

MakeSkyBlue is a professional company of MPPT solar controller and MPPT so lar inverter, which focus on MPPT technology.

Established since 2015, our headquarters is in Shenzhen regarded as China Silicon Valley. Our company is growing rapidly and is developing a series of reliable MPPT Controller and Inverter to help clients save cost and electricity bill, even to protect our blue sky. The most of products are selling to United States, Europe, Australia, South Africa and we are honored to get the great feedback from our professional customers.

As a 15-year technology team in MPPT and solar field, we will continue to research new generation of solar products to face the environmental and manufacturing

cost challenges.

MakeSkyBlue is not only a solar company, but also is an idea to "Make Sky Blue". Just do something and we'll have a blue sky.

Don't let the shadows of yesterday hide the sunshine of tomorrow.

----- Nandina Morris

Solar On&Off Grid MPPT Charger&Inverter



Main Features

This is multi-function inverter/charger, combining functions of inverter, MPPT solar charger and battery charger to offer uninterruptible power support with portable size. Its comprehensive LCD display offers user-configurable and easy-accessible button operation

such as battery charging current.

- Pure sine wave inverter
- •120A MPPT solar charger for Max 7000W PV power
- •120V-500VDC wide range input PV voltage
- AC/Solar charger priority, battery charging/cut-off voltage, acceptable input voltage based on different applications.
- work without battery, inverter can generate power from solar panels directly to load appliances

PV INPUT

	AIO3K24V	AIO4K48V	AIO5K48V	AIO6K648V
MPPT Range @ Operating	120-450VDC	120-450VDC	150-450VDC	150-450VDC
Voltage				
PV Over voltage Protection	500VDC	500VDC	500VDC	500VDC
Open Circuit Voltage				
Maximum PV Array Power	3000W	4000W	5000W	7000W
Maximum Solar Charge Current	100A	100A	100A	120A

AC INPUT

AC Voltage	220Vac	220Vac	220Vac	220Vac
Selectable Voltage Range	170-270Vac(UPS), 90-280Vac(APL)	170-270Vac(UPS), 90-280Vac(APL)	170-270Vac (UPS) , 90-280Vac(APL)	170-270Vac(UPS), 90-280Vac(APL)
Max AC Voltage	280VAC	280VAC	280VAC	280VAC
Frequency	50Hz/60Hz(Auto)	50Hz/60Hz(Auto)	50Hz/60Hz(Auto)	50Hz/60Hz(Auto)
Frequency Range	40-65Hz	40-65Hz	40-65Hz	40-65Hz
Transfer Time	10ms(UPS) 20ms(APL)	10ms(UPS) 20ms(APL)	10ms(UPS) 20ms(APL)	10ms(UPS) 20ms(APL)
Maximum AC Charge Current	30A	30A	30A	30A

BATTERY

Туре	Lead-acid/Lithium	Lead-acid/Lithium	Lead-acid/Lithium	Lead-acid/Lithium
Battery Voltage	24VDC	48VDC	48VDC	48VDC

