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

I-P-SMART1-DC12V/24V/48V-50A MPPT Solar charge Controller. With MPPT, it can targetthe highest output possibe from PV panels, make efficiency higher upto 30%~60%than traditional PWM ones. It can store energy to different kinds ofbatteries(Gel,Vented, Sealed, NiCd etc.). For all of our products has passedCE, ROHS, FCC etc.Unlimited connect in

### **System**



#### **Features**

- 1. Peak efficiency upto 99% with MPPT,increasing30%~60% efficiency than traditional controller.
- 2. 12v/24v/48v system voltage automatic recognize.
- 3. Max. input PV voltage upto DC150V.
- 4. 105degrees can be sufferred by good components.
- 5. Charge mode: three stages (fast charge, constant charge, floating charge)
- 6. Support kinds of batteries:Gel,Sealed leadacid,vented,NiCd,etc.
- 7. LCD and LEDs show parameters and systeminformation, like PV input voltage, battery voltage, charge current, chargepower, etc.
- 8. Port RS232 or connects to PC with uppersoftware to show working state and parameters in 11 languages.
- 9. CE,RoHS, FCC certifications approved.
- 10. 2 years warranty;3~10 years extended technicalservice.

#### **Parameter**

Model:I-P-SMART1-DC12V/24V/48V-series		50A
Charge Mode	Maximum Power Point Tracking	
Method	3 stages: fast charge(MPPT),constant voltage,floating charge	
System Type	DC12V/24V/48V	Automatic recognition
System Voltage	12V system	DC9V~DC15V
	24V system	DC18V~DC30V
	48Vsystem	DC36V~DC60V
Soft Start Time	12V/24V/48Vsystem	≤10S
Dynamic Response Recovery Time	12V/24V/48Vsystem	500us
Conversion Efficiency	12V/24V/48Vsystem	≥96.5%,≤99%

