



PRODUCT OVERVIEW

EV-MC48 is a MPPT solar charge & discharge controller. Typically used in home and off grid power systems.

FEATURES

- FOR OFF-GRID APPLICATIONS - Connect to photovoltaic and supply power to batteries
- ALL-IN-ONE - Supports multiple battery types; supports 1-10 PCS in parallel
- 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 communication; 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-MC4860N15	MPPT Controller	60A	12V/24V/36V/48Vdc	9~64Vdc
EV-MC4870N15	MPPT Controller	70A	12V/24V/36V/48Vdc	9~64Vdc
EV-MC4860N25	MPPT Controller	60A	12V/24V/36V/48Vdc	9~64Vdc
EV-MC4870N25	MPPT Controller	70A	12V/24V/36V/48Vdc	9~64Vdc

Specifications

MODEL#	EV-MA2430N15	EV-MA2440N15	EV-MA2460N15	EV-MA4830N15
PV INPUT				
Maximum Voltage of Open Circuit	150Vdc		250Vdc	
MPPT Voltage Range	(Battery voltage + 2V) ~ 110Vdc		(Battery voltage + 2V) ~ 180V	
Maximum PV Input Power	800W/12V, 1600W/24V, 2400W/36V, 3200W/48V	920W/12V, 1840W/24V, 2760W/36V, 3680W/48V	800W/12V, 1600W/24V, 2400W/36V, 3200W/48V	920W/12V, 1840W/24V, 2760W/36V, 3680W/48V
Maximum Parallel Capacity	1-10 units			
BATTERY				
Battery Type	USE/FLD/GEL/LI/SLD/ User Defined			
Rated Battery Voltage	12/24/36/48Vdc			
Battery Voltage Range	9~64Vdc			
Rated Charging Current	60A	70A	60A	70A
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	≤98%			
ACCESSORIES				
Matching	RM-6/ RM-7 Display screen · BT-2 Bluetooth module, USB to TTL Connecting wire, TTL Communication line (TTL to TTL), BTS Temperature sensor, CN-4 (TTL to 485), GP-2 Internet of things module, RS485 Communication line (RS485 to S485)			
GENERAL				
Communication	TTL/RS485/Built-in Bluetooth			
Weight	3.6kg (7.9lb)			
Dimensions	266*194*119mm (0.87*0.64*0.39ft)			
Protection Degree	IP32			
Operating Temperature Range	-35°C ~ +65°C (-31°F ~ 149°F)			

Wiring Diagram

