Introduction

This is a solar charge controller $40A \sim 60A$ that have automatic max. power point tracking function with high

efficiency that almost $30\%\sim60\%$ higher than traditional charge controller. It also features the functions of system

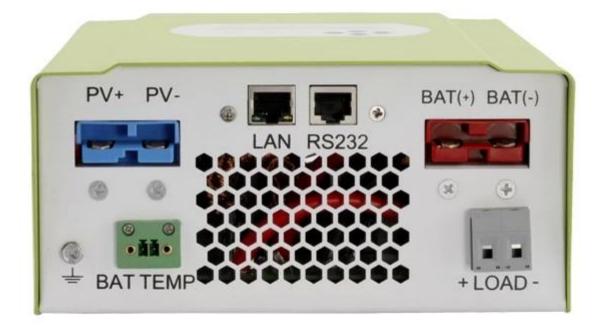
voltage auto recognition, wide rang of PV input ,charge for all kinds of battery,automatic discharge control,RS

232 / LAN communication function and so on. It is very high-end product for solar market with its best partner <u>I-P-TPI2 model Inverter/Charger/UPS.</u>

Application

- 1. Industrial, commercial, household off grid solar energy generation system
- 2. Movable off grid solar energy generation system
- 3. Communication base stations
- 4. New energy education business
- 5. Solar Monitoring System
- 6. Solar Street Lighting System







Features

- 1.MPPT charge mode, conversion efficiency upto 99%
- 2.12V/24V/48V system auto recognize;
- 3. Wide range of PV input with max. is DC150V.
- 4.Unlimited parallel connection
- 5. Journal function, Save function set, Date, time, Generating capacity and so on.
- 6.Charge mode: three stages (fast charge ,constant charge ,floating charge) .It prolongs service life of the batteries .
- 7. Discharge mode: ON/OFF mode, double time control mode, PV voltage control mode , PV voltage+time delay mode and so on .
- 8.Recommended battery types: sealed lead acid, vented, gel, NiCd battery. Other types of the batteries can also be defined.
- 9.Most information could be provide by LCD and LED like: model no.,PV input voltage,battery

type,battery voltage,charging current,charging power,working status and so on. Also customer's information like company name,website and logo can be added into Solar Eagle software.

- 10.RS232 and LAN communication port. IP and Gate address could be user define it satisfy global area. And communication protocol can be provided to help customer manage all information .
- 11. The upper computer software is displayed in 11 languages, it could show work status and set parameters of the discharge system.
- 12. With intelligent design, the device can be upgraded online lifelong.
- 13. Adopting the well-known brand components, the devices can suffer the temperature not less than 105°C. The service life is designed to use for 10 years in theory.
- 14.Compliance with the 2002/95/EC environment protecting demand, doesn't include the Cadmium, hydride and fluoride etc material
- 15.Equipment integrity: controller + CD-ROM(microcomputer software) + communication wire + temperature sensing wire+Anderson terminals;
- 16.CE, ROHS certifications approved.
- 17.2 years warranty. And 3~10 years extended warranty service also can be provided.

Parameter

Model:I-P-SMART2-40A/50A/60A -series		40A 50A 60A		
Charge Mode	Maximum Power Point Tracking			
Method		arge(MPPT),constant voltage, floating charge		
System Type		Automatic recognition		
		DC9V~DC15V		
System Voltage		DC18V~DC30V		
	48Vsystem	DC36V~DC60V		
Soft Start Time	12V/24V/48Vsyste m			
Dynamic Response Recovery Time	12V/24V/48Vsyste m	e 500us		
Conversion Efficiency	12V/24V/48Vsyste m	290.370,39970		
PV Modules Utilization Rate	12V/24V/48Vsyste m	e >99%		
Input Character	istics			
	12V system	DC18V~DC150V		
MPPT Working Voltage and Range	24V system	DC34~DC150V		
	48V system	DC65~DC150V		
	12V system	DC16V		
Low Voltage Input Protection Point		DC30V		
	48V system	DC60V		
Low Voltage Input Recovery Point	12V system	DC22V		
Low voitage input Recovery Point	24V system	DC34V		
	48V system	DC65V		
Max DC Voltage	system	DC160V		
Input Overvoltage Protection Point	12V/24V/48V system	DC150		
Input Overvoltage Recovery Point	12V/24V/48V system	DC145V		
	12V system	570W 700W 900W		
Max. PV Power	24V system	1130W 1400W 1700W		
	48V system	2270W 2800W 3400W		
Output Characteristics				
Selectable Battery Types (Default type is GEL	12V/24V/48V	Sealed lead acid, vented, Gel, NiCd battery		
battery)	system	(Other types of the batteries also can be defined)		
Constant Voltage	12V/24V/48V			
Constant Foliage	system	Please check the charge voltage according to the battery type form.		
Floating Charge Voltage	12V/24V/48V			
	system			
	12V system	14.6V		
Over Charge Protection Voltage	24V system	29.2V		
	48V system	58.4V		

