Introduction:

This is a <u>solar charge controller 40A ~ 60A</u> that have automatic max. power point tracking function with high efficiency that almost $30\% \sim 60\%$ 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.







Feature:

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 $^{\circ}$ C. The service life is designed to use for 10 years in theory.

14.Compliance with the 2002/95 / EC environment protecting demand, does not 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.

Parameter:

Model: I-P-SMART2-40A / 50A / 60A -series		40A	50A	60A		
Charge Mode	Maximum Power P	oint Tracking				
Method		ge (MPPT), constant volta	ige, floating charge			
System Type	DC12V / 24V / 48V	Automatic recognition	n			
	12V system	DC9V ~ DC15V				
System Voltage	24V system	DC18V ~ DC30V				
	48Vsystem	DC36V ~ DC60V				
Soft Start Time	12V / 24V / 48Vsys	tem ≤10S				
Dynamic Response Recovery Time	12V / 24V / 48Vsys	tem 500us				
Conversion Efficiency	12V / 24V / 48Vsys	tem ≥96.5%, ≤99%				
PV Modules Utilization Rate	12V / 24V / 48Vsys	tem ≥99%				
Input Characteristics						
	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	24V system	DC30V				
	48V system	DC60V				
Low Voltage Input Recovery Point	12V system	DC22V DC34V				
	24V system					
	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				
	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 battery)	12V / 24V / 48V system		nted, Gel, NiCd battery patteries 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	Fiedse check the the	arge voltage according to the ballery	туре юпп.		

Due Charge Protection Voltage 24.9 yetem 14.6 yetem Autor Output Current 22/2/2W/48/ 40.4 50.4 60.4 Current Iming Protection 12/2/2W/48/ 44.4 55.4 66.4 Current Iming Protection 12/2/2W/48/ 44.4 55.4 66.4 Date Charge Autor Current 50/2W/48/ 40.4 50.4 66.4 Date Charge Autor Current 50/2W/48/ 40.4 50.4 60.4 Emperature Compensation 52/2/2W/48/ 40.5 50.4 60.4 Date Ringles (pask) 52/2/2W/48/ 41.5% 50.4 50.5 50.5 Date Ringles (pask) 50.7 (Current) 200m/ 51.5% 50.5 5						
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PV voltage / time delay control 12// / 24/ / 48/V Discharge voltage protection 12// / 24/ / 48/V Discharge voltage protection 12// / 24/ / 48/V R5232 Communication 12// / 24/ / 48/V System Chose COM communication LAN Communication 12// / 24/ / 48/V System Chose COM communication Point Voltage Protection Check the input characteristics Input Low Voltage Protection Check the input characteristics Input Overvoltage Protection Check the input characteristics Output Point/y Reversal Protection Check the input characteristics Output Overvoltage Protection Check the input characteristics Output Point/y Reversal Protection Check the input characteristics Output Overvoltage Protection Check the input characteristics Output Point/y Reversal Protection So C Stort-Circuit Protection So C Temperature Protection 95 °C Temperature Protection Above 85 °C, decrease the output power, decrease 3A per degree. Other Parameters Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stoy; when controller stop working, fan also stop ran.	PV voltage control	12V / 24V / 48V	PV voltage on,	PV voltage off		
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Temperature Protection 95 °C Temperature protection Above 85 °C, decrease the output power, decrease 3A per degree. Other Parameters Noise <40dB	Short-circuit Protection		Recover after	eliminating the Short-circuit fa	ault, no problem for long term Short-circuit	
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numially 0 ~ 90% km (no condense) Altitude 0 ~ 3000m	Humidity			2)		
Autuate 0 ~ 300m Operating Temperature -20 °C ~ + 40 °C						
Storage Temperature -40 °C ~ + 75 °C						
Atmospheric Pressure 70 ~ 106kPa						



Blue

Green



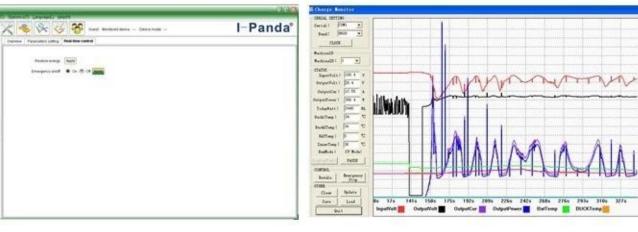
Upper Computer Software and Test Software

Filled intervalue Filled intervalue Filled intervalue Contract intervalue Filled intervalue Contract intervalue Filled intervalue Contract intervalue	16.9
Metal bar - Lantar -	36.4
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Charle strate [15] + Charlestone [15] # Part Strate State	-
Deprived 10 + 120 mm 10 m	
Editor Information III. 72	

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

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Certificates

ISO2008 ISO2004 CE FCC ROHS

Company









