



# MPPT

## Solar Charge Controller



Lighting Proof



Rain Proof



Sand&dust Proof



ISO9001



ISO14001



RoHS  
CE

## Explorer-M Series

EM2460

EM2450

EM2440

EM2430

EM2420

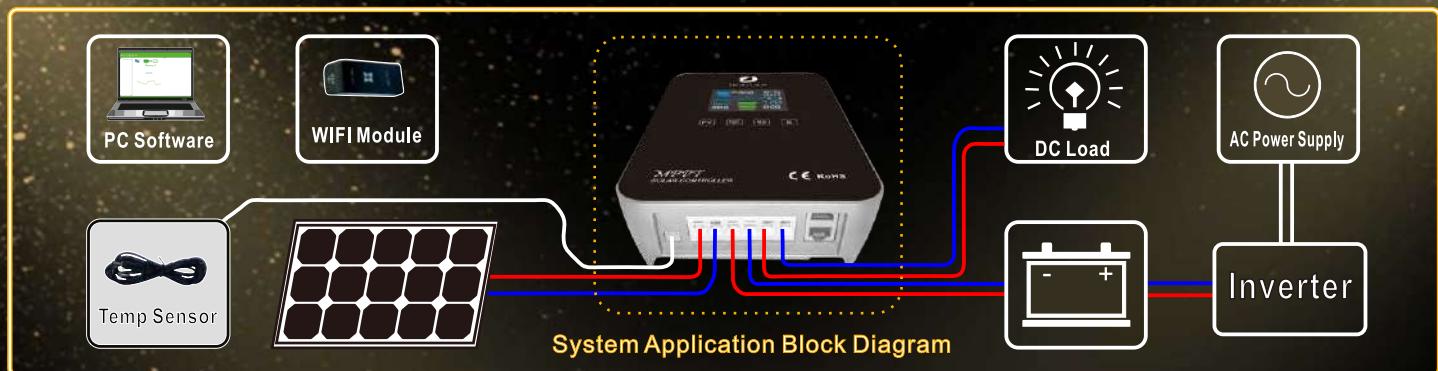
\* Suitable For Li-ion Batteries

\* Activation For Li-ion Batteries

\* Natural-cooling & IP43 Protection

\* Suitable For 12V/24V Lead-acid Batteries

\* Support Parallel Connection/Compatible With PC Software Or APP



	Model	EM2420	EM2430	EM2440	EM2450	EM2460			
Product Category	MPPT efficiency	$\geq 99.5\%$							
	Standby consumption	0.5W~1.2W							
	Heat-dissipating method	Natural-Cooling							
	Battery system voltage range	12V system	9VDC~15VDC(Lead acid)						
		24V system	18VDC~30VDC(Lead acid)						
		Li-ion	8VDC~30VDC(Default), $\leq 30$ VDC(Optional activation function)						
Input Characteristics	Max. PV input voltage(Voc)	100VDC(Default), DC150V(Optional)							
	Min. Vmpp Voltage	Battery voltage + 2V							
	Start-up charging voltage	Battery voltage + 3V							
	Low input voltage protection	Battery voltage + 2V							
	Over voltage protection / Recovery	100VDC/95VDC(Default), 150VDC/145VDC(Optional)							
	Rated PV Power	12V system	260W	390W	520W	650W	780W		
Charge Characteristics	Rated charge current	24V system	520W	780W	1040W	1300W	1560W		
		Li-ion	252W~504W	378W~756W	504W~1008W	630W~1260W	756W~1512W		
	Activation for lithium battery	Optional							
	Battery types(Default Gel battery)	Sealed(SEL), Gel(GEL), Flooded(FLD), User-defined(USE), Li-ion(Lit)							
	Temperature compensation	20A	30A	40A	50A	60A			
	Charge method	3-stages: CC(Constant Current), CV(Constant Voltage), CF(Floating Charge)							
LOAD Characteristics	Output voltage stability accuracy	$\leq \pm 0.2V$							
	Load voltage	Same as battery voltage.							
	Rated load current	20A		30A					
	Load control mode	On\Off mode, PV voltage control mode, Dual-time control mode, PV + Time control mode							
	Low voltage protection	10.5V(default), 11V(restored), settable							
Display & Communication	Setting method	PC software / APP / Controller							
	Display	High-definition LCD segment code backlight display							
	Communication	Dual RJ45 port / RS485 protocol / PC (via RS485-USB Cable) & APP (via Wi-Fi module) / Centralized monitoring (via parallel connection and RS485-USB cable)							
Other Parameters	Protection	Input & output over-volt / low-voltage protection, reverse polarity protection, over-heating protection, battery shedding protection etc.							
	Operating ambient temperature	-20°C~+50°C							
	Storage temperature	-40°C~+75°C							
	IP(Ingress protection)	IP43							
	Noise	$\leq 10$ dB							
	Altitude	0~3000m							
	Max. Wiring size	28mm <sup>2</sup>							
	Recommended breaker	≥40A	≥63A	≥63A	≥100A	≥100A			
	N. weight (kg) / G. weight (kg)	1.65 / 1.98		2.35 / 2.78					
	Product size/Packing size(mm)	220×148×58.5/289×212×105		245×170×63.5/334×255×123					