	20.4-29.2V(Lithium)	46.4-58.8V(Lithium)	46.4-58.8V(Lithium)	46.4-58.8V(Lithium)
Battery Voltage Range	20-30V(Lead-Acid)	38.4-60V(Lead-Acid)	38.4-60V(Lead-Acid)	38.4-60V(Lead-Acid)
Max Charge current	100A	130A	130A	130A
Floating Charge Voltage	27.6V (Lead-Acid), Defined by user for Lithium	53.5V(Lead-Acid), Defined by user for Lithium	53.5V(Lead-Acid), Defined by user for Lithium	53.5V(Lead-Acid), Defined by user for Lithium
highest constant voltage	28.8V (Lead-Acid), Defined by user for Lithium	56.5V(Lead-Acid), Defined by user for Lithium	56.5V(Lead-Acid), Defined by user for Lithium	56.5V(Lead-Acid), Defined by user for Lithium
Inverter				
RATED POWER	3KW	4KW	5KW	6.6KW
Output voltage	220VAC/208VAC/240VAC	220VAC/208VAC/240VAC	220VAC/208VAC/240VAC	220VAC/208VAC/240VAC
Voltage accuracy	±5%	±5%	±5%	±5%
Frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Frequency accuracy	±2%	±2%	±2%	±2%
Total harmonic distortion (THD)	≤3% (100% Linear Load)	≤3% (100% Linear Load)	≤3% (100% Linear Load)	≤3% (100% Linear Load)
PF	1.0	1.0	1.0	1.0
Max efficiency	95.5%(PV360V@1/2load)	95.1%(PV360V@1/2load)	97.5%(PV360V@1/2load)	96.5%(PV360V@1/2load)
Over-load	110% <load<150% (±10%):</load<150% 	110% < Load <150% (±10%):	110% < Load <150% (±10%):	110%< Load <150% (±10%):
	Shutdown after 10 seconds	Shutdown after 10 seconds	Shutdown after 10 seconds	Shutdown after 10 seconds
	150% < load < 200% (±10%): Shutdown after 5 seconds	150% <load (±10%):<br="" <200%="">Shutdown after 5 seconds</load>	150% <load (±10%):<br="" 200%="" <="">Shutdown after 5 seconds</load>	150% <load<200% (±10%):<br="">Shutdown after 5 seconds</load<200%>
	200% <load (±10%):<="" th=""><th>200%<load (±10%):<="" th=""><th>200%<load (±10%):<="" th=""><th>200%<load (±10%):<="" th=""></load></th></load></th></load></th></load>	200% <load (±10%):<="" th=""><th>200%<load (±10%):<="" th=""><th>200%<load (±10%):<="" th=""></load></th></load></th></load>	200% <load (±10%):<="" th=""><th>200%<load (±10%):<="" th=""></load></th></load>	200% <load (±10%):<="" th=""></load>
	Shutdown immediately	Shutdown immediately	Shutdown immediately	Shutdown immediately

Protection

Battery over voltage protection	Yes	Yes		Yes	Yes
Battery low voltage protection	Yes	Yes		Yes	Yes
Over-load protection	Yes	Yes		Yes	Yes
Output short circuit protection	Yes	Yes		Yes	Yes
Over-temperature protection	Yes	Yes		Yes	Yes

PHYSICAL				
Dimension(L/W/H)	350/300/100mm	350/300/100mm	350/300/100mm	350/300/100mm
Weight	8kg	9kg	9kg	9kg
Noise	≤48dB	≤48dB	≤48dB	≤48dB
Operating Temperature	-10℃~+55℃	-10℃~+55℃	-10°C~+55°C	-10°C~+55°C
Storage Temperature	-15℃~+60℃	-15℃~+65℃	-15°C~+65°C	-15℃~+65℃
Humidity (Noncondensing)	0~90%	0~90%	0~90%	0~90%
Altitude	≤6000m	≤6000m	≤6000m	≤6000m

Please contact us for 120V version



It can be running without batteries, energy shared from utility and solar to loads at the same time or alternatively.

Without batteries, it can help clients to reduce the whole solar system cost and save electricity fee.



It combines a wide PV input range MPPT controller, can convert solar energy from PV to loads directly and the remaining solar energy converted to batteries synchronously.



When PV output is reduced by clouds or at night, resulting in no surplus PV power available, loads powered by utility, batteries are charged, when utility outage , battereis are discharged.

Solar Off-Grid MPPT Inverter



Main Features

- •Pure sine wave inverter
- •Built-in MPPT solar charge controller
- •Selectable input voltage range for home appliances and personal computers
- Selectable charging current based on applications
- •Configurable AC/Solar input priority via LCD setting
- •Compatible to mains voltage or generator power
- •Auto restart while AC is recovering
- •Overload and short circuit protection
- •Smart battery charger design for optimized battery performance
- •Cold start function

