



# SOLAR INVERTER



Beijing Multifit Electrical Technology Co.,Ltd  
北京众能力电科技有限公司



Tel:86-010-87227420 Fax:86-010-85885278  
Email: multifit@multifitele.com  
Website: <http://www.multifitele.com>  
Factory Add: 3/F,JieSi Bldg.,6 Keji West Road,  
Hi-Tech Zone 515041,Shantou,Guangdong,China.

Beijing Multifit Electrical Technology Co.,Ltd



# Company Introduction

Beijing Multifit Electrical Technology Co., Ltd. is a high-tech plant for the solar power and renewable energy research, production, sales and construction of photovoltaic power station. We are located in the Chinese capital, the center of the Beijing Economic and Technological Development Zone areas - a beautiful high-tech Fortune of 500 companies Industry park.

Multifit group's main products in Beijing plant are power inverter, micro-grid inverter, Solar panel cleaning robot, PV combiner box, solar controller, LED, Solar street light, solar modules, solar and wind power generation systems and other green energy products; we have another three branch plants in Guangdong province for the production of the solar charger, solar portable light, solar water heater, EPS, UPS, Batteries, Battery charger, wind generator, frequency inverter, softstarter, transformers etc. We undertake the projects related to electrical engineering design and installation and also our company is in strict accordance with the ISO9001: 2008 quality system. some products have the TUV, UL, CE, SONCAP, CCC and other international authoritative certification and national quality inspection certification. and the patents.

Founded in 2009, the company focused on providing world-class, small-scale photovoltaic power plants for civilian solutions and an innovative research and development of renewable energy electrical products. we had cultivated a group of ideals, experience, technical sales and R & D team. Our products are now exported to France, UK, Italy, Hungary, Australia, Yemen, Pakistan, India, Nigeria, Dakar, Ghana, Chile, Dominican Republic Asia and Africa and Latin America. There are more than 50 countries and regions in the world and meet the various needs of different regions' customers. we never stop to try our best to grow up and enhance the customer's satisfaction and awareness.

Multifit means to fit all your needs, step electric energy technological mountain on new heights! The technological tie will be used to send to you and to reach a higher level quality of life. In the future.

Multifit is committed to improve the renewable energy industry and continues to develop more efficient and cost-effective solar solutions to bring more green electricity into our lives.



SUNSHINE FOR YOU MULTIFIT TO ALL







# Qualification Certification



01-06	Solar Inverter
07-17	Inverter With Charger
18-24	Inverter & Controller

## Contents

25-26	Stored Inverter
27-30	Hybrid Inverter With Controller
31-34	Three Phase Inverter







**Solar Inverter**

## Green Sky series Solar Inverter

### Product Characteristic

- High Efficiency/Energy Saving
- Low self-Consumption below 1.2A.It can reach to zero at the energy saving mode.
- Make sure the load capacity is above 10W.or the inverter can not be restarted automatically
- Leading energy saving technology
- With the AVR function.AC voltage fluctuated is within +-5%
- Pure sine wave
- Extreme overload capacity and super load capacity
- Working Appliance: Air-conditioners. refrigerators. water pumps, TV, lights, fans and other household appliances and office appliances etc.
- Durable. LF transformer technology design. It is suitable for the poor working conditions or where the grid power is not stable
- LED display/ LCD display / Digital display
- DC reverse polarity protection

### Performance Characteristic

- CPU Technology control
- Intelligent LED display:Grid power.battery.AC output.Fault.Saving.Low voltage. Battery capacity.
- Intelligent battery management for maximum battery life
- 220V/110V AC 50/60Hz is optional
- It can work with the generator
- Intelligent fan control mode.The fan work at Temperature  $\geq 30^{\circ}\text{C}$ .the inverter will protect by itself at temperature  $\geq 100^{\circ}\text{C}$

## LCD Display Data

Input/Output voltage	Output Power	Battery Voltage	Energy saving
Language Version	Charging voltage	Battery Capacity	Battery type
Chinese/English/French/Russian	setting	setting	setting