127	PV Modules Utilization Rate	12V/24V/48Vsystem	≥99%
MAPPY Working Voltage and Range	Input Characteristics	12V system	DC18V~DC150V
Low Voltage Input Protection Point Rev System DCGOV AND Voltage Input Recovery Point Rev System DCGOV AND Voltage Input Recovery Point Rev System DCGOV AND Voltage Input Recovery Point Rev System DCGSV AND CVellage DVAVAVAVAVAVAVAVAVAVAVAVAVAVAVAVAVAVAVA	MPPT Working Voltage and Range		
Low Voltage Input Protection Point  ARY System  DCGOV  Low Voltage Input Recovery Point  ARY System  DCGOV  ARY System  DCGOV  ARY System  DCGOV  ARY System  DCGOV  Input Overvoltage Protection Point  12V/24V/48V system  DCGSV  Nax. PV Power  ARY System  DCGOV  ARY System  DCGOV  DIPUT Overvoltage Recovery Point  12V/24V/48V system  DCGOV  ARY System  DCGOV  DRIPUT Overvoltage Recovery Point  DRIPUT Overvoltage Recovery Point Overvoltage Recoveries Point Overvoltage Recoveries Point Overvoltage Recoveries Point Overvoltage Recoveries Point Overvoltage Protection  DRIPUT Overvoltage Protect			DC65~DC150V
ASV system   CC2V			
Dev Voltage Input Recovery Point	Low Voltage Input Protection Point		
Low Voltage Injust Recovery Point 42V system 5CSV Max DC Voltage 12V/28V/48V system 5CISOV Injust Overvoltage Protection Point 12V/28V/48V system 5CISOV Injust Overvoltage Recovery Point 12V/28V/48V system 5CISOV Max, PV Power 12V/28V/48V system 1400W Max, PV Power 12V/28V/48V system 1400W Max PV Power 14V/28V/48V system 1500W Max PV Power 15V/28V/48V system 15V/28V/48V s			
ABV system   DC65V	I ow Voltage Input Recovery Point		
Nax DC Voltage   12V/24V/48V system   12V/24V/48V system   12V/24V/48V system   1400W   12V/24V/48V system   1400W   12V/24V/48V system   1400W   1400			
Input Overvoltage Protection Point Input Overvoltage Recovery Point Input Overvoltage Protection Input Overv		1 -	- 11
much Overvoltage Recovery Point    12V/24V/48V system   700W	Max DC Voltage	12V/24V/48V system	DC160V
12V system   700W   24V system   1400W   24V system   1400W   24V system   1400W   24V system   1400W   24V system   2000W   24V system   2000W   24V system   2000W   24V system   2000W   24V system   25V 24V/48V system   2500W   24V 24V/48V system   24V 24V/48V system   24V 24V/48V system   24V	Input Overvoltage Protection Point	12V/24V/48V system	DC150V
Max. PP Power    24V system   3400W     28V system   2800W     28V system   28V system   28V system     28V system   28V system   28V system     28V system   28V system   28V system     28V system   28V system   29 SV     28V system   20 SV system   20 SV system     28V system   20 SV system   20 SV system   20 SV system     28V system   20 SV s	Input Overvoltage Recovery Point		
ABV system 2800W  AUTOL Characteristics  Selectable Battery Types (Default type is GEL 12V/24V/48V system 12V/24V/24V/24V/24V/24V/24V/24V/24V/24V/2			
Selectable Battery Types (Default type is GEL battery)  Selectable Battery Types (Default type is GEL battery)  Constant Voltage  12V/24V/38V system 12V system 12V system 24V system 24V system 24V system 24V system 25V system 26V system 26V system 26V system 27V system 28V system 28V system 29 37V 28V system 30 AV  Rated Output Current 12V/24V/38V system 30 A  Current-limiting Protection 30 A  Current-limiting Protection 40 A  Current-limiting Protection 40 A  Current-limiting Protection 40 A  Current-limiting Protection 40 A  Current-limiting Protection 50 A  Current-limi	Max. PV Power		
Selectable Battery Types (Default type is GEL battery)  Constant Voltage  12V;24V/48V system Floating Charge Voltage Floating Fl	Output Characteristics	48V system	2800W
Floating Charge Voltage  12V/24V/48V system  14.6V 24V system  24V system  24V system  24V system  38.4V  Rated Output Current  12V/24V/48V system  50A  55A  Temperature Factor  12V/24V/48V system  20V/24V/48V system  30A  Output Ripples(peak)  12V/24V/48V system  14.2V.The highest temperature-25°C)*0.3  Output Ripples(peak)  12V/24V/48V system  200mV  \$\text{\$\tex	Selectable Battery Types (Default type is GEL	12V/24V/48Vsystem	
Pipadang Charge Voltage   12V/24V/48V system   14.6V	Constant Voltage		Please shock the sharee voltage asserting to the hattery type form
Over Charge Protection Voltage    24V system   58.4V	Floating Charge Voltage	<del></del>	7 7
ABV system   12V/24V/48V system   14.2V-The highest temperature-25°C)*0.3   14.2V-The highe			
