Introduction

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

efficiency that almost $30\%\sim60\%$ higher than traditional charge controller. It also features the functions of system

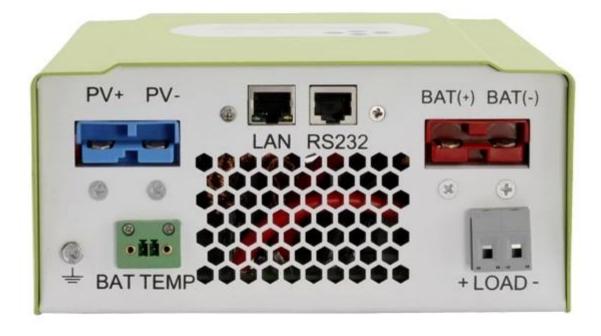
voltage auto recognition, wide rang of PV input ,charge for all kinds of battery,automatic discharge control,RS

232 / LAN communication function and so on. It is very high-end product for solar market with its best partner <u>I-P-TPI2 model Inverter/Charger/UPS.</u>

Application

- 1. Industrial, commercial, household off grid solar energy generation system
- 2. Movable off grid solar energy generation system
- 3. Communication base stations
- 4. New energy education business
- 5. Solar Monitoring System
- 6. Solar Street Lighting System







Features

- 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°C. The service life is designed to use for 10 years in theory.
- 14. Compliance with the 2002/95/EC environment protecting demand, doesn't 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.
- 17.2 years warranty. And 3~10 years extended warranty service also can be provided.

Parameter

Parameter					
Model:I-P-SMART2-40A/50A/60A -series		40A	50A	60A	
Charge Mode	Maximum Power F	oint Tracking	•	•	
Method	3 stages: fast char	ge(MPPT),constant vol	tage, floating charge		
System Type	DC12V/24V/48V	Automatic recognition			
	12V system	DC9V~DC15V			
System Voltage	24V system	DC18V~DC30V			
,	48Vsystem	DC36V~DC60V			
Soft Start Time	12V/24V/48Vsyste m				
Dynamic Response Recovery Time	12V/24V/48Vsyste m				
Conversion Efficiency	12V/24V/48Vsyste m	≥90.5%,≤99%			
PV Modules Utilization Rate	12V/24V/48Vsyste m	≥99%			
Input Character					
		DC18V~DC150V			
MPPT Working Voltage and Range		DC34~DC150V			
		DC65~DC150V			
	12V system	DC16V			
Low Voltage Input Protection Point	24V system	DC30V			
	48V system	DC60V			
Low Voltage Input Recovery Point	12V system	DC22V			
Low voicage input necessery rount		DC34V			
	48V system	DC65V			
Max DC Voltage	12V/24V/48V system	DC160V			
Input Overvoltage Protection Point	system	DC150			
Input Overvoltage Recovery Point	system	DC145V			
		570W	700W	900W	
Max. PV Power		1130W	1400W	1700W	
	48V system	2270W	2800W	3400W	
Output Characteristics					
Selectable Battery Types (Default type is GEL	12V/24V/48V	Sealed lead acid, vent			
battery)	system	(Other types of the batteries also can be defined)			
Constant Voltage	12V/24V/48V system	Please check the char	ge voltage according to th	ne hattery type form	
Floating Charge Voltage	12V/24V/48V system	—Please check the charge voltage according to the battery type form.			
	•				

