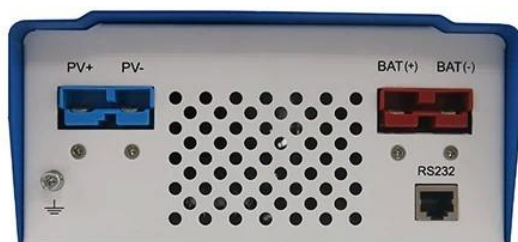# Chinafactory 12V/24V/48V Automatic MPPT solar charge controller 40A 50A 60A

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. commucation port :RS232.
5. Software to monitor 100pcs equipments at the same time on one screen on acomputer.
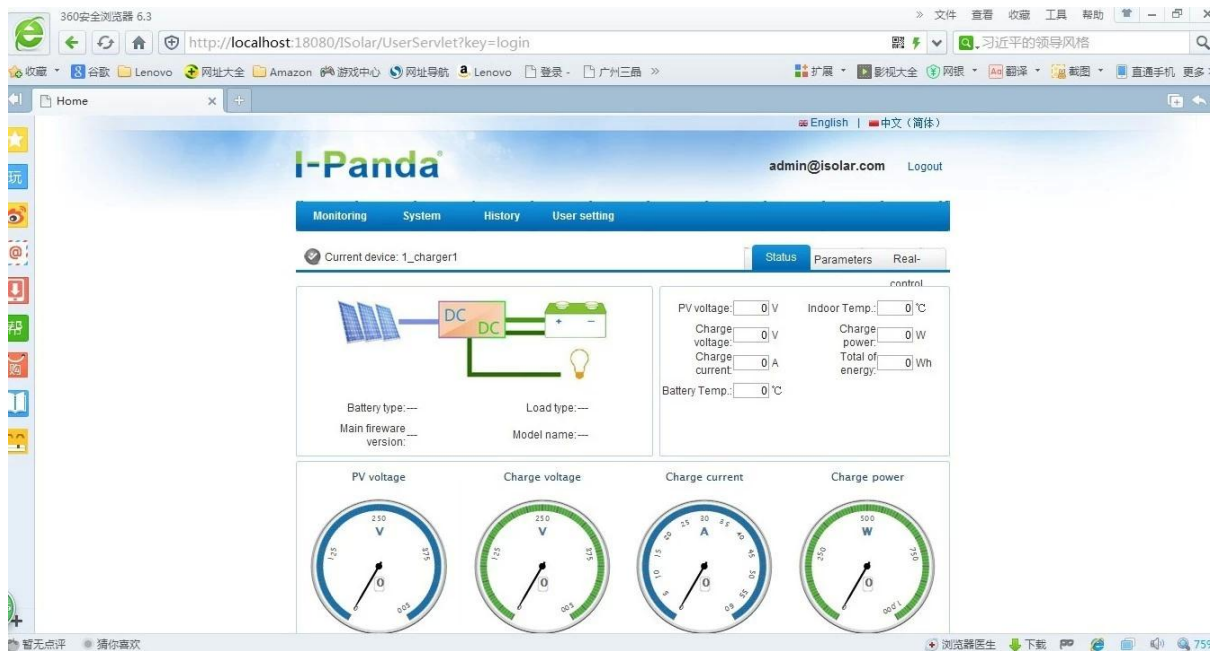
Parameter of mppt charger controller

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	Automatic recognition		
System Voltage	12V system	DC9V~DC15V		
	24V system	DC18V~DC30V		
	48Vsystem	DC36V~DC60V		
Soft Start Time	12V/24V/48Vsystem	≤10S		
Dynamic Response Recovery Time	12V/24V/48Vsystem	500us		
Conversion Efficiency	12V/24V/48Vsystem	≥96.5%,≤99%		