Rated Output Current  Current-limiting Protection  12V/24V/48V system  55A  Temperature Factor  12V/24V/48V system  12V/24V/48V system  Output Ripples(peak)  12V/24V/48V system  12V/24V/48V system  Output Ripples(peak)  12V/24V/48V system  Output Voltage Stability Precision  12V/24V/48V system  12V/24V/48V system  Output Voltage Stability Precision  12V/24V/48V system  Display  LCD display  LCD display  LCD display  Software Control through PC(communication port)  Software Control through PC(communication port)  RS232 (matching) or LAN(optional)  Frotection  Input Low Voltage 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  Check the input characteristics  Output Polarity Reversal Protection  Ves  Output Polarity Reversal Protection  Soft-circuit Protection  Temperature Protection  Temperature Protection  Temperature Protection  Temperature Protection  Other Protection  Temperature Protection  Temperature Protection  Other Pranameters  Noise  Software Control through PC(communication port)  Above 85°C.decrease the output power, decrease 3A per degree.  Other Pranameters  Noise  Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop, when controller stop working, also stop ran.  World brand raw materials. Compliance with EU standards. All rated temperature is too low, fan ran slowly or stop, when controller stop working, also stop ran.  World brand raw materials. Compliance with EU standards. All rated temperature is teo low, fan ran slowly or stop, when controller stop working, 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 and toxic substances.  Fivincial  Wester E-002/95/EC, no cadmium hydride and fluoride  Physical  Mester E-002/95/EC, no cadmi	Over Charge Protection Voltage		
Current-limiting Protection 12V/24V/48V system 55A Temperature Factor 12V/24V/48V system 20.02%/°C Temperature Compensation 12V/24V/48V system 20.02%/°C Temperature Compensation 12V/24V/48V system 20.00m/ Output Ripples(peak) 12V/24V/48V system 20.00m/ Output Voltage Stability Precision 12V/24V/48V system 20.00m/ Sisplay 20.00m/ LED display 20.00m/ LED display 3 LEDs indicates:Fault indicate light, charge indicate light, power source indicate light(check the LED display instruction) Software Control through PC(communication port) 8.5232 (matching) or LANloptional) Protection 20.00m/ Input Low Voltage Protection 3.00m/20.00m/	Pated Output Current		
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  S±1.5%  Display 5±1.5%  Display 1.2V/24V/48V system 5±1.5%  Display 1.2V/24V/48V system 5±1.5%  LED display 1.2V/24V/48V system 3 LEDs indicates-Fault indicate light, charge indicate light, power source indicate light(each the LED instruction)  Software Control through PC(communication port) 85232 (matching) or LAN(optional)  Protection 1.2V/24V/48V system 3 LEDs indicates-Fault indicate light, charge indicate light, power source indicate light(each the LED instruction)  Software Control through PC(communication port) 85232 (matching) or LAN(optional)  Protection 1.2V/24V/48V system 3 LEDs indicates-Fault indicate light, power source indicate light(each the LED instruction)  Input Low Voltage Protection	·	1	
Temperature Compensation 12V/24Vi48V system 14.2V-(The highest temperature-25°C)*0.3 Output Ripples(peak) 12V/24Vi48V system 200mV  s±1.5%  Display  LCD display			
Output Ripples(peak)         12V/24V/48V system           Output Voltage Stability Precision         12V/24V/48V system           Display         Input, output parameter and output power etc (check the LCD display) instruction)           LED display         3 LEDs indicates:Fault indicate light, charge indicate light, power source indicate light (check the LED instruction)           Software Control through PC(communication port)         RS232 (matching) or LAN(optional)           Protection         As232 (matching) or LAN(optional)           Input Low Voltage Protection         Check the input characteristics           Input Polarity Reversal Protection         Check the output characteristics           Output Overvoltage Protection         Check the output characteristics           Output Vervoltage Protection         Check the output characteristics           Output Polarity Reversal Protection         Pes           Short-circuit Protection         Recover after eliminating the Short-circuit fault, no problem for long term Short-circuit Protection           Temperature Protection         Psc           Short-circuit Protection         Above 85°C, decrease the output power, decrease 3A per degree.           Other Parameters         Volder           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, also stop ran	Temperature Factor	12V/24V/48V system	±0.02%/°C
Output Voltage Stability Precision  Display  LCD display  LCD display  LED display  LED display  LED display  LED display  LED display  Software Control through PC(communication port)  RS232 (matching) or LAN(optional)  Protection  Input Low Voltage Protection Input Low Voltage Protection Input Overvoltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Ves Short-circuit Protection  Temperature Protection  Temperature Protection  Temperature Protection  Temperature Protection  Thermal methods  Software Pontrol Results of the support of the sup	·		