29 29 29 29 29 29 29 29			_		
Bit A Stand Guipper Current 12V/24V/49V 20.0 50.		12V system	14.6V		
ABAY Oystem Bat V Sand	Over Charge Protection Voltage	24V system	29.2V		
\$12774746897 \$100			58.4V		
State Output Current System			30.11		
20/74/48V SAA	Rated Output Current		40A	50A	60A
System MA DA BOA BOA BOA BOA BOA BOA BOA BOA					
Rate charge current System System System Output RippleSipeak) System Sys	Current-limiting Protection		444	55Δ	664
System S	Carrent miniming reduction		1171	33/1	00/1
Emperature Factor	Data shares surrent	12V/24V/48V	404	F0A	604
Temperature Factor Interpretative Compensation Interpretative Compensative Interpretative Compensative Interpretative Compensative Interpretative Compensati	Rate charge current	System	40A	DUA	DUA
Emperature Factor System 20.00% 1.27/24/48V 4.27/-The highest temperature -25°C)*0.3 3.00% 3.					
Emperature Compensation 12V/24V/48V system 14.2V-(The highest temperature 25°C)*0.3	Temperature Factor		±0.02%/℃		
Imperature Compensation system 12/V24V48V 20/V24V48V 21/V24V48V 20/V24V48V 21/V24V48V 21/V24V48V 21/V24V48V 21/V24V48V 21/V24V48V 21/V24V48V 21/V24V48V 21/V24V48V 21/V24V48V 20/V24V48V 20/V24V					
Output Voltage Stability Precision Output Voltage Stability Precision Output Voltage Stability Precision Output Voltage Stability Precision Output Voltage Peak Peak Ripple Discharge voltage Peak Peak Ripple Discharge voltage Peak Peak Ripple Output Voltage Stability Precision Output Overvollage accuracy Output Overvollage Accuracy Output Overvollage Output Output Output Delarity Reversal Protection Output Overvollage Output Output Delarity Reversal Protection Output Overvollage Output Output Delarity Reversal Protection Output Overvollage Protection Output Output Delarity Reversal Protection Output Overvollage Protection Output Output Delarity Reversal Protection Output Output Delarity Reversal Protection Output Overvollage Overvollage Output Overvollage Output Overvollage Overvollage Output Overvollage Output Overvollage Output Overvollage Overvollage Output Ove	Temperature Compensation		14.2V-(The highes	t temperature-25°C)*0.3	
Jourput Voltage Stability Precision 2007/24/48V System Syst			· · · · ·		
Description	Output Bingles(neels)	12V/24V/48V	2001/		
Dutput Voltage Stability Precision System System System System System System System System System Southern Communication System Sy	Output Rippies(peak)	system	2001110		
St.1-96 System					
Charge voltage Peak-Peak Ripple \$2\text{V24V48V} \$\text{System} \$\t	Output Voltage Stability Precision		≤±1.5%		
Charger voltage exervesk rispine Charger voltage accuracy Discharge characteristic Setting Control Discharge current Discharge protection Discharge protection Discharge current Discharge current Discharge protection Discharge voltage vo					
System S	Charge voltage Peak-Peak Ripple		200mV		
Sacharge characterists Setting Control Controller or LAN Max discharge current 12V/24V/48V System Discharge protection 12V/24V/48V System On in morning off in morning / On in night off in night ON / OFF mode 12V/24V/48V System ON / OFF PV voltage control 12V/24V/48V System ON / OFF PV voltage control 12V/24V/48V System PV voltage control 12V/24V/48V System PV voltage off System Output off when it under setting voltage; Factory set is 10.5. (Note : set based on 1 battery) System Communication System Chose COM communication AN Communication System Chose COM communication 12V/24V/48V System Chose COM communication Check the input characteristics Input Overvoltage Protection Input Polarity Reversal Protection Input Polarity Reversal Protection Check the input characteristics Output Overvoltage Protection Check the input characteristics Output Polarity Reversal Protection Post-circuit Forection Recover after eliminating the Short-circuit fault, no problem for long term Short-circuit Temperature Protection Check the input characteristics Output Overvoltage Protection Other Parameters Social System Very Communication System System Overvoltage on System Very Communication System Components Scancer and System Very Communication System Very Communication System Check the input characteristics Output Devervoltage Protection Output Devervoltage Protection Output Devervoltage Protection Output Deversion System Output Deversion Sys	onargo romago r can r can ruppre				
Secting Control Controller or LAN ANA discharge current Discharge protection Discharge current Discharge protection Discharge protection Discharge voltage control Discharge voltage protection Discharge voltage vol	Chargor voltage accuracy	12V/24V/48V	-±1 E0/		
Setting Control Controller or LAN Max discharge current Discharge protection Discharge protection Discharge protection Discharge protection Discharge protection Discharge protection Double-time control DV/24W/48V System On in morning off in morning / On in night off in night DV voltage control DV/24W/48V DV voltage on(PV voltage off PV voltage on(PV voltage off PV voltage rotted on Discharge voltage protection Discharge Protection Disch	Charger voltage accuracy	System	S±1.5%		
Setting Control Controller or LAN Max discharge current Discharge protection Discharge protection Discharge protection Discharge protection Discharge protection Discharge protection Double-time control DV/24W/48V System On in morning off in morning / On in night off in night DV voltage control DV/24W/48V DV voltage on(PV voltage off PV voltage on(PV voltage off PV voltage rotted on Discharge voltage protection Discharge Protection Disch	Discharge characteristic				
Max discharge current 127/24/48V System 127/24/48V System 128/24/48V System		Control	lor or LAN		
Max discharge current System System System System Double-time control 12/2/44/48V System Syste	Setting Control		ICI OI LAN		
Discharge protection Discharge voltage control Discharge voltage control Discharge voltage protection Discharge voltage vo	Max discharge current		40A		
Discharge protection Double-time control Double-time delay off D					
Double-time control 20/24/V48V System Do N / OFF mode 21/24/V48V System PV voltage control 21/24/V48V System PV voltage control 21/24/V48V System PV voltage on[PV voltage off System Discharge voltage protection 21/24/V48V System Chose COM communication Features 82.22/Cavivage Communication 21/24/V48V System Chose COM communication 21/24/V48V System Discharge voltage protection 12/24/V48V System Chose COM communication System Discharge voltage protection Input Low Voltage Protection Input Low Voltage Protection Input Overvoltage Protection Input O	Dischause austration	12V/24V/48V	6 204*2		
Double-time control 12V/24V/48V System 12V/24V/48V System 12V/24V/48V System 12V/24V/48V System 12V/24V/48V System 12V/24V/48V System PV voltage control System 12V/24V/48V System PV voltage origin delay off System PV voltage protection System PV voltage protection System Suzvia part System System Suzvia part System System System Suzvia part System System Suzvia part System System Suzvia part System Syst	Discharge protection	Svstem	ruse 30A*2		
Double-time control System On In morning, or in morning / On In night					
ON / OFF mode 12/2/4/V/aBV System System 12/2/4/V/aBV System	Double-time control		On in morning ,off	in morning / On in night ,off in night	
System PV voltage control 12/V/34/V48V System PV voltage on ppv voltage of protection 12/V/34/V48V System PV voltage on ppv voltage on ppv voltage; Factory set is 10.5. (Note: set based on 1 battery) Discharge voltage protection 12/V/34/V48V System Pv voltage on protection 22/V/34/V48V System Pv voltage protection Pv pv voltage protection System Pv voltage protection System Pv voltage protection Pv					
Py voltage control 12/7/34/J48V System Py voltage on(jPV voltage off 12/7/34/J48V System Py voltage / time delay control 12/7/34/J48V System Py voltage on(jime delay off 12/7/34/J48V System Py voltage protection Potential Py voltage protection Py voltag	ON / OFF mode		ON / OFF		
PV voltage control PV voltage / time delay control System PV voltage / time delay control System Discharge voltage protection Discharge Protecti	ON THIOSE	System	0117 011		
PV voltage control PV voltage / time delay control System PV voltage / time delay control System Discharge voltage protection Discharge Protecti	5) ()	12V/24V/48V	D) /		
PV voltage / time delay control \$\frac{12\text{V}_24\text{V}_48V}{\text{System}} \\ \text{Discharge voltage protection} \\ \text{LAN Communication} \\ \text{LAY}_24\text{V48V} \\ \text{System} \\ \text{Discharge voltage Protection} \\ \text{Discharge Protection} \\ Discharge P	PV voltage control		PV voltage on PV	voltage off	
