Introduction

This is a MPPT (maximum Power Point Tracking) smart solar controller, with charging and discharging function, increasing 30%~60% efficiency than traditional PWM controller. It has automatic recognition function, three Stages charging function, also supports many kinds of battery charging and discharging, RS232 communication etc, It's our company's MPPT solar controller e-SMART series.

Features

- 1. **MPPT charging mode, peak efficiency up to 99%**, saving 30%~60% solar panel than traditional PWM controller.
- 2. **DC12V/24V/48V battery system automatic recognition**, users would like to use in different system conveniently.
- 3. DC12V/24V/48V system, maximum PV input voltage up to DC100V.
- 4. Charge type: **three stages charge** fast charge(MPPT), constant voltage,

floating charge, protected our battery, lead to a long use age.

- 5. Discharge type owns always on pattern and always off pattern, it also has PV voltage solar controlling switch pattern.
- 6. Clients can **auto select any one in the 4 kinds of commonly used batteries,** Sealed lead acid, vented, Gel, NiCd and custom other batteries.
- 7. **Digital tube display** controller battery voltage and charging current,upper computer display various parameters, such as model, PV input voltage, battery types, battery voltage, charging current, charging power, working condition etc.
- 8. **RS232 communication**, and that providing communication protocol, it's convenient for customer's integration management.
- 9. This controller could be **paralleled infinitely.**
- 10. **CE, RoHS FCC Certifications approved;** cooperating with clients through the other certifications.
- 11. 2 years warranty; 3~10 years extended technical service.

Products photos







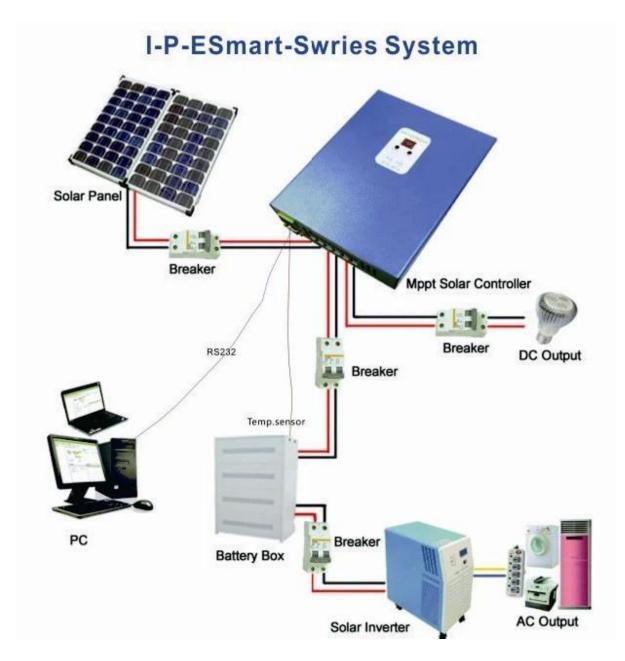
Parameters

MPPT solar controller modes I-P-e-SMART-12V/24V/48V-series		15A	20A	25A	30A	40A	
Charge mode	MPPT(maximum power point tracking)						
Charge method	Three stages: constant current(MPPT),constant voltage,floating charge						
System type	DC12V/24V/48V	Automatic recognition					
System voltage	12V system	DC9V~DC15V					
	24V system	DC18V~DC30V					
	48V system	DC36V~DC60V					
Soft start time	12V/24V/48V system	≤3S					

