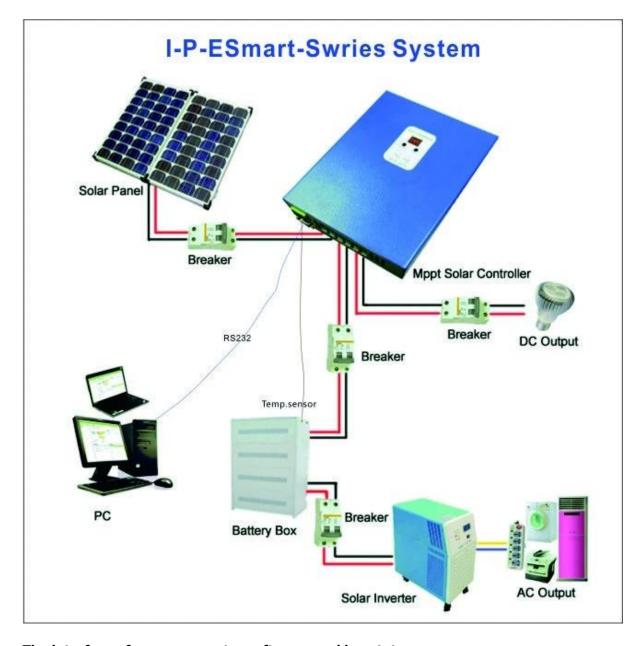
Introduction

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.

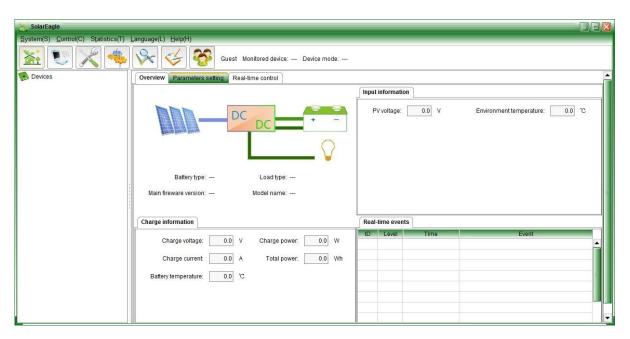
Protection

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

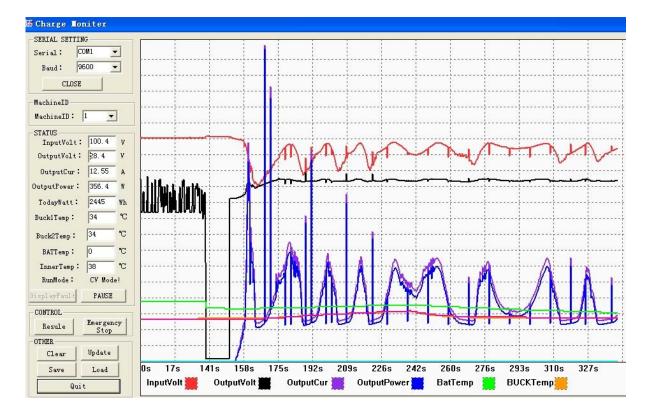
Connection diagram



The interface of upper computer software working state



The interface of test software working state



Parameters

MPPT solar controller modes[]						
LD - CMART 12///24///	40\/ porios	25A	30A	40A		
I-P-e-SMART-12V/24V/		point two clairs				
Charge mode	MPPT(maximum power point tracking) Three stages: constant current(MPPT),constant voltage,floating charge					
Charge method						
System voltage	DC12V/24V/48V	Automatic recognition				
	12V system	DC9V~DC15V				
	24V system	DC18V~DC30V				
	48V system	DC36V~DC60V				
Soft start time	12V/24V/48V system	≤3S				
Dynamic response recovery time	12V/24V/48V system	500us				
MPPT efficiency	12V/24V/48V system	≥96.5%,≤99%				
INPUT CHARACTERIST	ics					
range	12V system	DC14V~DC100V				
	24V system	DC30~DC100V				
	48V system	DC60~DC100V				
nrotection 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				
	12V system (W)	355	426	568		
Maximum PV power	24V system (W)	710	852	1136		
	48V system (W)	1420	1704	2272		
CHARGE CHRECTREST						