RATED POWER 1000W 1000W 1000W 2000W 2000W 3000W 3000W 4000W 5000W INPUT	Model	1KVA12	1KVA24	1KVA48	2KVA12	2KVA24	2KVA48	3KVA24	3KVA48	4KVA48	5KVA48			
NPUTAC VoltageI 20VAC / 20 VACSelectable Voltage RangeI 20VAC / 20 VACSelectable Voltage RangeSelectable Voltage RangeI 20VAC / 20 VACSelectable Voltage RangeSelectable Voltage RangeOUTPUTCOUTPUTVOLTAGE INTERIATION INTER	RATED POWER	1000W	1000W	1000W	2000W	2000W	2000W	3000W	3000W	4000W	5000W			
AC Voltage120VAC / 230 VAC230 USelectable Voltage RangeU230 USelectable Voltage RangeGrupper RangeUUUUUGrupper RangeUUUUUGrupper RangeUUUUUGrupper RangeUUUUUGrupper Ronge2000WIUSOUTHUSOUTHUSOUTHUSOUTHUSOUTHUSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTHSOUTH <t< th=""><th>INPUT</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></t<>	INPUT													
Selectable Voltage Rangeimage of the selectable interval interva	AC Voltage			120VAC /	230 VAC				230	VAC				
mergenen gene gene gene gene gene gene ge	Selectable Voltage Range					90-28	BOVAC							
OUTPUT AC Voltage (Inverter. Mode) Image: Subject State St	Frequency Range					50 Hz ,	/ 60 Hz							
AC Voltage (inverter. Mode)120/23 UVE ± 362300V $\leq 3000V$ Source 100000Source 1000000Source 1000000Source 1000000Source 10000000Source 1000000000000Source 1000000000000000000000000000000000000	OUTPUT													
Surge Power Image Power Ima	AC Voltage (Inverter. Mode)			120/230	VAC ± 3%				230VA	C ± 3%				
Efficiency (Peak)Image: Image: Im	Surge Power		2000W			4000W		600	W	8000W	10000W			
Transfer TimeImage: Image: I	Efficiency (Peak)		90%-92% 93%											
WaveformOutput BATTERY & AC CHARGERBattery Voltage12VDC24VDC48VDC12VDC24VDC48VDC24VDC48VDCBattery Voltage13.8VDC27.6VDC13.8VDC27.6VDC54VDC54VDC54VDCOvercharge Protection16VDC31VDC62VDC16VDC31VDC62VDC62VDC62VDC60VDCSOLAR CHARGER & AC CHARGET400W800W1500W600W800W1500W1500W3000W3000WMaximum PV Array Power400W800W1500W600W800W1500W1500W37°100VDC72°160VDC72°160VDCVoltage90VDC1050VC1050VC1050VC1050VC1050VC1050VC1060VDC1060VDCMaximum Solar Charge Current30A30A30A30A30A30A30A30A30A60A60AMaximum AC Charge Current90VDC100VDC200200200200200200200200200200200Maximum AC Charge Current500500500500500500500500500500500Maximum AC Charge Current500500500500500500500500500500500Maximum Ac Charge Current500500500500500500500500500500500Maximum Ac Charge Current500500500500500 <th< th=""><th>Transfer Time</th><th></th><th colspan="12"><10ms</th></th<>	Transfer Time		<10ms											
BATTERY & AC CHARGER Battery Voltage 12VDC 24VDC 48VDC 24VDC 48VDC 24VDC Floating Charge Voltage 13.8VDC 27.6VDC 54VDC 13.8VDC 27.6VDC 54VDC 54VDC 62VDC 62VDC 62VDC 62VDC 60VDC Overcharge Protection 16VDC 31VDC 62VDC 16VDC 16VDC 31VDC 62VDC 62VDC 62VDC 62VDC 60VDC SOLAR CHARGER & AC CHARGET V V 800W 1500W 600W 800W 1500W 600W 3000W 3000W Maximum PV Array Power 400W 800W 1500W 600W 800W 1500W 1500W 300W 3000W 3000W MPPT Range @ Operating 20*80VC 37*100VDC 72*160VDC 37*100VDC 72*160VDC 72*160VDC<	Waveform		Pure sine wave											
Battery Voltage 12VDC 24VDC 48VDC 12VDC 24VDC 48VDC 24VDC 48VDC 24VDC 48VDC 24VDC 48VDC 24VDC 48VDC 24VDC 48VDC 24VDC 26VDC 310DC	BATTERY & AC CHARGER													