PV voitage of time dealy control System PV voitage onlytime dealy off					
Discharge voltage protection 12V/24V/48V System 12V/24V/48V	PV voltage / time delay control	, , ,	PV voltage on∏tim	e delay off	
Displayer voltage protection Communication Features RS232 Communication LAN Communi	3 . ,		, , , ,	<u> </u>	
Communication Features 12V/24V/48V System Set IP and Gate address for controller and solar eagle ;Then chose TCP communication Protection Input Low Voltage Protection Check the input characteristics Input Polarity Reversal Protection System Set IP and Gate address for controller and solar eagle ;Then chose TCP communication System Set IP and Gate address for controller and solar eagle ;Then chose TCP communication System Set IP and Gate address for controller and solar eagle ;Then chose TCP communication Set IP and Gate address for controller and solar eagle ;Then chose TCP communication Set IP and Gate address for controller and solar eagle ;Then chose TCP communication Set IP and Gate address for controller and solar eagle ;Then chose TCP communication Set IP and Gate address for controller and solar eagle ;Then chose TCP communication Set IP and Gate address for controller and solar eagle ;Then chose TCP communication Set IP and Gate address for controller and solar eagle ;Then chose TCP communication Set IP and Gate address for controller stols solar eagle ;Then chose TCP communication Set IP and Gate address for controller stols solar eagle ;Then chose TCP communication Set IP and Gate address for controller stols solar eagle ;Then chose TCP communication Set IP and Gate address for controller stols solar eagle ;Then chose TCP communication Set IP and Gate address for controller stols solar eagle ;Then chose TCP communication Set IP and Gate address for controller stols solar eagle ;Then chose TCP communication Set IP and Gate eagle ;Then chose TCP communication Set IP and Gate eagle ;Then chose TCP communication Set IP and Gate eagle ;Then chose TCP communication Set IP and Gate eagle ;Then chose TCP communication Set IP and Gate eagle ;Then chose TCP communication Set IP and Gate eagle ;Then chose TCP communication S	Discharge voltage protection	12V/24V/48V	Output off whon it	under setting voltage: Factory set is 10.5	(Noto : set based on 1 battony)
R5232 Communication LAN Communication LAN Communication Protection Input Low Voltage Protection Input Doveroltage Protection Input Overoltage Protection Input Overoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Input Polarity Reversal Protection Input Overoltage Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Input Overvoltage Protection Output Polarity Reversal Protection Input Overvoltage Protection Input Overvoltage Protection Input Overvoltage Protection Input Overvoltage Protection Output Polarity Reversal Protection Input Overvoltage Inp	Discharge voltage protection	System	Output on when it	under setting voitage, ractory set is 10.5	.(Note . set based on I battery)
R5232 Communication LAN Communication LAN Communication Protection Input Low Voltage Protection Input Doveroltage Protection Input Overoltage Protection Input Overoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Input Polarity Reversal Protection Input Overoltage Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Input Overvoltage Protection Output Polarity Reversal Protection Input Overvoltage Protection Input Overvoltage Protection Input Overvoltage Protection Input Overvoltage Protection Output Polarity Reversal Protection Input Overvoltage Inp	Communication Foatures				
Consection System Chose CUM Communication 12V/24V/48V Set IP and Gate address for controller and solar eagle ;Then chose TCP communication 12V/24V/48V System Set IP and Gate address for controller and solar eagle ;Then chose TCP communication 12V/24V/48V System Set IP and Gate address for controller and solar eagle ;Then chose TCP communication 12V/24V/48V System Set IP and Gate address for controller and solar eagle ;Then chose TCP communication 12V/24V/48V System Set IP and Gate address for controller and solar eagle ;Then chose TCP communication 12V/24V/48V System Set IP and Gate address for controller and solar eagle ;Then chose TCP communication 12V/24V/48V System 12V/24V/48V System 12V/24V/48V System 12V/24V/48V System 12V/24V/48V Set IP and Gate address for controller stoler. 12V/24V/48V Set IP and Gate address for controller stoler. 12V/24V/48V Set IP and Gate address for controller stoler. 12V/24V/48V Set IP and Gate address for controller stoler. 12V/24V/48V Set IP and Gate address for controller stoler. 12V/24V/48V Set IP and Gate address for controller stoler. 12V/24V/48V Set IP and Gate address for controller stoler. 12V/24V/48V Set IP and Gate address for controller stoler. 12V/24V/48V Set IP and Gate address for controller stoler. 12V/24V/48V					
LAN Communication 12V/Z4V/48V System Set IP and Gate address for controller and solar eagle ; Then chose TCP communication Protection Check the input characteristics Input Overvoltage Protection Check the input characteristics Input Overvoltage Protection Check the input characteristics Output Overvoltage Protection Check the output characteristics Output Overvoltage Protection Check the output characteristics Output Polarity Reversal Protection Check the output characteristics Output Polarity Reversal Protection Pes Output Protection Output Protection Output Protection Output Protection Output Protection Pes Output Protection Output Protection Output Protect		12\//24\//48\/			
System S			Chose COM comm	unication	
Protection Input Low Voltage Protection Check the input characteristics Input Overvoltage Protection Check the input characteristics Input Overvoltage Protection Check the input characteristics Input Overvoltage Protection Ves Output Polarity Reversal Protection Ves Output Polarity Reversal Protection Ves Short-circuit Protection Recover after eliminating the Short-circuit fault, no problem for long term Short-circuit Temperature Protection 95°C Temperature protection Above 85°C, decrease the output power, decrease 3A per degree. Other Parameters Noise \$40dB Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, fan also stop ran. Components World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105°C Smell No peculiar smell and toxic substances. Environment Protection Meet the 2002/95/EC,no cadmium hydride and fluoride Physical Measurement DxWxH (mm) 270*185*90 N.G(kg) 3.6 G.N(kg) 3.6 G.N(kg) 3.6 G.N(kg) 3.6 Color Blue/Green (optional) Safety C.E., RoHS, PSE, FCC EMC EN61000 Type of Mechanical Protection IP21 Environment		System	Chose COM comm	unication	
Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Reversal Protection Output Polarity Reversal Protection Recover after eliminating the Short-circuit fault, no problem for long term Short-circuit Protection Recover after eliminating the Short-circuit fault, no problem for long term Short-circuit Perotection Perperature Protection Above 85°C,decrease the output power, decrease 3A per degree. Other Parameters Noise S40aB Thermal methods Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, fan also stop ran. Components World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105°C No peculiar smell and toxic substances. Environment Protection Meet the 2002/95/EC,no cadmium hydride and fluoride Physical Measurement DxWxH (mm) 270*185*90 N.G(kg) 3.6 G.N(kg) 3.6 G.N(kg) 3.6 G.N(kg) 3.6 G.N(kg) 3.6 EMC ENGIONO EMGLANIA (no condense) Altitude 0~90%RH (no condense) Altitude 0~90%RH (no condense) Altitude 0~3000m Operating Temperature 40°C ~ +40°C Storage Temperature 40°C ~ +40°C	RS232 Communication	System 12V/24V/48V			chose TCP communication
Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Overvoltage Protection Output Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Output Overvoltage Protection Output Overvoltage Protection Short-circuit Protection Recover after eliminating the Short-circuit fault, no problem for long term Short-circuit Temperature Protection Officer of Short-circuit Forecase and per degree. Other Parameters Noise S40dB Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, fan also stop ran. Components Overded air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, fan also stop ran. World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105°C Smell No peculiar smell and toxic substances. Environment Protection Meet the 2002/95/EC,no cadmium hydride and fluoride Physical Ook (Kig) Ook	RS232 Communication	System 12V/24V/48V			chose TCP communication
Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Overvoltage Protection Output Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Output Overvoltage Protection Output Overvoltage Protection Short-circuit Protection Recover after eliminating the Short-circuit fault, no problem for long term Short-circuit Temperature Protection Officer of Short-circuit Forecase and per degree. Other Parameters Noise S40dB Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, fan also stop ran. Components Overded air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, fan also stop ran. World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105°C Smell No peculiar smell and toxic substances. Environment Protection Meet the 2002/95/EC,no cadmium hydride and fluoride Physical Ook (Kig) Ook	RS232 Communication LAN Communication	System 12V/24V/48V			chose TCP communication
Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Short-circuit Protection Recover after eliminating the Short-circuit fault, no problem for long term Short-circuit Temperature Protection 95°C Above 85°C, decrease the output power, decrease 3A per degree. Other Parameters Noise S40dB Thermal methods Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, fan also stop ran. World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105°C Smell No peculiar smell and toxic substances. Environment Protection Measurement DxWxH (mm) 270*185*90 N.G(kg) 3.6 Sink(kg) Sink	RS232 Communication LAN Communication Protection	System 12V/24V/48V	Set IP and Gate ac	ddress for controller and solar eagle ;Then	chose TCP communication
Output Overvoltage Protection Check the output characteristics Output Polarity Reversal Protection yes Short-circuit Protection Recover after eliminating the Short-circuit fault, no problem for long term Short-circuit Temperature Protection 95°C Temperature protection Above 85°C, decrease the output power, decrease 3A per degree. Other Parameters Other Parameters Noise \$40dB Thermal methods Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, fan also stop ran. Components World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105°C Smell No peculiar smell and toxic substances. Environment Protection Meet the 2002/95/EC,no cadmium hydride and fluoride Physical Measurement DxWxH (mm) 270*185*90 N.G(kg) 3 G.N(kg) 3.6 Color Blue/Green (optional) Safety CE, RoHS, PSE, FCC EMC EN61000 Type of Mechanical Protection IP21 Environment Humid	RS232 Communication LAN Communication Protection Input Low Voltage Protection	System 12V/24V/48V	Set IP and Gate ac	ddress for controller and solar eagle ;Then	chose TCP communication
Output Polarity Reversal Protection yes Short-circuit Protection Recover after eliminating the Short-circuit fault, no problem for long term Short-circuit Temperature Protection 95°C Temperature protection Above 85°C,decrease the output power, decrease 3A per degree. Other Parameters \$40dB Noise \$40dB Thermal methods Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, fan also stop ran. Components World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105°C Smell No peculiar smell and toxic substances. Environment Protection Meet the 2002/95/EC,no cadmium hydride and fluoride Physical Measurement DxWxH (mm) Measurement DxWxH (mm) 270*185*90 N.G(kg) 3.6 Color Blue/Green (optional) Safety CE, RoHS, PSE,FCC EMC EN61000 Type of Mechanical Protection IP21 Environment Humidity Under the protection of the prote	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection	System 12V/24V/48V	Set IP and Gate ac Check the input ch Check the input ch	ddress for controller and solar eagle ;Then	chose TCP communication
Short-circuit Protection Recover after eliminating the Short-circuit fault, no problem for long term Short-circuit Temperature Protection Above 85°C, decrease the output power, decrease 3A per degree. Other Parameters Noise SeladdB Thermal methods Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, fan also stop ran. World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105°C Smell No peculiar smell and toxic substances. Environment Protection Meet the 2002/95/EC, no cadmium hydride and fluoride Physical Measurement DxWxH (mm) Safety	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection	System 12V/24V/48V	Set IP and Gate ac Check the input ch Check the input ch yes	ddress for controller and solar eagle ;Then naracteristics naracteristics	chose TCP communication
Short-circuit Protection Recover after eliminating the Short-circuit fault, no problem for long term Short-circuit Temperature Protection Above 85°C, decrease the output power, decrease 3A per degree. Other Parameters Noise SeladdB Thermal methods Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, fan also stop ran. World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105°C Smell No peculiar smell and toxic substances. Environment Protection Meet the 2002/95/EC, no cadmium hydride and fluoride Physical Measurement DxWxH (mm) Safety	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection	System 12V/24V/48V	Set IP and Gate ac Check the input ch Check the input ch yes	ddress for controller and solar eagle ;Then naracteristics naracteristics	chose TCP communication
Temperature Protection 95°C Temperature protection Above 85°C, decrease the output power, decrease 3A per degree. Other Parameters Noise ≤40dB Thermal methods Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, fan also stop ran. Components World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105°C Smell No peculiar smell and toxic substances. Environment Protection Meet the 2002/95/EC, no cadmium hydride and fluoride Physical Measurement DxWxH (mm) 270*185*90 N.G(kg) 3 G.N(kg) 3.6 G.N(kg) 3.6 G.N(kg) 3.6 Color Blue/Green (optional) Safety CE, RoHS, PSE,FCC EMC EN61000 Type of Mechanical Protection IP21 Type of Mechanical Protection IP21 Environment Humidity 0~90%RH (no condense) Altitude 0~3000m Operating Temperature -20°C ~ +40°C Storage Temperature -40°C ~ +75°C	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection	System 12V/24V/48V	Check the input check the output of the check the	ddress for controller and solar eagle ;Then naracteristics naracteristics	chose TCP communication
Temperature protection Other Parameters Noise \$\frac{40dB}{50c}\$ Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, fan also stop ran. World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105 °C Smell No peculiar smell and toxic substances. Environment Protection Meet the 2002/95/EC,no cadmium hydride and fluoride Physical Measurement DxWxH (mm) 270*185*90 N.G(kg) 3.6 G.N(kg) 3.6 G.N(kg) 3.6 G.N(kg) G.N(kg) G.N(kg) Safety CE, RoHS, PSE,FCC EMC ENG	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection	System 12V/24V/48V	Set IP and Gate ac Check the input ch Check the input ch yes Check the output yes	ddress for controller and solar eagle ;Then naracteristics naracteristics characteristics	
Other Parameters Noise Thermal methods Thermal methods Components Smell Environment Protection Measurement DXWXH (mm) N.G(kg) G.N(kg) G.N(kg) G.N(kg) G.N(kg) Color Blue/Green (optional) Safety CE, RoHS, PSE,FCC EMC EMC Type of Mechanical Protection Environment Humidity Noy90%RH (no condense) Altitude Ooperating Temperature 40°C ∼ +40°C Storage Temperature Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, fan also stop ran. World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105°C Nopeculiar smell and toxic substances. Meet the 2002/95/EC,no cadmium hydride and fluoride Physical No peculiar smell and toxic substances. Meet the 2002/95/EC,no cadmium hydride and fluoride Physical No peculiar smell and toxic substances. Meet the 2002/95/EC,no cadmium hydride and fluoride Physical No peculiar smell and toxic substances. Meet the 2002/95/EC,no cadmium hydride and fluoride Physical No peculiar smell and toxic substances. Meet the 2002/95/EC,no cadmium hydride and fluoride Physical No peculiar smell and toxic substances. Meet the 2002/95/EC,no cadmium hydride and fluoride Physical No peculiar smell and toxic substances. Meet the 2002/95/EC,no cadmium hydride and fluoride Physical No peculiar smell and toxic substances. Meet the 2002/95/EC,no cadmium hydride and fluoride Physical No peculiar smell and toxic substances. Meet the 2002/95/EC,no cadmium hydride and fluoride Physical No peculiar smell and toxic substances. Beculiar smell and toxic substances. No peculiar smell and	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection	System 12V/24V/48V	Set IP and Gate ac Check the input of Check the input of yes Check the output of yes Recover after elim	ddress for controller and solar eagle ;Then naracteristics naracteristics characteristics	
