

# MPPT 15A-25A-30A-40A SOLAR CHARGE CONTROLLER



This is a MPPT (maximum Power Point Tracking) smart solar controller, with charging and discharging function, increasing 30%~60% efficiency than traditional PWM controller. It has automatic recognition function, three Stages charging function to protect battery, it also supports many kinds of battery charging and discharging, RS232 communication etc, It's our company's MPPT solar controller SMART series.

## Features

- MPPT charge mode, conversion efficiency up to 99%
- 12V/24V/48V system auto recognize
- Wide range of PV input with max is DC100V
- Memory function, Save setting function: date, time, generating capacity record and so on
- Selected battery types: sealed lead acid, vented, gel, NiCd battery. Other types of the batteries can also be defined.
- RS232 communication, and that providing communication protocol, it's convenient for customer's integration management.
- 2 years warranty. Extended 3~10
- Display Led/LCD
- Noise:  $\leq 40$ dB
- Type of Mechanical protection: IP25
- Charge type: three stages charge fast charge(MPPT), constant voltage charge, floating charge, protecting our battery, leading to a long use age.
- It has three patterns: discharge type owns always on pattern and always off pattern, it also has PV voltage solar controlling switch pattern.
- Clients can select any one in the 4 kinds of commonly used batteries, such as sealed lead acid, vented, Gel, NiCd ; Also we can customize other batteries wick you want.



TECHNICAL SPECIFICATION		15A	20A	25A	30A	40A
Charge Mode	Maximum Power Point Tracking					
Discharge Mode	Intelligent control					
System Type	12V 24V 48V Automatic recognition					
Soft Start Time	≤3S					
Dynamic Response Recovery Time	500us					
Conversion Efficiency	≥96.5%, ≤99%					
PV Modules Utilization Rate	≥99%					
<b>INPUT CHARACTERISTICS</b>						
MPPT Working Voltage and Range	12V system	DC14V~DC100V				
	24V system	DC30~DC100V				
	48V system	DC60~DC100V				
Max. DC Voltage	Max. DC Voltage DC100V					
Input Overvoltage Protection Point	DC100V					
Max. PV Power	12V system	213W	284W	355W	426W	568W
	24V system	426W	568W	710W	852W	1136W
	48V system	852W	1136W	1420W	1704W	2272W
<b>CHARGE CHARACTERISTICS</b>						
Selectable Battery Types	Sealed lead acid, vented, Gel, NiCd battery (Default type is GEL battery)					
Other types of Battery Setting	Other types of the batteries also can be defined					
Battery Type Setting	12V/24V/48V SYS			Controller and upper monitor		
Charge Type	12V/24V/48V SYS			Three Stages: Fast charge/Constant charge/Floating charge		
Rated Input Current	15A	20A	25A	30A	40A	
Current-limiting Protection	20A	25A	30A	35A	45A	
Output Ripples (peak)	200mV					
Output Voltage Stability Precision	±1.5%					
Charge voltage Peak-Peak Ripple	200mV					
Charger voltage accuracy	±1.5%					
<b>DISCHARGE CHARACTERISTICS</b>						
Output voltage	Base on battery voltage					
Rated output Current	30A					
Low voltage output Protection point	Default 10.5V; Recovery 11V; Adjust by users is available;					
<b>COMMUNICATION PORT</b>						
RS232 Communication	Chose COM communication					
<b>PHYSICAL</b>						
Measurement DxWxH (mm)	205*168*60					
Safety	CE, ROHS, FCC					
N.G (kg) / G.N (kg)	1.8kg / 2kg					
Type of Mechanical Protection	IP21					
<b>ENVIRONMENT</b>						
Humidity	0~90%RH (no condense)					
Altitude	0~3000m					
Operating Temperature	-20°C ~ +50°C					
Storage Temperature	-40°C ~ +75°C					
Atmospheric Pressure	70~106kPa					