Floating Charge Voltage 13.8VDC 27.6VDC 54VDC 13.8VDC 27.6VDC 54VDC 27.6VDC 54VDC 54VDC Overcharge Protection 16VDC 31VDC 62VDC 16VDC 31VDC 62VDC 31VDC 62VDC 62VDC <th< th=""><th>Battery Voltage</th><th>12VDC</th><th>24VDC</th><th>48VDC</th><th>12VDC</th><th>24VDC</th><th>48VDC</th><th>24VDC</th><th></th><th colspan="4">48VDC</th></th<>	Battery Voltage	12VDC	24VDC	48VDC	12VDC	24VDC	48VDC	24VDC		48VDC				
Overcharge Protection16VDC31VDC62VDC16VDC31VDC62VDC31VDC62VDC60VDCSOLAR CHARGER & AC CHARGER400W800W1500W600W800W1500W1500W3000W3000WMaximum PV Array Power400W800W1500W600W800W1500W1500W3000W3000WMPPT Range @ Operating Voltage20~80VDC37~100VDC72~160VDC72~160VDC72~160VDC72~160VDC72~160VDCPV Over-voltage Protection (Open Circuit Voltage)90VDC105VDC160VDC105VDC160VDC160VDC160VDC160VDCMaximum Solar Charge Current30A30A30A30A30A50A60A60AMaximum AC Charge Current30A20A20A20A20A20A20A20A20A	Floating Charge Voltage	13.8VDC	27.6VDC	54VDC	13.8VDC	27.6VDC	54VDC	27.6VDC	54VDC					
SOLAR CHARGER & AC CHARGER Maximum PV Array Power 400W 800W 1500W 600W 800W 1500W 1500W 3000W 3000W 3000W MPPT Range @ Operating 20°80VDC 37°100VDC 72°160VDC 20°80VDC 37°100VDC 72°160VDC 20°80VDC 37°100VDC 72°160VDC	Overcharge Protection	16VDC	31VDC	62VDC	16VDC	31VDC	62VDC	31VDC	62VDC	62VDC 60VDC				
Maximum PV Array Power 400W 800W 1500W 800W 1500W 3000W 3000W 3000W MPPT Range @ Operating 20~80VDC 37~100VDC 72~160VDC 20~80VDC 2	SOLAR CHARGER & AC CHARGER													
MPPT Range @ Operating 20~80VDC 37~100VDC 72~160VDC 20~80VDC 37~100VDC 72~160VDC 72~1	Maximum PV Array Power	400W	800W	1500W	600W	800W	1500W	1500W	3000W 3000W					
VoltageImage: Note of the second	MPPT Range @ Operating	20~80VDC	37~100VDC	72~160VDC	20~80VDC	37~100VDC	72~160VDC	37~100VDC	72~160VDC	72~160VDC 72~ 160VDC				
PV Over-voltage Protection (Open Circuit Voltage) 90VDC 105VDC 160VDC 90VDC 105VDC 160VDC	Voltage													
(Open Circuit Voltage)Image: Constraint of the state of th	PV Over-voltage Protection	90VDC	105VDC	160VDC	90VDC	105VDC	160VDC	105VDC	160VDC	160	VDC			
Maximum Solar Charge Current 30A 30A 30A 30A 30A 60A 60A 60A Maximum AC Charge Current	(Open Circuit Voltage)													
Maximum AC Charge Current 10A / 20A 10A / 15A 20A Maximum Charge Current 20A 20A <t< th=""><th>Maximum Solar Charge Current</th><th>30A</th><th>30A</th><th>30A</th><th>30A</th><th>30A</th><th>30A</th><th>60A</th><th>60A</th><th>60</th><th>A</th></t<>	Maximum Solar Charge Current	30A	30A	30A	30A	30A	30A	60A	60A	60	A			
Maximum Charge Current 200 200 200 200 200 200 200 200 200 20	Maximum AC Charge Current							10A / 20A	10A / 15A	20	A			
Maximum Charge Current 30A 30A 30A 30A 30A 30A 30A 30A 30A 70A 70A 80A	Maximum Charge Current	30A	30A	30A	30A	30A	30A	70A	70A	80)A			
Standby Power Consumption 11W	Standby Power Consumption					11	.W							
Maximum Efficiency 98%	Maximum Efficiency					98	3%							
PHYSICAL	PHYSICAL													
Dimension, D x W x H (mm) 370 x230 x 100 455 x 300 x 110	Dimension, D x W x H (mm)			370 x23	0 x 100				455 x 30)0 x 110				
Net Weight (kgs) 4.7 4.7 4.8 4.8 4.8 8.4 8.4 8.5 8.5	Net Weight (kgs)	4.7	4.7	4.7	4.8	4.8	4.8	8.4	8.4	8.5	8.5			
OPERATING ENVIRONMENT	OPERATING ENVIRONMENT													
Humidity (Non-condensing) 5% to 95% Relative Humidity	Humidity (Non-condensing)					5% to 95% Rel	ative Humidity							
Operating Temperature 0°C - 55°C	Operating Temperature					0°C -	55°C							
Storage Temperature -15°C - 60°C	Storage Temperature					-15°C	- 60°C							

