High Conversion Efficiency Wide Range Input Voltage DC12V/24V/48V/96V Syatem Automatic Identification

I-P- SMART1-DC12V/24V/48V/96V-<u>30A MPPT Solar Controller</u>. With MPPT, it can target the highest output possibe from PV panels, make efficiency higher upto 30%~60% than traditional PWM ones. It can store energy to different kinds of batteries(Gel,Vented, Sealed,NiCd)

System



Features

- 1. Peak efficiency upto 99% with MPPT, increasing 30%~60% efficiency than traditional controller.
- 2. 12v/24v/48v/96V system voltage automatic recognize.
- 3. Maximum input PV voltage upto DC300V.
- 4. 105degrees can be sufferred by good components.
- 5. Charge mode: three stages (fast charge, constant charge, floating charge)
- 6. Support kinds of batteries:Gel,Sealed lead acid,vented,NiCd,etc.

7. LCD and LEDs show parameters and system information, like PV input voltage, battery voltage, charge current, charge power, etc.

8. Port RS232 or connects to PC with upper software to show working state and parameters in 11 languages.

9. CE, RoHS, FCC certificatons approved.

10. 2 years warranty;3~10 years extended technical service.

Parameter

Model: I-P-SMART1-DC12V/24V/48V/96v series		<u>30A</u>
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
	96Vsystem	DC72V~DC120V
Soft Start Time	12V/24V/48V/96v system	≤10S
Dynamic Response Recovery Time	12V/24V/48V/96v system	500us
Conversion Efficiency	12V/24V/48V/96v system	≥96.5%,≤99%

PV Modules Utilization Rate	12V/24V/48V/96v system	≥99%
Input Characteristics	10V evete	
	12V system	DC18V~DC150V
MPPT Working Voltage and Range	24V system	DC34~DC150V
	48V system	DC65~DC150V
	96V system	DC125~DC300V
	12V system	DC16V
	24V system	DC30V
Low Voltage Input Protection Point	49V system	DCS0V
	48V System	
	96V system	DC120V
	12V system	DC22V
Low Voltage Input Recovery Point	24V system	DC34V
	48V system	DC65V
	96V system	DC125V
	12\//24\//40\/ avetam	DC123V
Max DC Voltage	12V/24V/48V system	
	96V system	DC300V
Input Overveltage Protection Paint	12V/24V/48V system	DC150
input Overvoitage Protection Point	96V system	DC300V
	12V/24V/48V system	DC145V
Input Overvoltage Recovery Point	06V system	DC205V
	12V system	450W
Max DV Dower	24V system	850W
Max. FV FOWEI	48V system	1700W
	96V system	3400W
Output Characteristics	Sov System	540011
Selectable Battery Types (Default type is GEL battery)	12V/24V/48V/96Vsystem	Sealed lead acid, vented, Gel, NiCd battery (Other types of the batteries also can be defined)
Constant Valtage	12)//24)//49)//06)/ avatama	
	12V/24V/48V/96V System	Please check the charge voltage according to the battery type form.
Floating Charge Voltage	12V/24V/48V/96Vsystem	5 5
	12V system	14.6V
	24V system	29.2V
Over Charge Protection Voltage	48V system	58.41/
		116 0/
	96V System	110.8V
Rated Output Current	12V/24V/48V system	30A
Temperature Factor	12V/24V/48V system	±0.02%/°C
Temperature Compensation	12V/24V/48V/96v system	14.2V-(The highest temperature-25°C)*0.3
Output Ripples(peak)	12V/24V/48V/96v system	200mV
Output Voltage Stability Precision	12V/24V/48V/96v system	≤±1.5%
Display		
		Input, output parameter and output power etc.
LCD display		(check the LCD display instruction)
LCD display LED display		(check the LCD display instruction) 3 LEDs indicates: Fault indicate light, charge indicate light, power source indicate light(check the LED instruction)
LCD display LED display Software Control through PC(communication port)		(check the LCD display instruction) 3 LEDs indicates: Fault indicate light, charge indicate light, power source indicate light(check the LED instruction) RS232 (matching) or LAN(optional)
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LCD display LED display Software Control through PC(communication port) Protection		(check the LCD display instruction) 3 LEDs indicates: Fault indicate light, charge indicate light, power source indicate light(check the LED instruction) RS232 (matching) or LAN(optional)
LCD display LED display Software Control through PC(communication port) Protection Input Low Voltage Protection		(check the LCD display instruction) 3 LEDs indicates: Fault indicate light, charge indicate light, power source indicate light(check the LED instruction) RS232 (matching) or LAN(optional) Check the input characteristics
LCD display LED display Software Control through PC(communication port) Protection Input Low Voltage Protection Input Overvoltage Protection		(check the LCD display instruction) 3 LEDs indicates: Fault indicate light, charge indicate light, power source indicate light(check the LED instruction) RS232 (matching) or LAN(optional) Check the input characteristics Check the input characteristics
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LCD display LED display Software Control through PC(communication port) Protection Input Low Voltage Protection Input Overvoltage Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature protection		Above 85°C, decrease the output power, decrease 3A per degree.
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Altitude	0~3000m
Operating Temperature	-20°C ∼ +40°C
Storage Temperature	-40°C ~ +75℃
Atmospheric Pressure	70~106kPa

The specification is only forreference. Subject to change without prior notice. Weprovide OEM and ODM service. The 36V/72V/96V model also can be custom made foryou

RS232 Connect way

