Introduction:

This is a smart solar charge controller which has advanced MPPT technology .Solar charge controller is one of the important parts in the off-grid solar system. For having the advanced MPPT technology, the controller can trace the peak power with 99% conversion efficiency. MPPT microprocessor, inside the controller，making 30% more charge current with significantly less power than tradition. In addition to this, easier installing and supporting to expand volume are other advantages. It can also store energy to different kinds of batteries. We provide battery choice(Vented，Sealed，Gel，NiCd).

Feature:

1.MPPT charge mode,conversion efficiency upto 99%,can save 30%~60% of the power than traditional controller.

2.With high efficient MPPT operation scheme and adopting TI28035 chip,make the Solar panels utilization rate upto 99%.

Intelligent design,the device can be upgraded online,customers enjoy the lifelong upgrade service.

4.Compliance with the 2002/95/EC environment protecting demand,doesn’t include the Cadmium, hydride and fluoride

5.Adopting the well-known brand components,the devices can suffer the temperature not less than 105℃.The service life is designed to extend to 10 years in theory.

6.Charge mode: three stages (fast charge,constant charge,floating charge)

7.12V/24V/48V system auto recognize for easy control.

8.Nominal maximum solar input is DC 150V

9.Connected Battery Type choosing: Sealed lead acid, vented, Gel, NiCd battery. Other types of the batteries can also be defined.

10. LCD and LEDs show all kinds of parameter like products model, PV input voltage,battery voltage,charge current,charge power,work condition,and also can add customers’company name and website.

11. Communication Port.RS232 communication can provide communication protocol, This make the unified and integrated management more convenient to customers.

12. With providing a Microsoft by connecting with PC that can show the working state and all parameters in 7 languages.

13. Extensible LAN remote control.

14.Equipment integrity: controller+CD-ROM(microcomputer software) + communication wire+Anderson terminals;

15.CE,ROHS,FCC,PSE certifications approved.The device also can support to pass the other certifications.

16. 2 years warranty. And 3~10 years extended warranty service also can be provided.

Parameters:

MPPT solar controller modes I-P-e-SMART-12V/24V/48V-series		30A
Charge mode	MPPT(maximum power point tracking)	
Charge method	Three stages: constant current(MPPT),constant voltage,floating charge	
System type	DC12V/24V/48V	Automatic recognition
System voltage	12V system	DC9V~DC15V
	24V system	DC18V~DC30V
	48V system	DC36V~DC60V
Soft start time	12V/24V/48V system	≤3S
Dynamic response recovery and range	12V/24V/48V system	500us
MPPT efficiency	12V/24V/48V system	≥96.5%,≤99%
INPUT CHARACTERISTICS		
MPPT working voltage and Range	12V system	DC14V~DC100V
	24V system	DC30~DC100V
	48V system	DC60~DC100V
Low voltage input Protection point	12V system	DC14V
	24V system	DC30V
	48V system	DC60V

Low voltage input Recovery point	12V system	DC18V
	24V system	DC34V
	48V system	DC65V
Input over voltage protection point	12V/24V/48V system	DC110V
Input over voltage recovery point	12V/24V/48V system	DC100V
Maximum PV power	12V system (W)	450
	24V system (W)	850
	48V system (W)	1700
CHARGE CHRECTRESTICS		
Selectable Battery Types (Default type is GEL battery)	12V/24V/48V system	Sealed lead acid, vented, Gel, NiCd battery (Other types of the batteries also can be defined)
Constant Voltage	12V/24V/48V system	Please check the charge voltage according to the battery type form.
Floating Charge Voltage	12V/24V/48V system	Please check the charge voltage according to the battery type form.
Rated Input Current	12V/24V/48V system	30A
Current-limiting Protection	12V/24V/48V system	35A
Temperature Factor	12V/24V/48V system	±0.02%/℃
Temperature Compensation	12V/24V/48V system	14.2V-(The highest temperature-25℃)*0.3
Output Ripples(peak)	12V/24V/48V system	200mV
Output Voltage Stability Precision	12V/24V/48V system	≤±1.5%
Output Discharge Characteristics		
Output voltage		Base on battery voltage
Low voltage output Protection point		Default 10.5V; recovery 11V; custom available ;
Rated output Current		30A
The output control		Always on, always off, PV voltage control switch
Output control set mode		Controller button or upper computer
Display		
LED digital tube display		Battery voltage, charge current
LED light display		Charging indicator light, LOAD indicator light
PC communication port		RS232
Protection		
Input Low Voltage Protection		Check the input characteristics
Input Overvoltage Protection		Check the input characteristics
Charge over voltage power Protection		yes
Low Voltage output Protection		yes
Rated output Current protection		yes
Temperature Protection		yes
Other Parameters		
Noise		≤40dB
Thermal heat-dissipating method		Itself cooling fan cooling
Components		Imported material, with EU standards.
Certification		CE\FCC\ROHS
Physical		
Measurement D x W x H(mm)		205*168*60
package size D x W x H(mm)		265*196*110
N.G(KG)		1.8kg
G.N(KG)		2kg
Type of Mechanical Protection		IP25
Environment		
Humidity		0~90%RH (no condense)
Altitude		0~3000m
Operating Temperature		-20℃ ~ +50℃
Storage Temperature		-40℃ ~ +75℃
Atmospheric Pressure		70~106kPa

Pictures:





The Figures of the PC Firmware and Testing Software

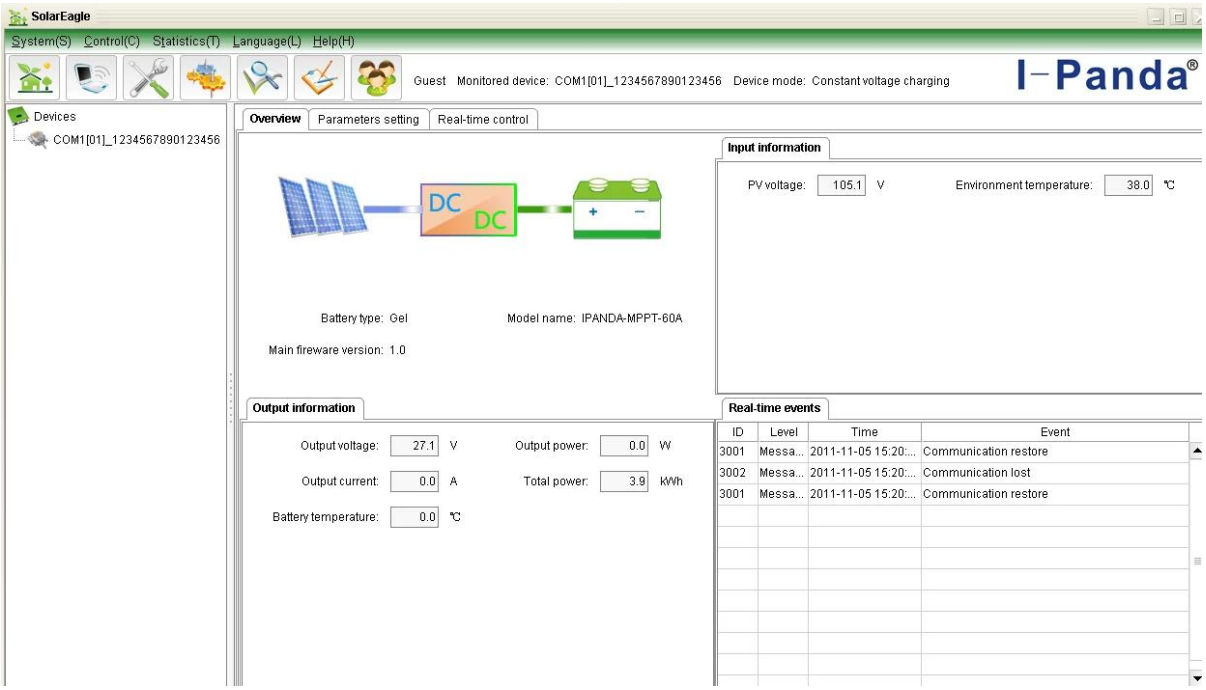

Figure 1: PC Firmware

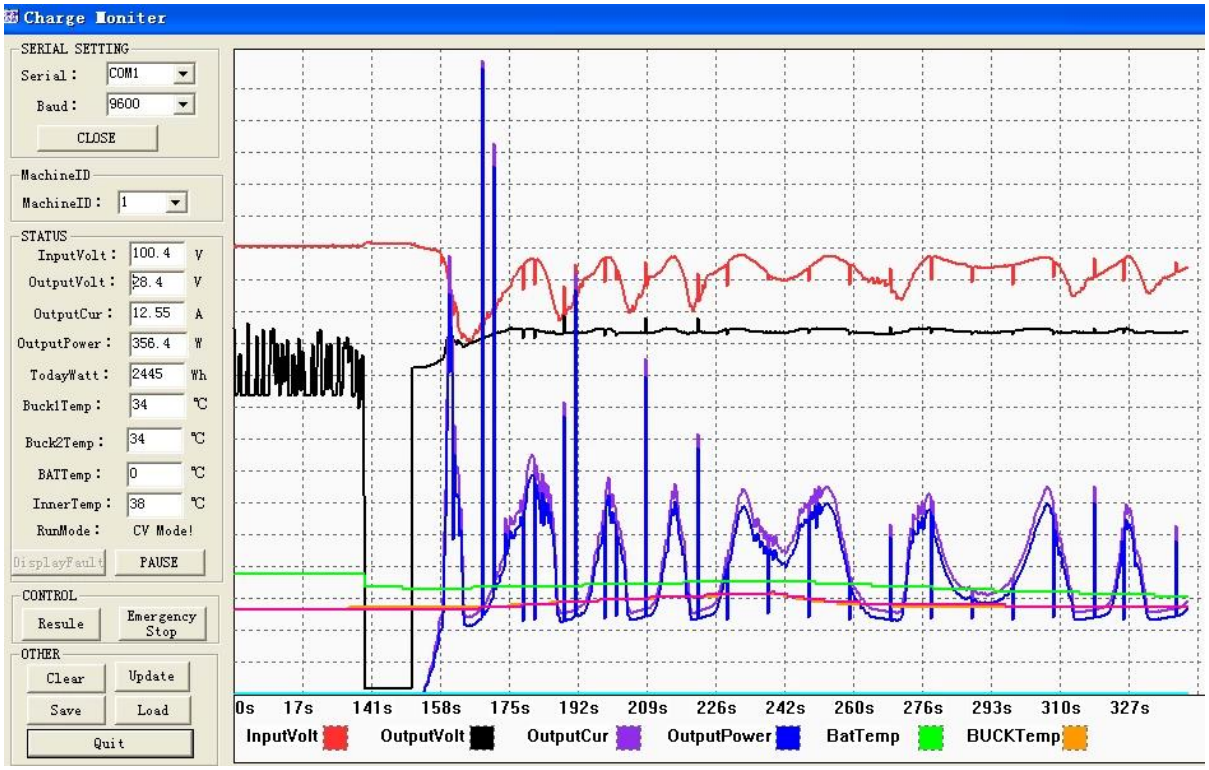

Figure: Testing Software

Welcome to order I-Panda [MPPT Solar Charge Controller Smart1 48V 40A~60A]

Company


I-Panda爱底德


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