Noise ≤40dB Thermal methods Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, fan also stop ran. World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105°C Smell No peculiar smell and toxic substances. Environment Protection Meet the 2002/95/EC,no cadmium hydride and fluoride Physical Measurement DxWxH (mm) 270*185*90 N.G(kg) 3 G.N(kg) 3.6 Color Blue/Green (optional) Safety CE, RoHS, PSE,FCC EMC EN61000 Type of Mechanical Protection IP21 Environment Humidity 0~90%RH (no condense) Altitude 0~3000m Altitude 0~3000m Coperating Temperature 4-40°C ~ +75°C	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection	System 12V/24V/48V	Check the input check the input check the input check the input check the output check the	ddress for controller and solar eagle ;Then naracteristics naracteristics characteristics ninating the Short-circuit fault, no problem	for long term Short-circuit
Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, fan also stop ran. World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105°C Smell No peculiar smell and toxic substances. Environment Protection Meet the 2002/95/EC,no cadmium hydride and fluoride Physical Measurement DxWxH (mm) 270*185*90 N.G(kg) 3 G.N(kg) 3 G.N(kg) 3.6 Color Blue/Green (optional) Safety CE, RoHS, PSE,FCC EMC Type of Mechanical Protection IP21 Environment Humidity 0~90%RH (no condense) Altitude 0~3000m Operating Temperature 40°C ~ +75°C	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature protection	System 12V/24V/48V	Check the input check the input check the input check the input check the output check the	ddress for controller and solar eagle ;Then naracteristics naracteristics characteristics ninating the Short-circuit fault, no problem	for long term Short-circuit
fan ran slowly or stop; when controller stop working, fan also stop ran. Components Component EU standards. All rated temperature of electrolytic capacitors not less than 105°C Ropeculiar smell and toxic substances. Meet the 2002/95/EC,no cadmium hydride and fluoride Physical Measurement DxWxH (mm) 270*185*90 N.G(kg) 3.6 G.N(kg) 3.6 Color Safety CE, RoHS, PSE,FCC EMC EN61000 Type of Mechanical Protection IP21 Environment Humidity C=90%RH (no condense) Altitude O=3000m Operating Temperature C20°C ~ +40°C Storage Temperature -40°C ~ +75°C	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature protection Other Parameters	System 12V/24V/48V	Check the input check the input check the input check the input check the output check the	ddress for controller and solar eagle ;Then naracteristics naracteristics characteristics ninating the Short-circuit fault, no problem	for long term Short-circuit
fan ran slowly or stop; when controller stop working, fan also stop ran. Components Component EU standards. All rated temperature of electrolytic capacitors not less than 105°C Ropeculiar smell and toxic substances. Meet the 2002/95/EC,no cadmium hydride and fluoride Physical Measurement DxWxH (mm) 270*185*90 N.G(kg) 3.6 G.N(kg) 3.6 Color Safety CE, RoHS, PSE,FCC EMC EN61000 Type of Mechanical Protection IP21 Environment Humidity C=90%RH (no condense) Altitude O=3000m Operating Temperature C20°C ~ +40°C Storage Temperature -40°C ~ +75°C	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature protection Other Parameters	System 12V/24V/48V	Check the input check the input check the input check the input check the output check the	ddress for controller and solar eagle ;Then naracteristics naracteristics characteristics ninating the Short-circuit fault, no problem	for long term Short-circuit
Components World brand raw materials. Compliance with EU standards. All rated temperature of electrolytic capacitors not less than 105 °C Smell No peculiar smell and toxic substances. Environment Protection Meet the 2002/95/EC,no cadmium hydride and fluoride Physical Measurement DxWxH (mm) 270*185*90 N.G(kg) 3 G.N(kg) 3.6 Color Blue/Green (optional) Safety CE, RoHS, PSE,FCC EMC EN61000 Type of Mechanical Protection IP21 Environment Humidity 0~90%RH (no condense) Altitude 0~3000m Operating Temperature -20°C ~ +40°C Storage Temperature -40°C ~ +75°C	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise	System 12V/24V/48V	Check the input check the input check the input check the input check the output check the output syes Recover after elim 95°C Above 85°C,decre	ddress for controller and solar eagle ;Then naracteristics naracteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de	for long term Short-circuit gree.
capacitors not less than 105°C Smell No peculiar smell and toxic substances. Environment Protection Meet the 2002/95/EC,no cadmium hydride and fluoride Physical Measurement DxWxH (mm) 270*185*90 N.G(kg) 3 G.N(kg) 3.6 Color Blue/Green (optional) Safety CE, RoHS, PSE,FCC EMC EN61000 Type of Mechanical Protection IP21 Environment Humidity 0~90%RH (no condense) Altitude 0~3000m Operating Temperature -20°C ~ +40°C Storage Temperature -40°C ~ +75°C	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise	System 12V/24V/48V	Set IP and Gate ac Check the input of Check the input of yes Check the output yes Recover after elim 95°C Above 85°C,decre ≤40dB Forced air cooling,	ddress for controller and solar eagle ;Then naracteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de	for long term Short-circuit gree. , when inner temperature is too low,
Capacitors not less than 105°C Smell No peculiar smell and toxic substances. Environment Protection Meet the 2002/95/EC,no cadmium hydride and fluoride Physical Measurement DxWxH (mm) 270*185*90 N.G(kg) 3 G.N(kg) 3.6 Color Blue/Green (optional) Safety CE, RoHS, PSE,FCC EMC EN61000 Type of Mechanical Protection P21 Environment Humidity 0~90%RH (no condense) Altitude 0~3000m Operating Temperature -20°C ~ +40°C Storage Temperature -40°C ~ +75°C	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise	System 12V/24V/48V	Check the input of Check the input of Check the input of yes Check the output of yes Recover after elim 95°C Above 85°C,decre	ddress for controller and solar eagle ;Then naracteristics characteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de , fan speed rate regulated by temperature stop; when controller stop working, fan also	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
Environment Protection Meet the 2002/95/EC,no cadmium hydride and fluoride Physical Physical Measurement DxWxH (mm) 270*185*90 N.G(kg) 3 G.N(kg) 3.6 Color Blue/Green (optional) Safety CE, RoHS, PSE,FCC EMC EN61000 Type of Mechanical Protection IP21 Environment Humidity Altitude 0~3000m Operating Temperature -20°C ~ +40°C Storage Temperature -40°C ~ +75°C	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature protection Other Parameters Noise Thermal methods	System 12V/24V/48V	Set IP and Gate ac Check the input check the input check the input check the output check	ddress for controller and solar eagle ;Then naracteristics characteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de , fan speed rate regulated by temperature ttop; when controller stop working, fan also	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
Physical Measurement DxWxH (mm) 270*185*90 N.G(kg) 3 G.N(kg) 3.6 Color Blue/Green (optional) Safety CE, RoHS, PSE,FCC EMC EN61000 Type of Mechanical Protection IP21 Environment Humidity Humidity 0~90%RH (no condense) Altitude 0~3000m Operating Temperature -20°C ~ +40°C Storage Temperature -40°C ~ +75°C	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature protection Other Parameters Noise Thermal methods Components	System 12V/24V/48V	Check the input of Check the input of Check the input of yes Check the output of yes Recover after elim 95°C Above 85°C,decre ≤40dB Forced air cooling, fan ran slowly or s World brand raw r capacitors not less	ddress for controller and solar eagle ;Then naracteristics characteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de , fan speed rate regulated by temperature itop; when controller stop working, fan also naterials. Compliance with EU standards. As	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