Soloctable Battery							
Selectable Battery Types 120/240/480/ system		Sealed lead acid, Vented, Gel, NiCd battery (Other types of the batteries also can be defined)∏					
(Default Gel 12V/24V/48V system							
battery)		(other types of the butteries also can be defined)					
Constant Voltage	12V/24V/48V system						
Floating Charge		Please check the	charge voltage a	according t	to the battery type form.		
Voltage	12V/24V/48V system	Thouse effect the charge voltage according to the sattery type form					
Rated Input Current	12V/24V/48V system	25A	30A		40A		
Current-limit							
Protection	12V/24V/48V system	30A	35A	4	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							
Output Discharge Cha	racteristics						
Output voltage		Base on battery v	oltage				
Low voltage output		Default 10.5V; Re	covery 11\/: It ca	an ha adius	stable		
Protection point			covery 11v, it co	an be aujus	Stable.		
Rated output Current		30A					
The output control		On mode, Off mode, PV voltage control mode					
Output control set mo	de	Controller button	Controller button or PC software				
Display							
LED digital tube displa	ay	Battery voltage, (
LED light display		Charging indicator light, LOAD indicator light					
							
PC communication po	ort[]	RS232					
PC communication por Protection							
PC communication por Protection Low input voltage pro	tection	Check the input of	haracteristics				
PC communication por Protection Low input voltage pro High input voltage pro	tection otection		haracteristics				
PC communication por Protection Low input voltage pro High input voltage pro Charge overpower pro	tection otection otection	Check the input of	haracteristics				
PC communication por Protection Low input voltage production input voltage production Charge overpower productions of the production in t	tection otection otection optocetion	Check the input of Check the input of	haracteristics				
PC communication por Protection Low input voltage profigh input voltage profigher overpower profischarge low voltage Discharge high current	tection otection otection otection otection otection	Check the input of Check the input of yes	haracteristics				
PC communication por Protection Low input voltage pro High input voltage pro Charge overpower pro Discharge low voltage Discharge high curren Temperature protection	tection otection otection otection otection otection	Check the input of Check the input of yes	haracteristics				
PC communication por Protection Low input voltage production High input voltage production Charge overpower production Discharge low voltage Discharge high current Temperature protection Other Parameters	tection otection otection otection otection otection	Check the input of Check the input of yes yes yes yes yes	haracteristics				
PC communication por Protection Low input voltage production High input voltage production Charge overpower production Discharge low voltage Discharge high current Temperature protection Other Parameters Noise	tection otection otection or protection on	Check the input of Check the input of Check the input of yes yes yes yes	haracteristics				
PC communication por Protection Low input voltage production High input voltage production Charge overpower production Discharge low voltage Discharge high current Temperature protection Other Parameters Noise Thermal heat-dissipat	tection otection otection or protection on	Check the input of the check the	haracteristics haracteristics	Fan cool			
PC communication por Protection Low input voltage production High input voltage production Charge overpower production Discharge low voltage Discharge high curren Temperature protection Other Parameters Noise Thermal heat-dissipat Components	tection otection otection or protection on	Check the input of the check the che	haracteristics haracteristics	Fan cool			
PC communication por Protection Low input voltage profined input voltage input volt	tection otection otection or protection on	Check the input of the check the	haracteristics haracteristics	Fan cool			
PC communication por Protection Low input voltage proceed the process of the proc	tection otection etection etection t protection on ing method	Check the input of Check the input of Check the input of Section 1 of Check the input of Section 2 of Check the input of Section 2 of Check the input of Section 3 of Check the input of Check the input of Check the input of Section 3 of Check the input o	haracteristics haracteristics	Fan cool			
PC communication por Protection Low input voltage production High input voltage production Charge overpower production Discharge low voltage Discharge high current Temperature protection Other Parameters Noise Thermal heat-dissipat Components Certification Physical Measurement D x W x	tection otection otection oprotection ot protection on it protection on ing method	Check the input of Check the input of Check the input of yes yes yes yes ≤40dB Itself cooling Imported material CE\FCC\RoHS	haracteristics haracteristics	Fan cool			