## Communication Data

Current	Rated power of load	Input/output voltage	Frequency
Battery capacity	Temperature	Remote control operation	Record of history data







## Technical Data Greensky

AC output Load	Greensky 500W	Greensky 800W
Nominal AC voltage	220V/200-240V	220V/200-240V
Optional 220V/120V	120V/105V-132V	120V/105V-132V
Nominal AC frequency	50Hz/60Hz	50Hz/60Hz
Continuous AC power for 3 hours 25°C	500W	800W
Continuous AC power 25°C	500W	800W
Nominal AC current / Max.AC current(peak)	2.28A/6.81A 1ms 4.15A/12.5A 1ms	3.63A/10.9A 1ms 6.66A/20A 1ms
THD output voltage	≤3%	≤3%
Power Factor	1	1
<b>Battery DC input</b>		
Battery voltage/range	12V/10-16V	12V/10-16V
Optional	24V/20-32V 48V/40-64V	24V/20-32V 48V/40-64V
Battery type/Battery Capacity	Lead acid 100-1000Ah	Lead acid 100-1000Ah
<b>Efficiency/Self-consumption</b>		
Max. efficiency	>90%	>90%
Self-consumption with no load	0.5A	0.6A
Self-consumption with no load /standby/for LCD type only	0.1A	0.1A
<b>Full intellective protection</b>		
	Over voltage/AC short circuit/overload/battery discharge voltage/battery over voltage/over temperature/over current/overheat protection/ dc polarity label	
Dimension (L×W×H) mm	384×190×142	424×190×177
Net Weight kgs	15	17
Operating temperature range	-20°C ~ 45°C	-20°C ~ 45°C
Degree of protection according to IEC60529	IP20	IP20
Noise emission typical	≤30dB (1M)	≤30dB (1M)
Humidity Percent range	0% ~ 95%	0% ~ 95%
<b>Accessories</b>		
DC terminal	Anderson connector	Anderson connector
AC terminal	Europe terminal	Europe terminal
Warranty	2year	2year
Certificate	CE/ISO9001	CE/ISO9001
Instruction Manual	yes	yes
<b>Optional Function</b>		
Battery Cable	Optional	Optional
Interface USB/RS232	Optional	Optional
SNMP Card	Optional	Optional
Software CD	Optional	Optional
Internet monitor	Optional	Optional
Remoted control	Optional	Optional
DC reverse polarity protection	Optional	Optional
Automatically restart after cut off	Optional	Optional
Split phase 220V/110V±5%:output	Optional	Optional
Inverter mode/silence	Optional	Optional
LCD Display	Optional	Optional

## Technical Data Greensky

AC output Load	Greensky 1000W	Greensky 1500W	Greensky 2000W
Nominal AC voltage	220V/200-240V	220V/200-240V	220V/200-240V
Optional 220V/120V	120V/105V-132V	120V/105V-132V	120V/105V-132V
Nominal AC frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Continuous AC power for 3 hours 25°C	1050W	1500W	2100W
Continuous AC power 25°C	1000W	1500W	2000W
Nominal AC current/ Max.AC current(peak)	4.55A/13.63A 1ms 8.34A/24.9A 1ms	6.85A/20.45A 1ms 12.50A/37.55A 1ms	9.10A/27.28 1ms 16.67A/50A 1ms
THD output voltage	≤3%	≤3%	≤3%
Power Factor	1.0	1.0	1.0
<b>Battery DC input</b>			
Battery voltage/range	12V/10-16V	12V/10-16V	12V/10-16V
Optional	24V/20-32V 48V/40-64V	24V/20-32V 48V/40-64V	24V/20-32V 48V/40-64V
Battery type/Battery Capacity	Lead acid 100-1000Ah	Lead acid 100-1000Ah	Lead acid 100-1000Ah
<b>Efficiency/Self-consumption</b>			
Max. efficiency	>90%	>90%	>90%
Self-consumption with no load	12W	15W	20W
Self-consumption with no load /standby/for LCD type only	5W	5W	5W
<b>Full intellective protection</b>			
	Over voltage/AC short circuit/overload/battery discharge voltage/battery over voltage/over temperature/ over current/overheat protection/ dc polarity label		
Dimension (L×W×H) mm	424×190×177	456×250×196	456×250×196
Net Weight kgs	25	27	29
Operating temperature range	-20°C ~ 45°C	-20°C ~ 45°C	-20°C ~ 45°C
Degree of protection according to IEC60529	IP20	IP20	IP20
Noise emission typical	≤30dB (1M)	≤30dB (1M)	≤30dB (1M)
Humidity Percent range	0% ~ 95%	0% ~ 95%	0% ~ 95%
<b>Accessories</b>			
DC terminal	Anderson connector	Anderson connector	Anderson connector
AC terminal	Europe terminal	Europe terminal	Europe terminal
Warranty	2year	2year	2year
Certificate	CE/ISO9001	CE/ISO9001	CE/ISO9001
Instruction Manual	yes	yes	yes
<b>Optional Function</b>			
Battery Cable	Optional	Optional	Optional
Interface USB/RS232	Optional	Optional	Optional
SNMP Card	Optional	Optional	Optional
Software CD	Optional	Optional	Optional
Internet monitor	Optional	Optional	Optional
Remoted control	Optional	Optional	Optional
DC reverse polarity protection	Optional	Optional	Optional
Automatically restart after cut off	Optional	Optional	Optional
Split phase 220V/110V±5%:output	Optional	Optional	Optional
Inverter mode/silence	Optional	Optional	Optional
LCD Display	Optional	Optional	Optional