Physical Measurement DxWxH (mm) 270*185*90 N.G(kg) 3 G.N(kg) 3.6 Color Blue/Green (optional) Safety CE, RoHS, PSE,FCC EMC EN61000 Type of Mechanical Protection IP21 Environment Humidity Humidity 0~90%RH (no condense) Altitude 0~3000m Operating Temperature -20°C ~ +40°C Storage Temperature -40°C ~ +75°C	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell	System 12V/24V/48V	Check the input of Check the input of Check the input of Yes Check the output yes Recover after elim 95°C Above 85°C, decression ≤40dB Forced air cooling fan ran slowly or sworld brand raw reapacitors not less No peculiar smell	ddress for controller and solar eagle ;Then maracteristics characteristics characteristics minating the Short-circuit fault, no problem ase the output power, decrease 3A per de top; when controller stop working, fan also materials. Compliance with EU standards. A s than 105°C and toxic substances.	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
Measurement DxWxH (mm) 270*185*90 N.G(kg) 3 G.N(kg) 3.6 Color Blue/Green (optional) Safety CE, RoHS, PSE,FCC EMC EN61000 Type of Mechanical Protection IP21 Environment Humidity Humidity 0~90%RH (no condense) Altitude 0~3000m Operating Temperature -20°C ~ +40°C Storage Temperature -40°C ~ +75°C	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell	System 12V/24V/48V	Check the input of Check the input of Check the input of Yes Check the output yes Recover after elim 95°C Above 85°C, decression ≤40dB Forced air cooling fan ran slowly or sworld brand raw reapacitors not less No peculiar smell	ddress for controller and solar eagle ;Then maracteristics characteristics characteristics minating the Short-circuit fault, no problem ase the output power, decrease 3A per de top; when controller stop working, fan also materials. Compliance with EU standards. A s than 105°C and toxic substances.	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
N.G(kg) 3 G.N(kg) 3.6 Color Blue/Green (optional) Safety CE, RoHS, PSE,FCC EMC EN61000 Type of Mechanical Protection IP21 Environment Humidity Humidity 0~90%RH (no condense) Altitude 0~3000m Operating Temperature -20°C ~ +40°C Storage Temperature -40°C ~ +75°C	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature protection Other Parameters Noise Thermal methods Components Smell Environment Protection	System 12V/24V/48V	Check the input of Check the input of Check the input of Yes Check the output yes Recover after elim 95°C Above 85°C, decression ≤40dB Forced air cooling fan ran slowly or sworld brand raw reapacitors not less No peculiar smell	ddress for controller and solar eagle ;Then maracteristics characteristics characteristics minating the Short-circuit fault, no problem ase the output power, decrease 3A per de top; when controller stop working, fan also materials. Compliance with EU standards. A s than 105°C and toxic substances.	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
G.N(kg) 3.6 Color Blue/Green (optional) Safety CE, RoHS, PSE,FCC EMC EN61000 Type of Mechanical Protection IP21 Environment Humidity Humidity 0~90%RH (no condense) Altitude 0~3000m Operating Temperature -20°C ~ +40°C Storage Temperature -40°C ~ +75°C	RS232 Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell Environment Protection Physical	System 12V/24V/48V	Set IP and Gate acc Check the input of Check the input of yes Check the output of yes Recover after elim 95°C Above 85°C,decre ≤40dB Forced air cooling, fan ran slowly or s World brand raw r capacitors not less No peculiar smell of Meet the 2002/95,	ddress for controller and solar eagle ;Then maracteristics characteristics characteristics minating the Short-circuit fault, no problem ase the output power, decrease 3A per de top; when controller stop working, fan also materials. Compliance with EU standards. A s than 105°C and toxic substances.	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
Color Blue/Green (optional) Safety CE, RoHS, PSE,FCC EMC EN61000 Type of Mechanical Protection IP21 Environment Humidity Humidity 0~90%RH (no condense) Altitude 0~3000m Operating Temperature -20°C ~ +40°C Storage Temperature -40°C ~ +75°C	RS232 Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell Environment Protection Physical Measurement DxWxH (mm)	System 12V/24V/48V	Check the input of Check the input of Check the input of yes Check the output of yes Recover after elim 95°C Above 85°C,decre ≤40dB Forced air cooling, fan ran slowly or s World brand raw r capacitors not less No peculiar smell of the cooling of yes the capacitors are less No peculiar smell of yes the capacitors are less Meet the 2002/95,	ddress for controller and solar eagle ;Then maracteristics characteristics characteristics minating the Short-circuit fault, no problem ase the output power, decrease 3A per de top; when controller stop working, fan also materials. Compliance with EU standards. A s than 105°C and toxic substances.	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
Safety CE, RoHS, PSE,FCC EMC EN61000 Type of Mechanical Protection IP21 Environment Western that the protection of the	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell Environment Protection Physical Measurement DxWxH (mm) N.G(kg)	System 12V/24V/48V	Set IP and Gate ac Check the input check the input check the input check the input check the output check	ddress for controller and solar eagle ;Then maracteristics characteristics characteristics minating the Short-circuit fault, no problem ase the output power, decrease 3A per de top; when controller stop working, fan also materials. Compliance with EU standards. A s than 105°C and toxic substances.	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
EMC EN61000 Type of Mechanical Protection IP21 Environment IP21 Humidity 0~90%RH (no condense) Altitude 0~3000m Operating Temperature -20°C ~ +40°C Storage Temperature -40°C ~ +75°C	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell Environment Protection Physical Measurement DxWxH (mm) N.G(kg) G.N(kg)	System 12V/24V/48V	Set IP and Gate ac Check the input of Check the input of yes Check the output of yes Recover after elim 95°C Above 85°C,decre ≤40dB Forced air cooling, fan ran slowly or s World brand raw r capacitors not less No peculiar smell Meet the 2002/95, 270*185*90 3 3.6	ddress for controller and solar eagle ;Then naracteristics characteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de , fan speed rate regulated by temperature itop; when controller stop working, fan also naterials. Compliance with EU standards. As than 105°C and toxic substances. /EC,no cadmium hydride and fluoride	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
EMC EN61000 Type of Mechanical Protection IP21 Environment IP21 Humidity 0~90%RH (no condense) Altitude 0~3000m Operating Temperature -20°C ~ +40°C Storage Temperature -40°C ~ +75°C	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell Environment Protection Physical Measurement DxWxH (mm) N.G(kg) G.N(kg)	System 12V/24V/48V	Set IP and Gate ac Check the input of Check the input of yes Check the output of yes Recover after elim 95°C Above 85°C,decre ≤40dB Forced air cooling, fan ran slowly or s World brand raw r capacitors not less No peculiar smell Meet the 2002/95, 270*185*90 3 3.6	ddress for controller and solar eagle ;Then naracteristics characteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de , fan speed rate regulated by temperature itop; when controller stop working, fan also naterials. Compliance with EU standards. As than 105°C and toxic substances. /EC,no cadmium hydride and fluoride	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
Type of Mechanical Protection	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell Environment Protection Physical Measurement DxWxH (mm) N.G(kg) G.N(kg) Color	System 12V/24V/48V	Set IP and Gate ac Check the input of Check the input of yes Check the output of yes Recover after elim 95°C Above 85°C,decre ≤40dB Forced air cooling, fan ran slowly or s World brand raw r capacitors not less No peculiar smell Meet the 2002/95, 270*185*90 3 3.6 Blue/Green (option	ddress for controller and solar eagle ;Then naracteristics characteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de top; when controller stop working, fan also naterials. Compliance with EU standards. As than 105°C and toxic substances. VEC,no cadmium hydride and fluoride	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