Basic System Architecture

The following illustration shows basic application for this inverter/charger. It also includes following devices to have a complete running system:

Generator or Utility.

PV modules

Consult with your system integrator for other possible system architectures depending on your requirements.

This inverter can power all kinds of appliances in home or office environment, including motor-type appliances such as tube light, fan, refrigerator and air conditioner.



MPPT Solar Charge Controller



Main Features

- 30A/40A/50A/60A MPPT solar charge controller
- MPPT technology
- Built-in DSP controller with high performance
- \bullet Automatic battery voltage detection for 12V/24V/36V/48V
- 3-stage charging optimizes battery performance
- Overcharge protection,
- Input PV polarity reverse protection,
- Output limited current protection,
- Over-temperature protection
- Suitable for battery types such as sealed lead acid, vented gel and lithium battery, etc
- V118 or V119 with wifi

Model		30A	40A	50A	60A	80A	100A	120A					
RATED OUTPUT CURREN	т	30A	40A	50A	60A	80A	100A	120A					
Charging mode		3-stage: constan	t current(MPPT)	, constant voltage	, floating								
Battery voltage automatic recognition		12V system (DCS	9V-DC15V) 24\	/ system (DC18V-D	DC29V) 36V sys	tem (DC30V-DC3	9V) 48V system	(DC40V~DC60V)					
Overcharging protection voltage		+2V	+2V	+2V	+2V	+2V	+2V	+2V					
Limited current protection		31A	42A	51A	61A	42A*2	51A*2	61A*2					
Max efficiency		≥98.1%	1%										
PV utilization		≥99%											
INPUT													
Maximum PV Array Power	For 12V Battery	400W	480W	600W	720W	480W*2	600W*2	720W*2					
	For 24V Battery	720W	960W	1200W	1440W	960W*2	1200W*2	1440W*2					
	For 36V Battery	1000W	1400W	1800W	2100W	1400W*2	1800W*2	2100W*2					
	For 48V Battery	1200W	1700W	2200W	2800W	1700W*2	2200W*2	2800W*2					
PV Array Open Circuit Voltage (Voc)	For 12V Battery	y 20~80VDC											
@Operating Voltage	For 24V Battery	37~105VDC											
	For 36V Battery	50~160VDC											
	For 48V Battery	72V~160VDC											
PV Over-voltage Protection (Open Circuit	For 12V Battery	90VDC											
Voltage)	For 24V Battery	105VDC											
	For 36V Battery	· 36V Battery 160VDC											
	For 48V Battery	160VDC											
Ουτρυτ													
Selectable battery type	For 12V/24V/			Vented/ Seale	ed / Gel / NiCd /	Lithium battery							
Absorption Charging Voltage	36V/48V			Refer to I	Batteries chargin	g reference							
Floating Charging Voltage	Battery			Refer to I	Batteries chargin	g reference							
Overcharging protection voltage		+2V	+2V	+2V	+2V	+2V	+2V	+2V					
Limited current protection		31A	42A	51A	61A	42A*2	51A*2	61A*2					
Temperature Coefficient					±0.02%/°C								
Automatic temperature compensation				14.2V- (n	nax temperature	-25℃)*0.3							
Output voltage ripple-peak					100mV								
Output voltage accuracy					≤±1%								
DISPLAY													
LCD display		PV voltage / Output power											
		Battery voltage / Charging current											
				Work	ing mode / Temp	oerature							
					Protection mod	e							