# MULTIFIT

## Technical Data Greensky

AC output Load	Greensky 3000W	Greensky 4000W
Nominal AC voltage	220V/200-240V	220V/200-240V
Optional 220V/120V	120V/105V-132V	120V/105V-132V
Nominal AC frequency	50Hz/60Hz	50Hz/60Hz
Continuous AC power for 3 hours 25°C	3000W	4200W
Continuous AC power 25°C	3000W	4000W
Nominal AC current/ Max.AC current(peak)	13.64A/40.91A 1ms 25.0A/75.0A 1ms	18.55A/54.63A 1ms 33.33A/99.99A 1ms
THD output voltage	≤3%	≤3%
Power Factor	1.0	1.0
Battery DC input		
Battery voltage/range	12V/10-16V	24V/20-32V
Optional	24V/20-32V 48V/40-64V	48V/40-64V
Battery type/Battery Capacity	Lead acid 100-1000Ah	Lead acid 100-1000Ah
Efficiency/Self-consumption		
Max. efficiency	>90%	>90%
Self-consumption with no load	35W	42W
Self-consumption with no load /standby/for LCD type only	5W	5W
Full intellective protection	Over voltage/AC short circuit/overload/battery discharge voltage/battery over voltage/over temperature/over current/overheat protection/ dc polarity label	
Dimension (L×W×H) mm	540×250×196	540×250×196
Net Weight kgs	32	34
Operating temperature range	-20°C ~ 45°C	-20°C ~ 45°C
Degree of protection according to IEC60529	IP20	IP20
Noise emission typical	≤30dB (1M)	≤30dB (1M)
Humidity Percent range	0% ~ 95%	0% ~ 95%
Accessories		
DC terminal	Anderson connector	Anderson connector
AC terminal	Europe terminal	Europe terminal
Warranty	2year	2year
Certificate	CE/ISO9001	CE/ISO9001
Instruction Manual	yes	yes
Optional Function		
Battery Cable	Optional	Optional
Interface USB/RS232	Optional	Optional
SNMP Card	Optional	Optional
Software CD	Optional	Optional
Internet monitor	Optional	Optional
Remoted control	Optional	Optional
DC reverse polarity protection	Optional	Optional
Automatically restart after cut off	Optional	Optional
Split phase 220V/110V±5%:output	Optional	Optional
Inverter mode/silence	Optional	Optional
LCD Display	Optional	Optional