PV Modules Utilization Rate	12V/24V/48Vsystem	≥99%		
Input Characteristics				
MPPT Working Voltage and Range	12V system	DC18V~DC150V		
	24V system	DC34~DC150V		
	48V system	DC65~DC150V		
Low Voltage Input Protection Point	12V system	DC16V		
	24V system	DC30V		
	48V system	DC60V		
Low Voltage Input Recovery Point	12V system	DC22V		
	24V system	DC34V		
	48V system	DC65V		
Max DC Voltage	12V/24V/48V system	DC160V		
Input Overvoltage Protection Point	12V/24V/48V system	DC150		
Input Overvoltage Recovery Point	12V/24V/48V system	DC145V		
Max. PV Power	12V system	570W	700W	900W
	24V system	1130W	1400W	1700W
	48V system	2270W	2800W	3400W
Output Characteristics				
Selectable Battery Types (Default type is GEL battery)	12V/24V/48Vsystem	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	14.6V		
	24V system	29.2V		
	48V system	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	±0.02%/°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	≤±1.5%		
Display				
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)		
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		

Product Parts

NO.	Quantity	Description
1	1 unit	Charge controller
2	2 pc	Terminals
3	2 pc	Gallow pulley (For install the controller on the wall)

4	4 set	Screw (For install 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

UpperComputer Software and Test Software
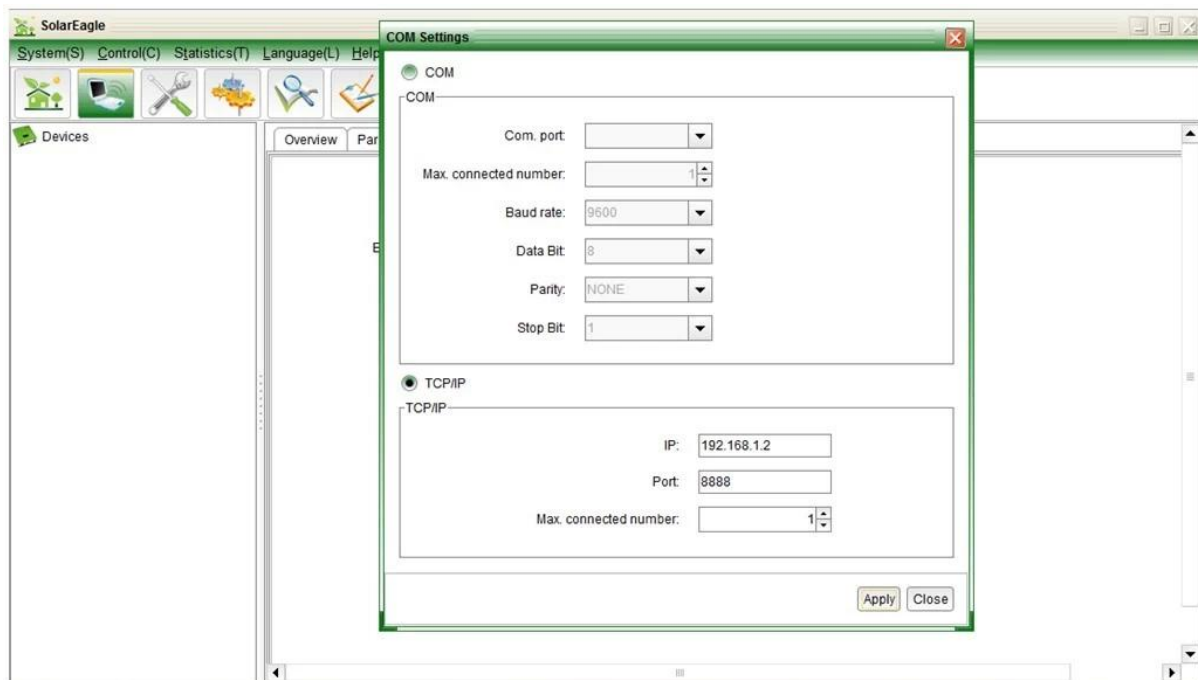
MPPTConnection

Service andContact

1. Warranty

1.1 Two years warranty, lifelong technical assistance.

2. Conditions and Terms

2.1 The warranty starts from the delivery date from our factory.

2.2 During the warranty, any defective product will get repaired or replacedfor free.

2.3 The warranty is unavailable for those products which are broken by theviolence or the carelessness or

repaired or altered without the authorization.

3. Lead Time

3.1 Sample orders: 1-5 working days.

3.2 Mass orders: Depend on Quantity

4. Shipment

4.1 Samples By EMS,DHL,FedEx TNT or other express.

4.2 Mass orders by our forwarding agent(by air or by sea).

4.3 Mass orders by your own forwarding agent.