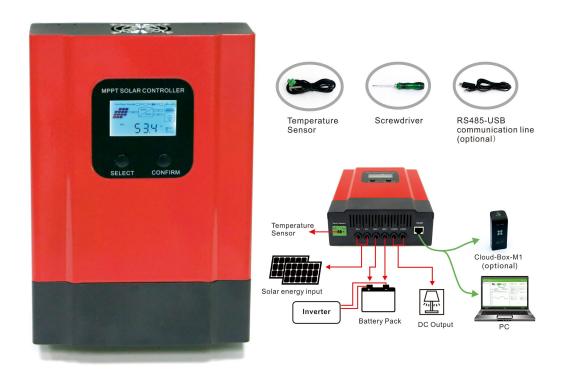
## **MPPT Solar Charge Controller**

## eSmart3 series(12V\24V\36V\48V Auto 20A\30A\40A\50A\60A)



Product color and some functions can be customized(OEM/ODM)

## **Features**

- ◆ It has an efficient MPPT algorithm, MPPT efficiency ≥99.5%, and converter efficiency up to 98%.
- Charge mode: three stages (constant current, constant voltage, floating charge), it prolongs service life of the batteries.
- ◆ Four types of load mode selection: ON/OFF, PV voltage control, Dual Time control, PV+Time control.
- Battery system voltage automatic recognition.
- ◆ Three kinds of commonly used lead-acid battery (Seal\Gel\Flooded) parameter settings fcan be selected by the user, and the user can also customize the parameters for other battery charging.
- ♦ It has a current limiting charging function. When the power of PV is too large, the controller automatically keeps the charging power, and the charging current will not exceed the rated value.
- High definition LCD display function to check the device running data and working status, also can support modify the controller display parameter.
- ♦ RS485 communication, we can offer communication protocol to convenient user's integrated management and secondary development.
- ◆ Support PC software monitoring and WiFi module to realize APP cloud monitoring.
- ♦ CE, RoHS, FCC certifications approved, we can assist clients to pass various certifications.
- ♦ 3 years warranty, and 3~10 years extended warranty service also can be provided.

## **Parameter**

eSmart3 series			eSmart3-20A	eSmart3-30A	eSmart3-40A	eSmart3-50A	eSmart3-60A
	Controller Properties		MPPT (maximum power point tracking)				
Product category	MPPT efficiency		≥99.5%				
	Standby power		0.5W~1.2W				
	System voltage		Automatic recognition				
	Heat-dissipating method		Intelligent fan cooling				
	Max.PV input voltage(VOC)		DC150V				
	Start the charge voltage point		Battery voltage + 3V				
	Low input voltage protection point		Battery voltage + 2V				
Input	Over voltage	protection point	DC150V				
Characteristics	Rated PV power	12V system	260W	390W	520W	650W	780W
		24V system	520W	780W	1040W	1300W	1560W
		36V system	780W	1170W	1560W	1950W	2340W
		48V system	1040W	1560W	2080W	2600W	3120W
	Selectable Battery Types		Sealed lead acid, Gel battery, Flooded				
Charge	(Default Gel battery)		(Other types of the batteries also can be defined)				
Characteristics	Charge r	ated current	20A	30A	40A	50A	60A
	Charge Method		3-Stage: constant current(fast charging)-constant voltage-floating charge				
LOAD	Load voltage		The same as the battery voltage				
	Load rated current		40A 60A				
Characteristics	Load control mode		On\Off mode, PV voltage control mode,  Dual-time control mode, PV + Time control mode				
	Display mode		High-definition LCD segment code backlight display				
Display &  Communication	Communication mode		8-pin RJ45 port/RS485/support PC software monitoring/ support WiFi module to realize APP cloud monitoring				
Other Parameters	Protect function		Input-output over \ under voltage protection,  Prevention of connection reverse protection,battery shedding protection etc.				
	Operation Temperature		-20℃~+50℃				
	Storage Temperature		-40℃~+75℃				
	IP(Ingress protection)		IP21				
	Max. connection size		20mm²			30mm²	
	Net Weight (kg)		2.3		2.6		
	Gross Weight (kg)		3		3.5		
	Product Size (mm)		240*168*66		270*180*85		
	Packing Size(mm)		289*204*101 324*223*135			3*135	