## Technical Data Greensky

AC output Load	Greensky 5000W	Greensky 6000W
Nominal AC voltage	220V/200-240V	220V/200-240V
Optional 220V/120V	120V/105V-132V	120V/105V-132V
Nominal AC frequency	50Hz/60Hz	50Hz/60Hz
Continuous AC power for 3 hours 25°C	5000W	6000W
Continuous AC power 25°C	5000W	6000W
Nominal AC current/ Max.AC current(peak)	22.78A/68.18A 1ms 41.67A/125.00A 1ms	27.28A/81.81 1ms 50A/150A 1ms
THD output voltage	≤3%	≤3%
Power Factor	1.0	1.0
Battery DC input		
Battery voltage/range	48V/40-64V	48V/40-64V
Optional		
Battery type/Battery Capacity	Lead acid 100-1000Ah	Lead acid 100-1000Ah
Charge control mode	Lead acid 100-1000Ah	Lead acid 100-1000Ah
Efficiency/Self-consumption		
Max. efficiency	>90%	>90%
Self-consumption with no load	45W	50W
Self-consumption with no load /standby/for LCD type only	5W	5W
Full intellective protection	Over voltage/AC short circuit/overload/battery discharge voltage/battery over voltage/over temperature/over current/overheat protection/ dc polarity label	
Dimension (L×W×H) mm	540×250×196	540×250×196
Net Weight kgs	40	42
Operating temperature range	-20°C ~ 45°C	-20°C ~ 45°C
Degree of protection according to IEC60529	IP20	IP20
Noise emission typical	≤30dB (1M)	≤30dB (1M)
Humidity Percent range	0% ~ 95%	0% ~ 95%
Accessories		
DC terminal	Anderson connector	Anderson connector
AC terminal	Europe terminal	Europe terminal
Warranty	2year	2year
Certificate	CE/ISO9001	CE/ISO9001
Instruction Manual	yes	yes
Optional Function		
Battery Cable	Optional	Optional
Interface USB/RS232	Optional	Optional
SNMP Card	Optional	Optional
Software CD	Optional	Optional
Internet monitor	Optional	Optional
Remoted control	Optional	Optional
DC reverse polarity protection	Optional	Optional
Automatically restart after cut off	Optional	Optional
Split phase 220V/110V±5%:output	Optional	Optional
Inverter mode/silence	Optional	Optional
LCD Display	Optional	Optional



## POWER SUN series Inverter with Charger

### Product Characteristic

- USB Output and Mobile charge
- High Efficiency/Energy Saving
- Low self-Consumption below 1.2A.It can reach to zero at the energy saving mode.
- Make sure the load capacity is above 10W.or the inverter can not be restarted automatically
- Leading energy saving technology
- With the AVR function.AC voltage fluctuation is within +-5%
- Pure sine wave
- Extreme overload capacity and super load capacity
- Working Appliance:Air-conditioners, refrigerators, water pumps, TV, lights,fans and other household appliances and office appliances etc.
- Durable LF transformer technology design.It is suitable for the poor working conditions or where the grid power is not stable
- LED display/ LCD display / Digital display
- DC reverse polarity protection

### Performance Characteristic

- CPU Technology control
- Big Charging current up to 70Amp.
- Intelligent LED/LCD display: Grid power, battery, AC output, Fault, Saving,
- Low voltage, Charging.
- Charging curren.Battery capacity.
- Intelligent battery management for maximum battery life
- Automatically switch between the grid and inverter mode
- Transfer time is below 4 ms if the grid power is cut off
- 220V/110V AC 50/60Hz is optional
- It can work with the generator
- Intelligent fan control mode.The fan work at Temperature  $\geq 30^{\circ}\text{C}$  .the inverter will protect by itself at temperature  $\geq 100^{\circ}\text{C}$

### LCD Display Data

Input/Output voltage	Output Power	Battery Voltage	Charge current	Input Frequency	Charge current setting
Language Version :	Discharging Protection	Battery Capacity setting	Battery type setting	Solar Prior Grid prior setting	Energy saving
Chinese/English/French/Russian	Voltage setting				

### Communication Data

Current	Rated power of load	Input/output voltage	Frequency
Battery capacity	Temperature	Remote control operation	Record of history data

