

**China factory 12V/24V/48V Automatic MPPT solar charge controller 60a**





## Core properties of mppt charger controller

1. Conversion efficiency 95%-99%, take most from solar panels
2. Charge for all kinds of batteries, 3 charge stage to protect battery.
3. All kinds of battery are available .
4. communication port :RS232.
5. Software to monitor 100pcs equipments at the same time on one screen on a computer.

360安全浏览器 6.3      http://localhost:18080/Isolar/UserServlet?key=login      习近平的领导风格

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Monitoring    System    History    User setting    Status    Parameters    Real-control

Current device: 1\_charger1

Battery type: ---    Load type: ---    Model name: ---

PV voltage: 0 V    Indoor Temp.: 0 °C  
 Charge voltage: 0 V    Charge power: 0 W  
 Charge current: 0 A    Total of energy: 0 Wh  
 Battery Temp.: 0 °C

PV voltage    Charge voltage    Charge current    Charge power

230 V    230 V    10 A    500 W

浏览医生    下载    75%

## Parameter of mppt charger controller

Model: I-P-SMART1 -DC12V/24V/48V-series	40A	50A	60A		
Charge Mode	Maximum Power Point Tracking				
Method	3 stages: fast charge(MPPT),constant voltage,floating charge				
System Type	DC12V/24V/48V 12V system 24V system 48V system	Automatic recognition DC9V~DC15V DC18V~DC30V DC36V~DC60V			
System Voltage	12V/24V/48V system	$\leq 10S$			
Dynamic Response	12V/24V/48V system	500us			
Recovery Time	12V/24V/48V system	$\geq 96.5\%, \leq 99\%$			
Conversion Efficiency	12V/24V/48V system				
PV Modules Utilization Rate	12V/24V/48V system	$\geq 99\%$			
<b>Input Characteristics</b>					
MPPT Working Voltage and Range	12V system 24V system 48V system	DC18V~DC150V DC34~DC150V DC65~DC150V			
Low Voltage Input Protection Point	12V system 24V system 48V system	DC16V DC30V DC60V			
Low Voltage Input Recovery Point	12V system 24V system 48V system	DC22V DC34V DC65V			
Max DC Voltage	12V/24V/48V system	DC160V			
Input Overtoltage Protection Point	12V/24V/48V system	DC150			
Input Overtoltage Recovery Point	12V/24V/48V system	DC145V			
Max. PV Power	12V system 24V system 48V system	570W 1130W 2270W	700W 1400W 2800W	900W 1700W 3400W	
<b>Output Characteristics</b>					
Selectable Battery Types (Default type is GEL battery)	12V/24V/48V system	Sealed lead acid, vented, Gel, NiCd battery (Other types of the batteries also can be defined)			
Constant Voltage	12V/24V/48V system	Please check the charge voltage according to the battery type form.			
Floating Charge Voltage	12V/24V/48V system				
Over Charge Protection Voltage	12V system 24V system 48V system	14.6V 29.2V 58.4V			
Rated Output Current	12V/24V/48V system	40A	50A	60A	
Current-limiting Protection	12V/24V/48V system	44A	55A	66A	
Temperature Factor	12V/24V/48V system	$\pm 0.02\%/\text{ }^{\circ}\text{C}$			
Temperature Compensation	12V/24V/48V system	14.2V-(The highest temperature-25°C)*0.3			
Output Ripples(peak)	12V/24V/48V system	200mV			
Output Voltage Stability Precision	12V/24V/48V system	$\leq \pm 1.5\%$			
<b>Display</b>					
LCD display	Input,output parameter and output power etc (check the LCD display instruction)				
LED display	3 LEDs indicates:Fault indicate light,charge indicate light, power source indicate light(check the LED instruction)				
Software Control through PC(communication port)	RS232 (matching) or LAN(optional)				
<b>Protection</b>					
Input Low Voltage Protection	Check the input characteristics				
Input Overtoltage Protection	Check the input characteristics				
Input Polarity Reversal Protection	yes				
Output Overtoltage Protection	Check the output characteristics				
Output Polarity Reversal Protection	yes				
Short-circuit Protection	Recover after eliminating the Short-circuit fault,no problem for long term Short-circuit				
Temperature Protection	95°C				

Temperature protection	Above 85°C, decrease the output power, decrease 3A per degree.
Other Parameters	
Noise	≤40dB
Thermal methods	Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan runs slowly or stops; when controller stops working, fan also stops running.
Components	World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105°C
Smell	No peculiar smell and no toxic substances.
Environment Protection	Meet the 2002/95/EC, no cadmium hydride and fluoride
Physical	
Measurement DxWxH(mm)	270*185*90
N.G(kg)	3
G.N(kg)	3.6
Color	Blue/Green (optional)
Safety	CE, RoHS, PSE, FCC
EMC	EN61000
Type of Mechanical Protection	IP21
Environment	
Humidity	0~90%RH (no condensation)
Altitude	0~3000m
Operating Temperature	-20°C ~ +40°C
Storage Temperature	-40°C ~ +75°C
Atmospheric Pressure	70~106kPa

Note: OEM and ODM service are provided. The 36V/72V/96V model also can be custom made for you

#### Product Parts

NO.	Quantity	Description
1	1 unit	Charge controller
2	2 pc	Terminals
3	2 pc	Gallow pulley (For installing the controller on the wall)
4	4 set	Screw (For installing the controller on the wall)
5	1 pc	232 turn to RJ45 communication cable
6	1 pc	User manual
7	1 pc	Temperature sensing wire
8	2 pc	Fuse wire