PROTECTION FUNCTION											
Temperature protection	75℃										
Fan-on temperature				>45°	Ê						
Fan-off temperature	<40°C										
Overcharging protection voltage	+2V +2V +2V +2V +2V +2V +2V										
Limited current protection	31A 42A 51A 61A 42A*2 51A*2 61A*2										
PHYSICAL PROPERTIES											
Acoustic noise	≤40dB										
Cooling way	Fan										
Environmental requirements	Meet 2002/95/EC; No cadmium, hydrides or fluorides										
Components	Imported materials, According to EU standards, Industrial grade.										
Humidity (Non-condensing)	5% to 95% Relative Humidity										
Operating Temperature			-	20°C ∼+55°C							
Storage Temperature			-	40°C ∼+75°C							
Dimension, D x W x H (mm)				215x115x50							
Net Weight (kg)				1.1							
Gross weight(Kg)				1.2							
Security Level			According to (CE, PSE, FCC, EMO	, EN60950						
Electromagnetic Compatibility	According to EN61000, EN55022, EN55024										
Enclosure				IP21							

Batteries charging reference

Battery Type	Absorption Voltag	e (Constant voltage	≘)		Floating Voltage					
	12V	24V	36V	48V	12V	24V	36V	48V		
Vented	14.2V	28.6V	42.6	57.2V	13.2V	26.4V	39.6	52.80V		
Sealed	14.4V	28.8V	43.2	57.6V	13.8V	27.6V	41.4	55.2V		
Gel	14.4 V	28.8V	43.2	57.6V	13.8V	27.6V	41.4	55.2V		
NiCd	14.2V	28.6V	42.6	57.2V	14.0V	28.0V	42	56.0V		
Lithium	Defined by users									

THREE-STAGE CHARGING



Lithium MPPT Solar Charge Controller



Main Features

- 30A/40A/50A/60A MPPT solar charge controller
- MPPT technology
- Built-in DSP controller with high performance
- Single voltage for lithium
- PV&Battery BMS start-on
- Great performance for lithium battery
- Overcharge protection
- Input PV polarity reverse protection,
- Over-temperature protection Output limited current protection,
- Suitable for battery types such as lithium and sealed lead acid, vented gel battery, etc
- V120 or V121 with wifi