Environment Humidity $0\sim90\%RH$ (no condense) Altitude $0\sim3000m$ Operating Temperature $-20^{\circ}\text{C} \sim +40^{\circ}\text{C}$ Storage Temperature $-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell Environment Protection Physical Measurement DxWxH (mm) N.G(kg) G.N(kg) Color Safety	System 12V/24V/48V	Set IP and Gate ac Check the input of Check the input of yes Check the output yes Recover after elim 95°C Above 85°C,decre ≤40dB Forced air cooling, fan ran slowly or s World brand raw r capacitors not less No peculiar smell Meet the 2002/95, 270*185*90 3 3.6 Blue/Green (option CE, RoHS, PSE,FCC	ddress for controller and solar eagle ;Then naracteristics characteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de top; when controller stop working, fan also naterials. Compliance with EU standards. As than 105°C and toxic substances. VEC,no cadmium hydride and fluoride	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
Humidity $0\sim90\%$ RH (no condense)Altitude $0\sim3000$ mOperating Temperature $-20^{\circ}\text{C} \sim +40^{\circ}\text{C}$ Storage Temperature $-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$	RS232 Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell Environment Protection Physical Measurement DxWxH (mm) N.G(kg) G.N(kg) G.N(kg) Coolor Safety EMC	System 12V/24V/48V	Set IP and Gate ac Check the input of Check the input of yes Check the output of yes Recover after elim 95°C Above 85°C,decre ≤40dB Forced air cooling, fan ran slowly or s World brand raw r capacitors not less No peculiar smell of yes	ddress for controller and solar eagle ;Then naracteristics characteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de top; when controller stop working, fan also naterials. Compliance with EU standards. As than 105°C and toxic substances. VEC,no cadmium hydride and fluoride	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
Altitude $0\sim3000\mathrm{m}$ Operating Temperature $-20^{\circ}\mathrm{C} \sim +40^{\circ}\mathrm{C}$ Storage Temperature $-40^{\circ}\mathrm{C} \sim +75^{\circ}\mathrm{C}$	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell Environment Protection Physical Measurement DxWxH (mm) N.G(kg) G.N(kg) Color Safety EMC Type of Mechanical Protection	System 12V/24V/48V	Set IP and Gate ac Check the input of Check the input of yes Check the output of yes Recover after elim 95°C Above 85°C,decre ≤40dB Forced air cooling, fan ran slowly or s World brand raw r capacitors not less No peculiar smell of yes	ddress for controller and solar eagle ;Then naracteristics characteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de top; when controller stop working, fan also naterials. Compliance with EU standards. As than 105°C and toxic substances. VEC,no cadmium hydride and fluoride	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
Operating Temperature $-20^{\circ}\text{C} \sim +40^{\circ}\text{C}$ Storage Temperature $-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Temperature Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell Environment Protection Physical Measurement DxWxH (mm) N.G(kg) G.N(kg) Color Safety EMC Type of Mechanical Protection Environment	System 12V/24V/48V System	Set IP and Gate acc Check the input of Check the input of Check the input of yes Check the output of yes Recover after elim 95°C Above 85°C,decre =40dB Forced air cooling, fan ran slowly or s World brand raw r capacitors not less No peculiar smell of the cooling of the cooli	ddress for controller and solar eagle ;Then naracteristics characteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de top; when controller stop working, fan also naterials. Compliance with EU standards. As than 105°C and toxic substances. VEC,no cadmium hydride and fluoride	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
Operating Temperature $-20^{\circ}\text{C} \sim +40^{\circ}\text{C}$ Storage Temperature $-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Temperature Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell Environment Protection Physical Measurement DxWxH (mm) N.G(kg) G.N(kg) Color Safety EMC Type of Mechanical Protection Environment	System 12V/24V/48V System	Set IP and Gate acc Check the input of Check the input of Check the input of yes Check the output of yes Recover after elim 95°C Above 85°C,decre =40dB Forced air cooling, fan ran slowly or s World brand raw r capacitors not less No peculiar smell of the cooling of the cooli	ddress for controller and solar eagle ;Then naracteristics characteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de top; when controller stop working, fan also naterials. Compliance with EU standards. As than 105°C and toxic substances. VEC,no cadmium hydride and fluoride	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
Storage Temperature -40°C ~ +75°C	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell Environment Protection Physical Measurement DxWxH (mm) N.G(kg) G.N(kg) Color Safety EMC Type of Mechanical Protection Environment Humidity	System 12V/24V/48V System 0~90%	Set IP and Gate ac Check the input of Check the input of yes Check the output of yes Recover after elim 95°C Above 85°C,decre ≤40dB Forced air cooling, fan ran slowly or s World brand raw r capacitors not less No peculiar smell Meet the 2002/95, 270*185*90 3 3.6 Blue/Green (option CE, RoHS, PSE,FCC EN61000 IP21 RH (no condense)	ddress for controller and solar eagle ;Then naracteristics characteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de top; when controller stop working, fan also naterials. Compliance with EU standards. As than 105°C and toxic substances. VEC,no cadmium hydride and fluoride	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
	RS232 Communication LAN Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell Environment Protection Physical Measurement DxWxH (mm) N.G(kg) G.N(kg) Color Safety EMC Type of Mechanical Protection Environment Humidity Altitude	System 12V/24V/48V System System O~90% O~3000 O~3000	Set IP and Gate ac Check the input of Check the input of yes Check the output of yes Recover after elim 95°C Above 85°C, decree ≤40dB Forced air cooling, fan ran slowly or s World brand raw r capacitors not less No peculiar smell. Meet the 2002/95, 270*185*90 3 3.6 Blue/Green (option CE, RoHS, PSE,FCCEN61000 IP21 RH (no condense)	ddress for controller and solar eagle ;Then naracteristics characteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de top; when controller stop working, fan also naterials. Compliance with EU standards. As than 105°C and toxic substances. VEC,no cadmium hydride and fluoride	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
Atmospheric Pressure /U~106kPa	RS232 Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell Environment Protection Physical Measurement DxWxH (mm) N.G(kg) G.N(kg) Color Safety EMC Type of Mechanical Protection Environment Humidity Altitude Operating Temperature	System 12V/24V/48V System Syste	Set IP and Gate ac Check the input of Check the input of Check the input of yes Check the output of yes Recover after elim 95°C Above 85°C, decre ≤40dB Forced air cooling, fan ran slowly or s World brand raw r capacitors not less No peculiar smell of Meet the 2002/95, 270*185*90 3 3.6 Blue/Green (option CE, RoHS, PSE, FCC EN61000 IP21 RH (no condense)	ddress for controller and solar eagle ;Then naracteristics characteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de top; when controller stop working, fan also naterials. Compliance with EU standards. As than 105°C and toxic substances. VEC,no cadmium hydride and fluoride	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.
	RS232 Communication Protection Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Short-circuit Protection Temperature Protection Temperature Protection Other Parameters Noise Thermal methods Components Smell Environment Protection Physical Measurement DxWxH (mm) N.G(kg) G.N(kg) Color Safety EMC Type of Mechanical Protection Environment Humidity Altitude Operating Temperature Storage Temperature	System 12V/24V/48V System Syste	Set IP and Gate ac Check the input of Check the input of Check the input of yes Recover after elim 95°C Above 85°C,decre ≤40dB Forced air cooling, fan ran slowly or s World brand raw r capacitors not less No peculiar smell Meet the 2002/95, 270*185*90 3 3.6 Blue/Green (option CE, RoHS, PSE,FCC EN61000 IP21 RH (no condense) om -+40°C +75°C	ddress for controller and solar eagle ;Then naracteristics characteristics characteristics ninating the Short-circuit fault, no problem ase the output power, decrease 3A per de top; when controller stop working, fan also naterials. Compliance with EU standards. As than 105°C and toxic substances. VEC,no cadmium hydride and fluoride	for long term Short-circuit gree. , when inner temperature is too low, o stop ran.

