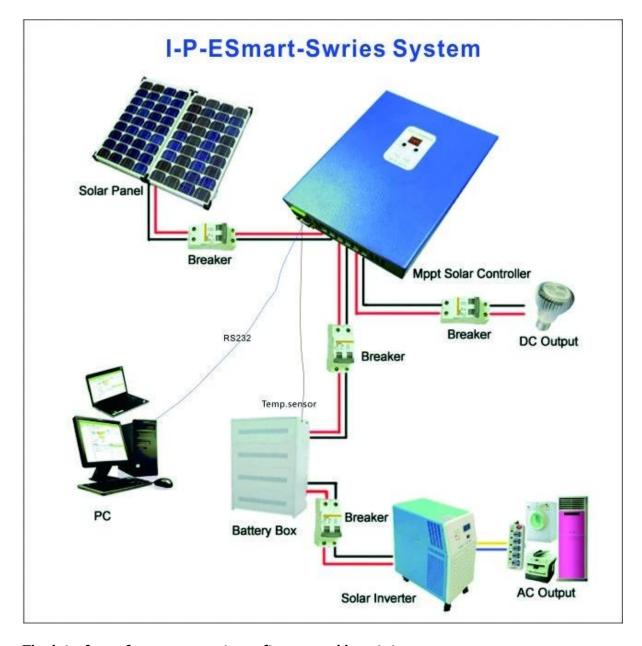
Introduction

This e-SMART MPPT (maximum Power Point Tracking) <u>solar charge controller</u> is a smart solar controller with automatic recognition function, smart charging and discharging function, three stages charging function to protect battery. It can increase 30%~60% efficiency than traditional PWM controller. It supports many kinds of batteries. It also have RS232 communication function.

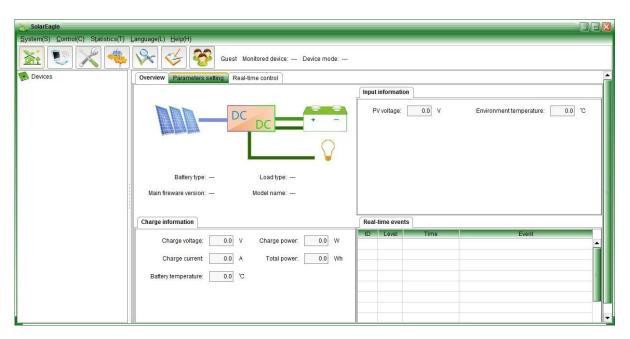
Protection

Input Low Voltage Protection;
Input Overvoltage Protection;
Charge over voltage power Protection;
Low Voltage output Protection;
Rated output Current protection;
Temperature Protection.

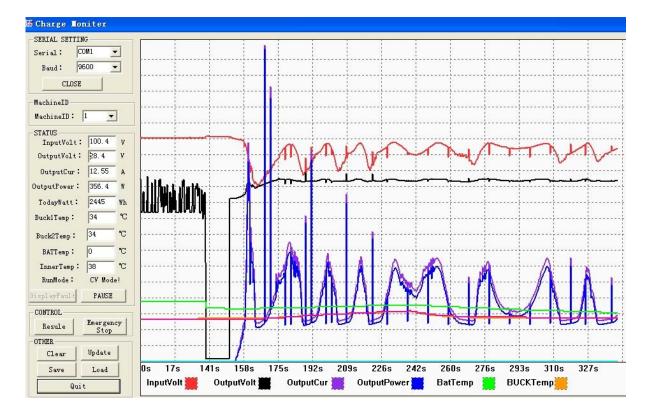
Connection diagram



The interface of upper computer software working state



The interface of test software working state



Parameters

MPPT solar controller mod	es[]	25.4	204	104			
I-P-e-SMART-12V/24V/48V-series		25A	30A	40A			
Charge mode		oint tracking)					
Charge method		i(maximum power point tracking) e stages: constant current(MPPT),constant voltage,floating charge					
System type	DC12V/24V/48V		atic recognition DC15V -DC30V -DC60V				
System voltage Soft start time	12V system	DC9V~DC15V					
		DC9V~DC13V					
	24V system 48V system	DC36V~DC30V					
		DC36V~DC60V ≤3S					
	12V/24V/48V system	≥35					
Dynamic response recovery time	12V/24V/48V system	500us					
MPPT efficiency	12V/24V/48V system	≥96.5%,≤99%					
INPUT CHARACTERISTICS							
MDDT working voltage	12V system	DC14V~DC100V					
MPPT working voltage range	24V system	DC30~DC100V					
	48V system	DC60~DC100V					
Low input voltage protection point	12V system	DC14V					
	24V system	DC30V					
	48V system	DC60V					
Low input voltage Recovery point	12V system	DC18V					
	24V system	DC34V					
	48V system	DC65V					
High input voltage protection point	12V/24V/48V system	DC110					
High input voltage recovery point	12V/24V/48V system	DC100V					
12 Maximum PV power 24	12V system (W)	355	426	568			
	24V system (W)	710	852	1136			
	48V system (W)	1420	1704	2272			
CHARGE CHRECTRESTICS							
Selectable Battery Types (Default Gel battery)	12V/24V/48V system	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						
Rated Input Current	12V/24V/48V system	25A	30A	40A			

Current-limit Protection	12V/24V/48V system	30A	35A	45A			
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	12V/24V/48V system	≤±1.5%					
Precision		21.570					
Output Discharge Charact	teristics						
Output voltage		Base on battery vo	tage				
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 mode		Controller button or PC software					
Display							
LED digital tube display		Battery voltage, Ch	arge current				
LED light display		Charging indicator light, LOAD indicator light					
PC□communication port□		RS232					
Protection							
Low input voltage protection		Check the input characteristics					
High input voltage protection		Check the input characteristics					
Charge overpower protection		yes					
Discharge low voltage protection		yes					
Discharge high current protection		yes					
Temperature protection		yes					
Other Parameters							
Noise		≤40dB					
Thermal heat-dissipating 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					

Packing and shipping









Company









