Voltage	12/24Vdc			12/24/36/48Vdc
Battery Voltage Range	8~32Vdc			8~64Vdc
Rated Charging Current	30A	40A	60A	30A
MPPT Charging Mode	Buck			
LOAD				
Load Type	Resistive load, Capacitive load, Inductive load			
Rated Load Voltage	Equal to battery voltage 12V/24V/36V/48V			
Rated Load Current	30A	40A	60A	30A
Load Working Mode	Light control, Light control + Time control, Manual control (default), Debugging mode, Normal open			
EFFICIENCY				
MPPT Tracking Efficiency	>99%			
Maximum Charging Conversion Efficiency	85%~98% (Corresponding load power 10%~100%)			
ACCESSORIES				
Optional	RS485 communications cable, RS485 8-core flat black cable with two crystal connectors			
COMMUNICATION				
TTL, RS485 (Default)	TTL Baud rate 9600kps, RS485, port			
CAN (Optional)	Optional (RV-C Protocol)			
Bluetooth (Optional)	External module BT-2 with mobile app			
GENERAL				
Weight	2.3kg (5.1lb)		3.4kg (7.5lb)	3.6kg (7.9lb)
Dimensions	260*216*83.2mm (10*8.5*3.27in)		260*216*98.5mm (10*8.5*3.87in)	
Protection Degree	IP32			
Operating Temperature Range	-35°C ~ +65°C (-31°F~149°F)			

Wiring Diagram