Note: OEM and ODM service are provided. The 36V/72V/96V model also can be custom made for you.

Product Parts

NO.	Quantity	Description
1	1 unit	Charge controller
2	2 pc	Terminals

3	2 pc	Gallow pulley (For install the controller on the wall)
4	4 set	Screw (For install the controller on the wall)
5	1 pc	232 turn to RJ45 communication cable
6	1 pc	User manual
7	1 pc	Temperature sensing wire
8	2 pc	Fuse wire



Upper Computer Software and Test Software



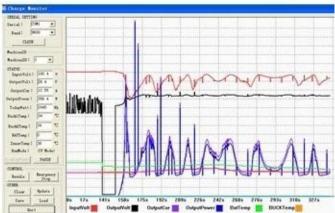


The interface of upper computer software working state

The interface of upper computer software parameter setting state

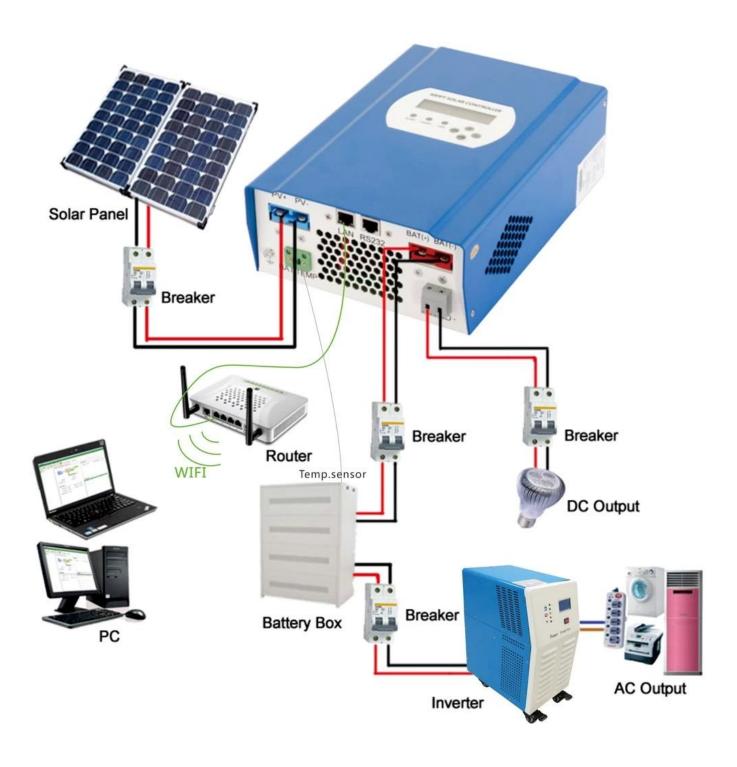


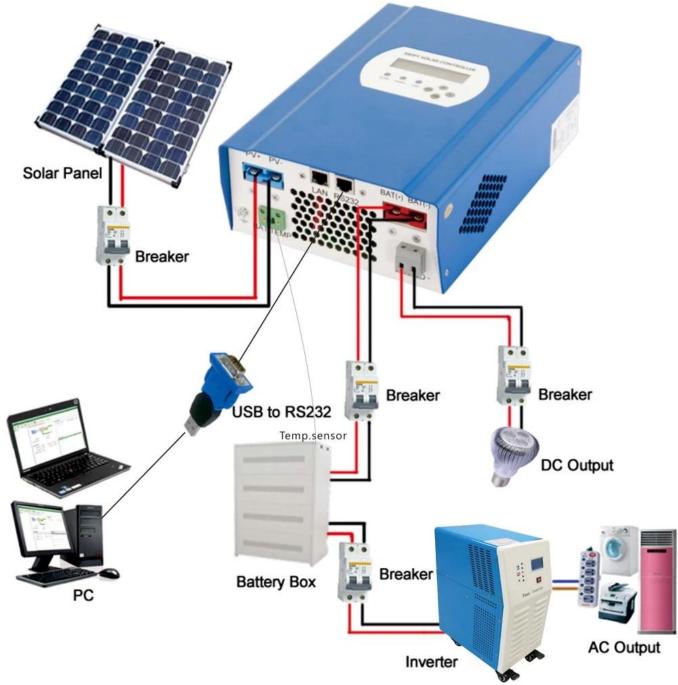
Upper computer software on/off interface and generating capacity record clean interface



The interface of test software working state

MPPT Connection





Service and Contact

1. Warranty

1.2 years warranty, lifelong technical assistance.

2. Conditions and Terms

- 2.1 The warranty starts from the delivery date from our factory.
- 2.2 During the warranty, any defective product will get repaired or replaced for free.
- 2.3 The warranty is unavailable for those products which are broken by the violence or the carelessness or

repaired or altered without the authorization.

3. Lead Time

- 3.1 Sample orders will be delivered from our factory within 5-7 working days.
- 3.2 General orders will be delivered from our factory within 7-15 working days.
- 3.3 Big orders will be delivered from our factory within 25 working days at most.

4. Shipment

- 4.1 Samples By EMS, DHL, FedEx or other express.
- 4.2 Wholesale orders by our forwarding agent(by air or by sea).
- 4.3 Wholesale orders by your own forwarding agent.

5. OEM and ODM
5.1 This page shows basic data, we can provide OEM, ODM service for you.