## Power Sun Series



Inverter with Charger

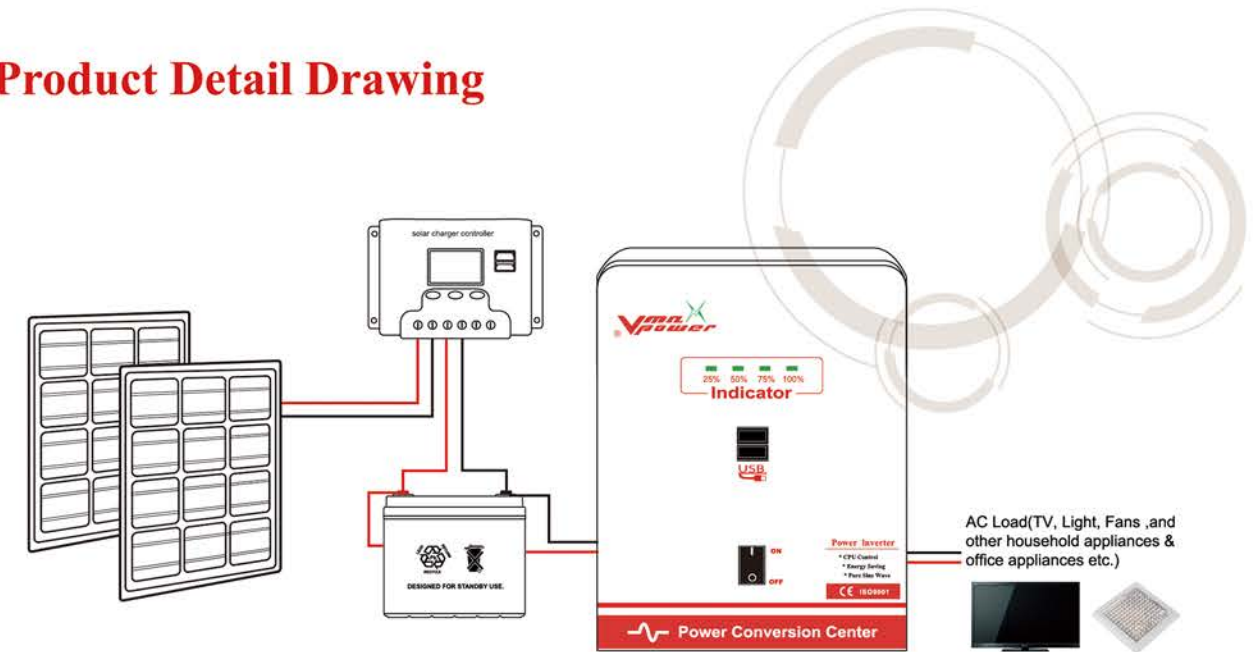
Inverter with Charger



## Technical Data Power Sun

Model	VMI-D 300W	VMI-D 500W	VMI-D 800W	VMI-D 1000W
<b>AC output Load</b>				
Nominal AC voltage	220V/200-240V	220V/200-240V	220V/200-240V	220V/200-240V
Optional 220V/120V	120V/105V-132V	120V/105V-132V	120V/105V-132V	120V/105V-132V
Nominal AC frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Continuous AC power for 3 hours 25°C	300W	500W	800W	1000W
Continuous AC power 25°C	260W	450W	720W	900W
Nominal AC current/Max.AC current(peak)	1.2A/3.6A 1ms 2.2A/6A 1ms	2.0A/6.0A 1ms 3.75A/11.25A 1ms	3.27A/9.8A 1ms 6.0A/18A 1ms	4.1A/12.3A 1ms 7.5A/22.5A 1ms
THD output voltage	≤3%	≤3%	≤3%	≤3%
Power Factor	0.9	0.9	0.9	0.9
<b>AC input ( generator or grid)</b>				
AC input voltage/range	220V/165-270V 120V/105V-132V	220V/165-270V 120V/105V-132V	220V/165-270V 120V/105V-132V	220V/165-270V 120V/105V-132V
AC input frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
<b>Battery DC input</b>				
Battery voltage/range Optional	12V/10-16V 24V/20-32V 48V/40-64V	12V/10-16V 24V/20-32V 48V/40-64V	12V/10-16V 24V/20-32V 48V/40-64V	12V/10-16V 24V/20-32V 48V/40-64V
Max. battery charging current/continuous charging current at 25°C	30A/10-30A	30A/10-30A	30A/10-30A	30A/10-30A
Battery type/Battery Capacity	Lead acid 100-1000Ah	Lead acid 100-1000Ah	Lead acid 100-1000Ah	Lead acid 100-1000Ah
Charge control mode	3 stage	3 stage	3 stage	3 stage
<b>Efficiency/Self-consumption</b>				
Max. efficiency	>85%	>85%	>85%	>85%
Self-consumption with no load	0.7A	0.7A	0.8A	1.0A
Self-consumption with no load /standby/for LCD type only	0.1A	0.1A	0.1A	0.1A