Display  LCD display  LCD display  LED display  LED display  Software Control through PC(communication port)  RS232 (matching) or LAN(optional)  Protection  Input Low Voltage Protection  Input Dovervoltage Protection  Input Dovervoltage Protection  Output Polarity Reversal Protection  Temperature Protection  Temperature Protection  Temperature protection  Temperature protection  The Parameters  Noise  Software Software Control through PC(communication port)  Protection  Check the input characteristics  Input Low Voltage Protection  Check the input characteristics  Output Delarity Reversal Protection  Ves  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  Software Control are regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, 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 and toxic substances.  Neet the 2002/95/EC, no cadmium hydride and fluoride  Physical  Neet the 2002/95/EC, no cadmium hydride and fluoride  Physical  Software  Software  CE, ROHS, PSE, FCC  EMC  EMC  EMC  EMC  EMC  EMC  EMC	Output Ripples(peak)	12V/24V/48V system	200mV
LCD display    Input, output parameter and output power etc (check the LCD display instruction)	, ,	12V/24V/48V system	≤±1.5%
Section   Sect			
indicate light(check the LED instruction)  Software Control through PC(communication port)  Protection  Input Low Voltage Protection  Check the input characteristics Input Polarity Reversal Protection  Output Overvoltage Protection  Overvoltage Protection  Pesson Overvoltage Protection  Overvoltage Protection  Protection  Recover after eliminating the Short-circuit fault,no problem for long term Short-circuit  Femperature Protection  Protection  Temperature Protection  Other Parameters  Noise  SaldB  Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, 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 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  Sin(Kg)  3.6  Sin(Kg)  3.6  Sin(Kg)  3.6  Sin(Kg)  3.6  Sin(Kg)  500  ENE(S)  ENE)  ENEC  ENEL  ENEC  ENEL  ENEL  ENEL  EVERNORS  ENEL  ENEL  EVERNORS  ENEL  ENEL  EVERNORS  ENEL  EVERNORS  ENEL  ENEL  EVERNORS  ENEL  ED  ENEL  ED  ENEL  ED  ENEL			
Input Low Voltage Protection   Check the input characteristics   Input Overvoltage Protection   Check the input characteristics   Input Polarity Reversal Protection   Check the input characteristics   Input Polarity Reversal Protection   Ves   Check the output characteristics   Output Overvoltage Protection   Check the output characteristics   Output Polarity Reversal Protection   Recover after eliminating the Short-circuit fault,no problem for long term   Short-circuit Protection   Short-circuit   Protection   Short-circuit   Protection   Short-circuit   Protection   Short-circuit   Protection   Short-circuit   Protection   Short-circuit   Protection   Short-circuit   Protection   Short-circuit   Protection   Short-circuit   Protection   Short-circuit   Protection   Short-circuit   Protection   Short-circuit   Protection   Short-circuit   Protection   Short-circuit   Protection   Short-circuit   Protection   Short-circuit   Protection   Short-circuit   Protection   Short-circuit   Protection   Protect	LED display		
Input Low Voltage Protection Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Overvoltage Protection Output Overvoltage Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Short-circuit Protection Short-circuit Protection Femperature Protection  Temperature Protection  Temperature protection  Other Parameters Noise  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, 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 and toxic substances.  Environment Protection Measurement DxWxH(mm) N.G(kg) 3 G.N(kg) G.N(kg) G.N(kg) G.N(kg) G.N(kg) G.Olor Blue/Green (optional) Safety CE_ROHS, PSE,FCC EMC  ENGINE Internation in protection i			RS232 (matching) or LAN(optional)
Input Overvoltage Protection Input Polarity Reversal Protection Output Overvoltage Protection Output Overvoltage Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Short-circuit Protection Femperature Protection Temperature Protection Temperature Protection Other Parameters Noise Salos  Forced air cooling,fan speed rate regulated by temperature, when inner temperature is too low,fan ran slowly or stop; when controller stop working, also stop ran.  World brand raw materials. Compliance with EU standards.All rated temperature of electrolytic capacitors not less than 105°C  Smell Environment Protection Meet the 2002/95/EC,no cadmium hydride and fluoride Physical Measurement DxWxH(mm) N.G(Kg) 3.6 G.N(Kg) 3.6 Color Blue/Green (optional) Safety ENSIGN ENSI			Check the input characteristics