Name							
Current-limiting Protection by Server	Rated Output Current	12V/24V/48V	40A	50A		60A	
System AL DA GOA Solar Charge current System 12/2/4/489V 50, \$0,0 \$0,0 \$00. Temperature Factor 12/2/4/88V 50,00 \$0,00 \$0.00							
Rate charge current 12/17/34/89V 10.0 50.0 50.0	Current-limiting Protection		44A	55A		66A	
Temperature Foctor 5/50/24/V489/ 5/5589 10.02/W/TC Temperature Compensation 12/12/24/V489/ 5/5589 14.2V-(The highest temperature 25°C)*0.3 Dutput Ripplesipeak) 12/V24/V48V 5/5589 14.2V-(The highest temperature 25°C)*0.3 Dutput Voltage Stability Precision 5/5589 12/V24/V48V 5/558			40.4	504		504	
Comparative Pactor System 20.02x3/C	Rate charge current	System	40A	50A		60A	
Communication Control	Temperature Factor		+0.02%/°C				
Imperature Compensation system International 12/2/44/W8V system	Temperature ractor		20.0270/ 0				
22/724/48V 200mV 22/724/48V 200mV 22/724/48V 22/724/48V 200mV 22/724/48V 22/724/48V 200mV 22/724/48V 200mV 22/724/48V 20mV 22/724/48V 22/724	Temperature Compensation		14.2V-(The highest temperature-25°C)*0.3				
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Charger voltage accuracy 12V/2AV/48V Secting Control Sect	Charge voltage Peak-Peak Ripple		200mV				
Controller or LAN							
Bischarge characteristic Controller or LAN	Charger voltage accuracy		≤±1.5%				
Setting Control Controller or LAN Max discharge current Discharge protection Discharge control Discharge control Discharge voltage protection Discharge protection D	Discharge characteristic	- 7					
Max discharge current System 12V/24/48V 5ystem 12V/24/48		Contro	ller or LAN				
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Double-time control 2V724V/48V System DN / OFF PV voltage control 2V724V/48V System PV voltage control 2V724V/48V System PV voltage on[PV voltage off PV voltage on[pV voltage on[pV voltage off PV voltage on[pV voltage on[pV voltage off PV voltage on[pV voltage o	Discharge protection		fuse 30A*2				
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ON / OFF mode 12/2/4/V48V System Sys	Double-time control		On in morning	,off in morning / On in ni	ght ,off in night		
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Environment Humidity $0\sim90\%$ RH (no condense) Altitude $0\sim3000$ m Operating Temperature $-20^{\circ}\text{C} \sim +40^{\circ}\text{C}$ Storage Temperature $-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$							
Altitude $0\sim3000\mathrm{m}$ Operating Temperature $-20^\circ\mathrm{C}\sim+40^\circ\mathrm{C}$ Storage Temperature $-40^\circ\mathrm{C}\sim+75^\circ\mathrm{C}$							
Operating Temperature $-20^{\circ}\text{C} \sim +40^{\circ}\text{C}$ Storage Temperature $-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$	Humidity	0~90%	RH (no condens	e)			
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 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