Full intellective protection	Over voltage/over charge/AC short circuit/overload/battery discharge voltage/battery over voltage/over temperature/over current/overheat protection/ dc polarity label			
Transfer time	≤ 4ms			
Dimension(L×W×H) mm	420×180×150	420×180×150	420×180×150	420×180×150
Net Weight kgs	8	12	14	16
Operating temperature range	-20°C ~ 45°C	-20°C ~ 45°C	-20°C ~ 40°C	-20°C ~ 45°C
Degree of protection according to IEC60529	IP20	IP20	IP20	IP20
Noise emission typical	≤30dB (1M)	≤30dB (1M)	≤30dB (1M)	≤30dB (1M)
Humidity Percent range	0% ~ 95%	0% ~ 95%	0% ~ 95%	0% ~ 95%
<b>Accessories</b>				
DC terminal	Anderson connector	Anderson connector	Anderson connector	Anderson connector
AC terminal	Europe terminal	Europe terminal	Europe terminal	Europe terminal
Warranty	2year	2year	2year	2year
Certificate	CE/ISO9001	CE/ISO9001	CE/ISO9001	CE/ISO9001
Instruction Manual	yes	yes	yes	yes
<b>Optional Function</b>				
Battery Cable	Optional	Optional	Optional	Optional
Interface USB/RS232	Optional	Optional	Optional	Optional
SNMP Card	Optional	Optional	Optional	Optional
Software CD	Optional	Optional	Optional	Optional
Internet monitor	Optional	Optional	Optional	Optional
Remote control	Optional	Optional	Optional	Optional
DC reverse polarity protection	Optional	Optional	Optional	Optional
Automatically restart after cut off	Optional	Optional	Optional	Optional
Split phase 220V/110V+-5%:output	Optional	Optional	Optional	Optional
Inverter mode/silence	Optional	Optional	Optional	Optional
LCD Display	Optional	Optional	Optional	Optional

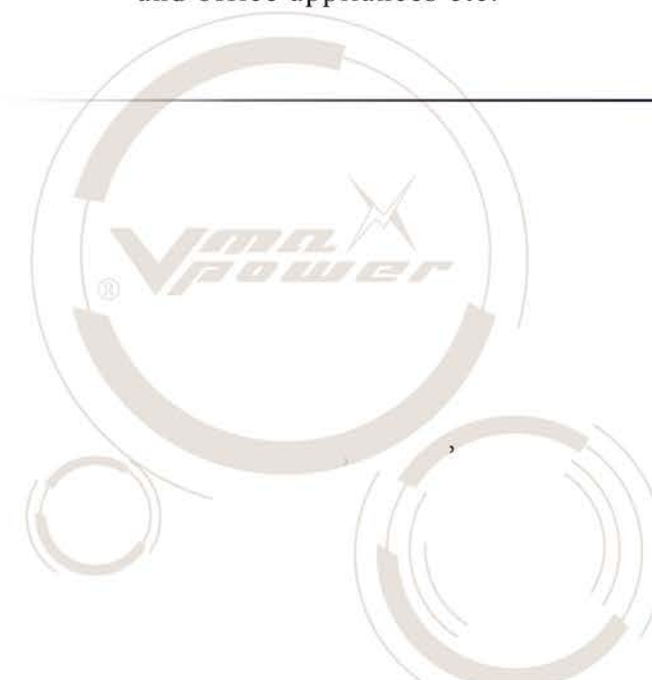
## Product Detail Drawing



**PowerSun series** Inverter can be widely used for the solar power system, or Inverter+battery as the back up power system when the electricity power are cut off.