Input Polarity Reversal Protection Output Overvoltage Protection Output Polarity Reversal Protection Output Polarity Reversal Protection Short-circuit Protection Short-circuit Protection Femperature Protection  Temperature Protection  Other Parameters Noise  Sequence of air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, 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 and toxic substances.  Environment Protection Measurement DxWxH(mm)  N.G(kg) G.N(kg) G.N(kg) G.N(kg) G.N(kg) G.N(kg) Safety CE,ROHS, PSE,FCC EMC  ENGIONE  Recover after eliminating the Short-circuit fault, no problem for long term Short-circuit Parameters Recover after eliminating the Short-circuit fault, no problem for long term Short-circuit fault, no problem for long term Short-circuit Pascover after eliminating the Short-circuit fault, no problem for long term Short-circuit fault, no pr			· ·
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         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, 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 and toxic substances.         Environment Protection       Meet the 2002/95/EC, no cadmium hydride and fluoride         Physical       Weasurement DxWxH(mm)         N.G(kg)       3         G.N(kg)       3.6         Color       Blue/Green (optional)         Safety       CE,RoHS, PSE,FCC         EMC       EN61000			
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, 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 and toxic substances.  Environment Protection  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)  Safety  CE,RoHS, PSE,FCC  EMC  EN61000			Check the output characteristics
Short-circuit  Temperature Protection  75°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, 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 and toxic substances.  Environment Protection  Meet the 2002/95/EC,no cadmium hydride and fluoride  Physical  Measurement DxWxH(mm)  N.G(kg)  3.G.  G.N(kg)  3.G.  Coolor  Blue/Green (optional)  Safety  CE,RoHS, PSE,FCC  EMC  EN61000	Output Polarity Reversal Protection		P .
Temperature protection  Above 85°C,decrease the output power,decrease 3A per degree.  Other Parameters  Noise  Sequence of air cooling,fan speed rate regulated by temperature, when inner temperature is too low,fan ran slowly or stop; when controller stop working, 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 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  Color  Blue/Green (optional)  Safety  CE,RoHS, PSE,FCC  EMC  EN61000	Short-circuit Protection		
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, 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 and toxic substances.         Environment Protection       Meet the 2002/95/EC, no cadmium hydride and fluoride         Physical       Weasurement DxWxH(mm)         N.G(kg)       3         G.N(kg)       3.6         Color       Blue/Green (optional)         Safety       CE,RoHS, PSE,FCC         EMC       EN61000	Temperature Protection		95℃
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, 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 and toxic substances.         Environment Protection       Meet the 2002/95/EC,no cadmium hydride and fluoride         Physical       270*185*90         M.G(kg)       3         G.N(kg)       3.6         Color       Blue/Green (optional)         Safety       CE,RoHS, PSE,FCC         EMC       EN61000	Temperature protection		Above 85°C,decrease the output power,decrease 3A per degree.
Forced air cooling, fan speed rate regulated by temperature, when inner temperature is too low, fan ran slowly or stop; when controller stop working, 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 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			<40dB
temperature of electrolytic capacitors not less than 105°C  Smell No peculiar smell and 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			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
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	Components		temperature of electrolytic capacitors not less than 105°C
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			
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			Meet the 2002/95/EC,no cadmium hydride and fluoride
N.G(kg)         3           G.N(kg)         3.6           Color         Blue/Green (optional)           Safety         CE,RoHS, PSE,FCC           EMC         EN61000			h70*19E*00
G.N(kg)         3.6           Color         Blue/Green (optional)           Safety         CE,RoHS, PSE,FCC           EMC         EN61000			
Color Blue/Green (optional) Safety CE,RoHS, PSE,FCC EMC EN61000			
Safety CE,RoHS, PSE,FCC ENG EN61000			
EMC EN61000			
Type of Mechanical Protection IP21			

Environment		
Humidity	0~90%RH ( no condense)	
Altitude	0~3000m	
Operating Temperature	-20℃ ~ +40℃	
Storage Temperature	-40°C ~ +75°C	
Atmospheric Pressure	70~106kPa	

## **RS232 Connect Way**