Model		30A12V	40A12V	50A12V	60A12V	72V30A	96V30A					
		30A24V	40A24V	50A24V	60A24V	72V50A	96V45A					
		30A36V	40A36V	50A36V	60A36V							
		30A48V	40A48V	50A48V	60A48V							
RATED OUTPUT CURRE	INT	30A	40A	50A	60A							
Charging mode		Lithium charging m	Lithium charging mode and 3-stage for Lead-acid battery: constant current(MPPT), constant voltage, floating									
Boot up		From PV and Batte	ery (For 12V system,	from PV firstly.)								
Battery voltage (Not voltage automatic recognition)		12V system (DC9V-I 36V system (DC30V	DC15V) 24V systen -DC39V) 48V syste									
Overcharging protection voltage		+2V	+2V	+2V	+2V	+2V	+2V					
Limited current protection		31A	42A	51A	61A	31A/52A	31A/46A					
Max efficiency		≥98.1%										
PV utilization		≥99%										
INPUT												
Maximum PV Array Power	For 12V Battery	400W	480W	600W	720W							
	For 24V Battery	720W	960W	1200W	1440W							
	For 36V Battery	1000W	1400W	1800W	2100W							
	For 48V Battery	1200W	1700W	2200W	2800W							
	For 72V Battery					2200W/3600W						
	For 96V battery						3000W/4500W					
PV Array Open Circuit Voltage (Voc)	For 12V Battery	20~80VDC										
@Operating Voltage	For 24V Battery	37~105VDC										
	For 36V Battery	50~160VDC										
	For 48V Battery	72V~160VDC										
	For 72V Battery					100V-190V						
	For 96V battery						120V-190V					
PV Over-voltage Protection (Open Circuit	For 12V Battery	90VDC										
Voltage)	For 24V Battery	105VDC										
	For 36V Battery	160VDC										
	For 48V Battery	160VDC										
	For 72V Battery					200V						
	For 96V battery					200V						

OUTPUT													
Selectable battery type	For 12V/24V/			Lithium / Vented	/ Sealed / Gel / NiCd	l battery							
Absorption Charging Voltage	36V/48V			Refer to Batt	eries charging refere	ence							
Floating Charging Voltage	/72V/96V			Refer to Batt	eries charging refere	ence							
Overcharging protection voltage	Battery	+2V	+2V	+2V	+2V	+2V	+2V						
Limited current protection		31A	42A	51A	61A	31A/52A	31A/46A						
Temperature Coefficient					±0.02%/°C								
Automatic temperature compensation			14.2V- (max temperature-25°C) *0.3										
Output voltage ripple-peak			100mV										
Output voltage accuracy			≤±1%										
DISPLAY													
LCD display		PV voltage / Output power											
			Battery voltage / Charging current										
				Working	mode / Temperature	9							
			Protection mode										
PROTECTION FUNCTION													
Temperature protection		75℃											
Fan-on temperature			>45°C										
Fan-off temperature					<40°C								
Overcharging protection voltage		+2V	+2V	+2V	+2V	+2V	+2V						
Limited current protection		31A	42A	51A	61A	31A/52A	31A/46A						
PHYSICAL PROPERTIES													
Acoustic noise				≤40dl	В								
Cooling way				Fan									
Environmental requirements			Meet 20	02/95/EC; No cadmi	um, hydrides or fluor	ides							
Components			Imported mat	terials, According to E	U standards, Industr	rial grade.							
Humidity (Non-condensing)				5% to 95% Relati	ve Humidity								
Operating Temperature				-20°C ~+	-55℃								
Storage Temperature				-40°C ~+	-75℃								
Dimension, D x W x H (mm)				215x115	x50								
Net Weight (kg)				1.1									
Gross weight(Kg)		1.2											
Security Level		According to CE, PSE, FCC, EMC, EN60950											
Electromagnetic Compatibility			Ace	cording to EN61000,	EN55022, EN55024								
Enclosure				IP21									

Batteries charging reference

Battery Type	Absorption Voltage (Constant voltage)						Floating Voltage					
	12V	24V	36V	48V	72V	96V	12V	24V	36V	48V	72V	96V
Vented	14.2V	28.6V	42.6V	57.2V	85.2V	113.6V	13.2V	26.4V	39.6V	52.80V	79.2V	105.6V
Sealed	14.4V	28.8V	43.2V	57.6V	86.4V	115.2V	13.8V	27.6V	41.4V	55.2V	82.8V	110.4V
Gel	14.4 V	28.8V	43.2V	57.6V	86.4V	115.2V	13.8V	27.6V	41.4V	55.2V	82.8V	110.4V
NiCd	14.2V	28.6V	42.6V	57.2V	85.2V	113.6V	14.0V	28.0V	42V	56.0V	84V	112V
Lithium	No need floating voltage and defined by users											



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