## **MPPT Solar Charge Controller**

TW-E3 series (12V\24V\36V\48V Auto 20A\30A\40A\50A\60A)



## **Features**

- 1. Efficient MPPT controller algorithm, MPPT efficiency is not less than 99.5%, the conversion efficiency of the whole machine is up to 98%;
- 2.12V/24V/36V/48V system automatically recognizes and is convenient for users to use in different systems;
- 3. Allow the solar panel open circuit voltage to be at most DC150V;
- 4. Charging mode: third-order charging (constant current, constant voltage, floating charge), effectively extending the life of the battery;
- 5. There are four discharge modes: manual switch mode, light control mode, fixed time light control mode, and dual time control mode;
- 6. Customers can choose to charge 3 types of commonly used batteries (sealed lead-acid batteries, drain batteries, colloidal batteries), and can be customized to charge other types of batteries;
- 7. The controller LCD and the host computer display various parameters, and the Cloud-Box-M1 product module can be purchased to realize remote intelligent cloud monitoring;
- 8. RS485 communication, and can provide communication protocols to facilitate secondary development and management of customers;
- 9. The products have passed CE, ROHS and FCC certification; they can cooperate with customers to pass various certifications;
- 10. The normal warranty period is three years, and it can provide 3~10 years extended warranty service.

TW-E3			004	204	404	504	COA
12V/24V/36V/48V-Series			20A	30A	40A	50A	60A
	Controller type		Controller with maximum power point tracking (MPPT)				
Product Category	MPPT efficiency		≥99. 5%				
	No-load static loss		0.5W~1.2W				
	System voltage		auto recognition				
	Heat dissipation method		Air cooled				
Input characteristics	PV maximum open circuit voltage (VOC)		DC150V				
	Start charging voltage point		Higher than battery voltage 3V				
	Input low voltage protection point		Higher than the current battery voltage 2V				
	Input overvoltage protection point		DC150V				
	Solar	12V system	260W	390W	520W	650W	780W
	panel	24V system	520W	780W	1040W	1300W	1560W
	rated	36V system	780W	1170W	1560W	1950W	2340W
	input power	48V system	1040W	1560W	2080W	2600W	3120W
Charging characteristics	Applicable battery type		Sealed lead acid battery, colloidal lead acid battery, open lead acid battery (can also customize parameters for other types of battery charging)				
	Charging current		20A	30A	40A	50A	60A
	charging method		Three stages: constant current (fast charge), constant voltage, floating charge				
Load characteristics	Load voltage		Same battery voltage				
	Rated load current		40A 60A				
	Load control mode		Normally open normally closed mode / dual time control mode / light control mode / light control - fixed time control mode				
Display/communication	Display method		HD LCD segment code backlight display				
	communication method		8-pin RJ45 interface / RS485 / support host computer monitoring / support WIFI module expansion to achieve app cloud monitoring				
Other attributes	Protective function		Input and output over-voltage protection, anti-reverse protection, battery off protection, etc.				
	Working temperature		-20 °C ~+50 °C				
	Storage temperature		-40 °C^+75 °C				
	IP protection level		IP21				
	Maximum wiring size		20mm <sup>2</sup>			$30\mathrm{mm}^2$	
	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				