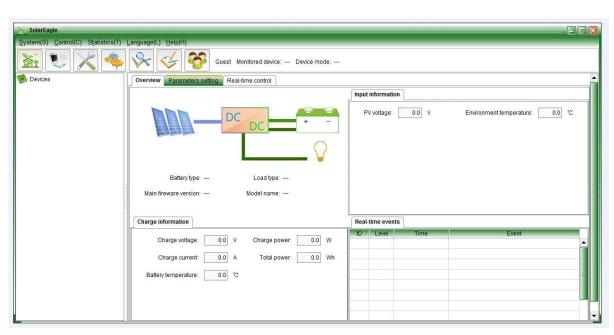
Dynamic	1	1						
response	12V/24V/48V	500us						
recovery time	system							
MPPT efficiency	12V/24V/48V system	≥96.5%,≤99%						
INPUT CHARACT	<u> </u>							
	12V system	DC14V~	-DC100V					
MPPT working	24V system	DC30~DC100V						
voltage range	48V system	DC60~DC100V						
	12V system	DC14V	JC100V					
Low input voltage protection point	24V system	DC30V						
	48V system	DC60V						
	12V system	DC18V						
Low input voltage Recovery point	24V system	DC34V						
	48V system	DC65V						
High input	40 V System	DC034						
voltage protection point	12V/24V/48V system	DC110						
High input voltage recovery point	12V/24V/48V system	DC100V						
Maximum DV	12V system (W)	213	284	355	426	568		
Maximum PV	24V system (W)	426	568	710	852	1136		
power	48V system (W)	852	1136	1420	1704	2272		
CHARGE CHRECT	TRESTICS	•			•	•		
Selectable								
Battery Types	12V/24V/48V	Sealed lead acid, Vented, Gel, NiCd battery (Other types of the batteries also can be defined)						
(Default Gel	system							
battery)								
Constant Voltage	12V/24V/48V							
_	system	_		•	tage acco	ording to the		
Floating Charge	12V/24V/48V	battery	type form	۱.				
Voltage	system							
Rated Input	12V/24V/48V	15A	20A	25A	30A	40A		
Current	system	13/1		23/1	3071	1071		
Current-limit	12V/24V/48V	20A	25A	30A	35A	45A		
Protection	system							
Temperature	12V/24V/48V	±0.02%/°C						
Factor	system							
Temperature	12V/24V/48V	14.2V-(The highest temperature-25°C)*0.3						
Compensation	system	- (zgzz zzpc.zzzz z z, o						
Output	12V/24V/48V	200mV						
Ripples(peak)	system	1						
Output Voltage	12V/24V/48V	1.1 50/	,					
Stability Precision	system	≤±1.5%						
	o Charactaristic							
Output Discharge Output voltage	je Characteristic		battery v	oltage				
Low voltage output		, ,						
Protection point		Default 10.5V; Recovery 11V; It can be adjustable.						
Rated output Current		30A						
The output control		On mode, Off mode, PV voltage control mode						
Output control set	Controller button or PC software							
Display		1						
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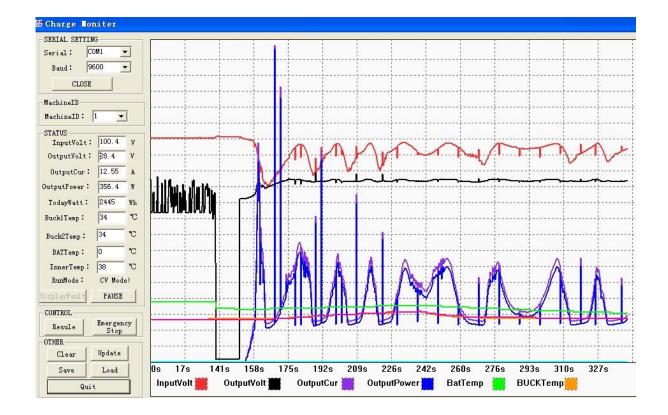
_ED digital tube display		Battery voltage, Charge current						
LED light display		Charging indicator light, LOAD indicator light						
PC communication	RS232							
Protection								
Low input voltage ¡	Check the input characteristics							
High input voltage protection		Check the input characteristics						
Charge overpower	yes							
Discharge low voltage protection		yes						
Discharge high cur	yes							
Temperature prote	yes							
Other Parameter	'S	-						
Noise	≤40dB							
Thermal heat-dissi	pating method	Itself cooling Fan cooling						
Components		Imported material With EU standards.						
Certification		CE\FCC\RoHS						
Physical		-						
Measurement D x W x H(mm)		205*168*60						
package size D x W x H(mm)		265*196*110						
N.G(KG)		1.8kg						
G.N(KG)		2kg						
Mechanical Protection		IP25						
Environment								
Humidity		0~90%RH (no condense)						
Altitude		0~3000m						
Operating Temperature		-20°C ~ +50°C						
Storage Temperature		-40°C ~ +75°C						
Atmospheric Pressure		70~106kPa						

Connection diagram



Upper software





Company photos