PC communication por Protection Low input voltage production High input voltage production Charge overpower production Discharge low voltage Discharge high curren Temperature protection Other Parameters Noise Thermal heat-dissipat Components Certification Physical Measurement D x W x package size D x W x	tection otection otection oprotection ot protection on it protection on ing method	Check the input of Check the input of Check the input of yes yes yes yes ≤40dB Itself cooling Imported material CE\FCC\RoHS 205*168*60 265*196*110	haracteristics haracteristics	Fan cool			
PC communication por Protection Low input voltage pro High input voltage pro Charge overpower pro Discharge low voltage Discharge high curren Temperature protection Other Parameters Noise Thermal heat-dissipat Components Certification Physical Measurement D x W x package size D x W x N.G(KG)	tection otection otection oprotection ot protection on it protection on ing method	Check the input of Check the input of Check the input of yes yes yes yes yes yes ≤40dB Itself cooling Imported materia CE\FCC\RoHS 205*168*60 265*196*110 1.8kg	haracteristics haracteristics	Fan cool			
PC communication por Protection Low input voltage pro High input voltage pro Charge overpower pro Discharge low voltage Discharge high curren Temperature protection Other Parameters Noise Thermal heat-dissipat Components Certification Physical Measurement D x W x package size D x W x N.G(KG) G.N(KG)	tection otection otection exprotection otection	Check the input of Check the input of Check the input of yes yes yes yes yes ≤40dB Itself cooling Imported materia CE\FCC\RoHS 205*168*60 265*196*110 1.8kg 2kg	haracteristics haracteristics	Fan cool			
PC communication por Protection Low input voltage production High input voltage production Charge overpower production Discharge low voltage Discharge high current Temperature protection Other Parameters Noise Thermal heat-dissipat Components Certification Physical Measurement D x W x package size D x W x N.G(KG) G.N(KG) Mechanical Protection	tection otection otection exprotection otection	Check the input of Check the input of Check the input of yes yes yes yes yes yes ≤40dB Itself cooling Imported materia CE\FCC\RoHS 205*168*60 265*196*110 1.8kg	haracteristics haracteristics	Fan cool			
PC communication por Protection Low input voltage production High input voltage production Charge overpower production Discharge low voltage Discharge high current Temperature protection Other Parameters Noise Thermal heat-dissipat Components Certification Physical Measurement D x W x package size D x W x N.G(KG) G.N(KG) Mechanical Protection Environment	tection otection otection exprotection otection	Check the input of Check the input of Check the input of yes yes yes yes ≤40dB Itself cooling Imported material CE\FCC\RoHS 205*168*60 265*196*110 1.8kg 2kg IP25	haracteristics haracteristics	Fan cool			
PC communication por Protection Low input voltage production High input voltage production Charge overpower production Discharge low voltage Discharge high current Temperature protection Other Parameters Noise Thermal heat-dissipat Components Certification Physical Measurement D x W x package size D x W x N.G(KG) G.N(KG) Mechanical Protection Environment Humidity	tection otection otection exprotection otection	Check the input of Check the input of Check the input of yes yes yes yes ≤40dB Itself cooling Imported material CE\FCC\RoHS 205*168*60 265*196*110 1.8kg 2kg IP25 0~90%RH (no co	haracteristics haracteristics	Fan cool			
PC communication por Protection Low input voltage pro High input voltage pro Charge overpower pro Discharge low voltage Discharge high curren Temperature protection Other Parameters Noise Thermal heat-dissipat Components Certification Physical Measurement D x W x package size D x W x N.G(KG) G.N(KG) Mechanical Protection Environment Humidity Altitude	tection otection otection oprotection t protection on on ing method t H(mm) H(mm)	Check the input of Check the input of Check the input of yes yes yes yes yes yes ≤40dB Itself cooling Imported materia CE\FCC\RoHS 205*168*60 265*196*110 1.8kg 2kg IP25 0~90%RH (no cooling)	haracteristics haracteristics	Fan cool			
PC communication por Protection Low input voltage production High input voltage production Charge overpower production Discharge low voltage Discharge high current Temperature protection Other Parameters Noise Thermal heat-dissipat Components Certification Physical Measurement D x W x package size D x W x N.G(KG) G.N(KG) Mechanical Protection Environment Humidity Altitude Operating Temperature	tection otection otection oprotection t protection on on ing method t H(mm) H(mm)	Check the input of Check the in	haracteristics haracteristics	Fan cool			
PC communication por Protection Low input voltage pro High input voltage pro Charge overpower pro Discharge low voltage Discharge high curren Temperature protection Other Parameters Noise Thermal heat-dissipat Components Certification Physical Measurement D x W x package size D x W x N.G(KG) G.N(KG) Mechanical Protection Environment Humidity Altitude	tection otection otec	Check the input of Check the input of Check the input of yes yes yes yes yes yes ≤40dB Itself cooling Imported materia CE\FCC\RoHS 205*168*60 265*196*110 1.8kg 2kg IP25 0~90%RH (no cooling)	haracteristics haracteristics	Fan cool			

Packing and shipping









Company