Upper Computer Software and Test Software



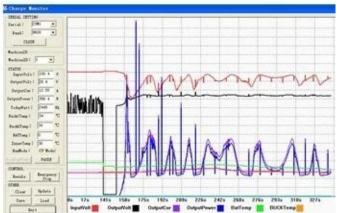


The interface of upper computer software working state

The interface of upper computer software parameter setting state

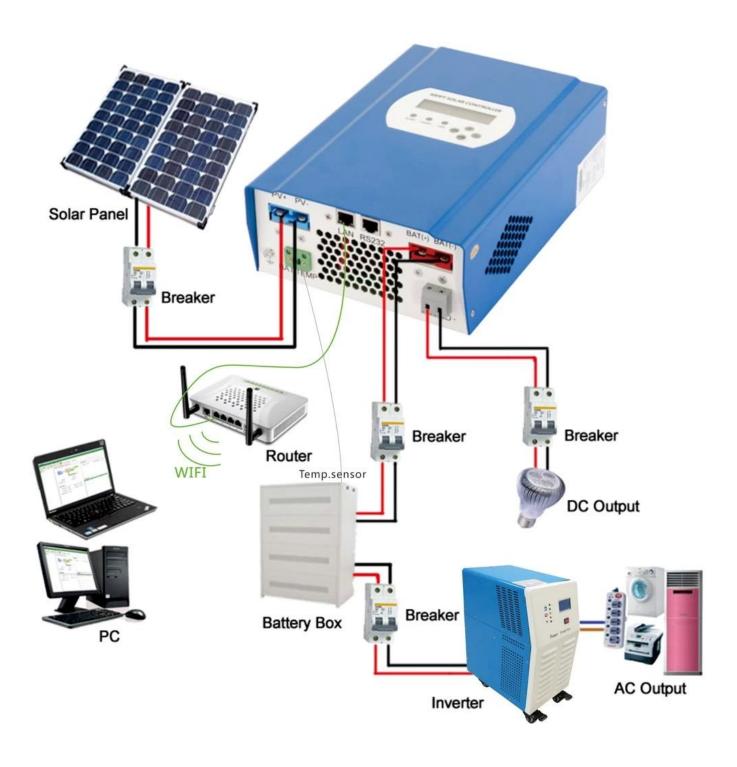


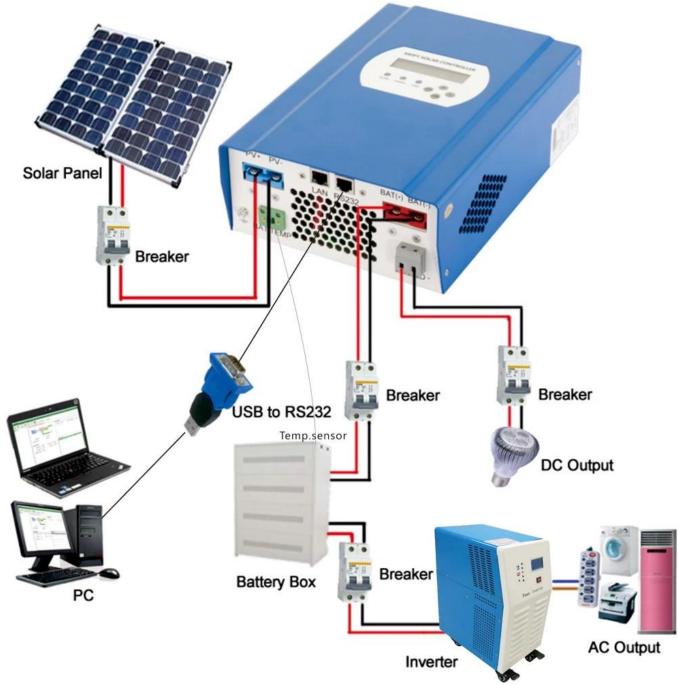
Upper computer software on/off interface and generating capacity record clean interface



The interface of test software working state

MPPT Connection





Service and Contact

1. Warranty

1.2 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 replaced for free.
- 2.3 The warranty is unavailable for those products which are broken by the violence or the carelessness or repaired or altered without the authorization.

3. Lead Time

- 3.1 Sample orders will be delivered from our factory within 5-7 working days.
- 3.2 General orders will be delivered from our factory within 7-15 working days.
- 3.3 Big orders will be delivered from our factory within 25 working days at most.

4. Shipment

- 4.1 Samples By EMS, DHL, FedEx or other express.
- 4.2 Wholesale orders by our forwarding agent(by air or by sea).
- 4.3 Wholesale orders by your own forwarding agent.

5. OEM and ODM

5.1 This page shows basic data, we can provide OEM, ODM service for you.