It includes the solar panel, charge controller, PowerSun Inverter, Battery, panel mounting, cable Etc.

Application: Refrigerator.TV .Light. fans and other household appliances and office appliances etc.





## POWER SUN series Inverter with Charger



### Product Characteristic

- High Efficiency/Energy Saving
- Low self-Consumption below 1.2A.It can reach to zero at the energy saving mode.
- Make sure the load capacity is above 10W.or the inverter can not be restarted automatically
- Leading energy saving technology
- With the AVR function.AC voltage fluctuated is within  $\pm 5\%$
- Pure sine wave
- Extreme overload capacity and super load capacity
- Working Appliance: Air-conditioners. refrigerators. water pumps, TV, lights, fans and other household appliances and office appliances etc.
- Durable. LF transformer technology design. It is suitable for the poor working conditions or where the grid power is not stable
- LED display/ LCD display / Digital display
- DC reverse polarity protection

### Performance Characteristic

- CPU Technology control
- Large charging current. up to 70Amp.
- Intelligent LED/LCD display:Grid power.battery.AC output.Fault.Saving.Low voltage.Charging. Charging current.Battery capacity.
- Intelligent battery management for maximum battery life
- Automatically switch between the grid and inverter mode
- Transfer time is below 4 ms if the grid power is cut off
- 220V/110V AC 50/60Hz is optional
- It can work with the generator
- Intelligent fan control mode.The fan work at Temperature  $\geq 30^{\circ}\text{C}$ .the inverter will protect by itself at temperature  $\geq 100^{\circ}\text{C}$

### LCD Display Data

Input/Output voltage	Output Power	Battery Voltage	Charge current	Input Frequency	Charge current setting
Language Version : Chinese/English/French/Russian	Discharging Protection Voltage Setting	Battery Capacity setting	Battery type setting	Solar Prior Grid prior setting	Energy saving

### Communication Data

Current	Rated power of load	Input/output voltage	Frequency
Battery capacity	Temperature	Remote control operation	Record of history data





## Technical Data Power Sun

AC output Load	VMI-D 500W	VMI-D 800W	VMI-D 1000W
Nominal AC voltage	220V/200-240V	220V/200-240V	220V/200-240V
Optional 220V/120V	120V/105V-132V	120V/105V-132V	120V/105V-132V
Nominal AC frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Continuous AC power for 3 hours 25°C	500W	800W	1000W
Continuous AC power 25°C	450W	720W	900W
Nominal AC current / Max.AC current(peak)	2.0A/6.0A 1ms 3.75A/11.25A 1ms	3.27A/9.8A 1ms 6.0A/18A 1ms	4.1A/12.3A 1ms 7.5A/22.5A 1ms
THD output voltage	≤3%	≤3%	≤3%
Power Factor	0.9	0.9	0.9
<b>AC input (generator or grid)</b>			
AC input voltage/range	220V/165-270V 120V/105V-132V	220V/165-270V 120V/105V-132V	220V/165-270V 120V/105V-132V
AC input frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
<b>Battery DC input</b>			
Battery voltage/range	12V/10-16V	12V/10-16V	12V/10-16V
Optional	24V/20-32V 48V/40-64V	24V/20-32V 48V/40-64V	24V/20-32V 48V/40-64V
Max.battery charging current/ continuous charging current at 25°C	30A/10-30A	30A/10-30A	30A/10-30A
Battery type/Battery Capacity	Lead acid 100-1000Ah	Lead acid 100-1000Ah	Lead acid 100-1000Ah
Charge control mode	3 stage	3 stage	3 stage
<b>Efficiency/Self-consumption</b>			
Max. efficiency	>85%	>85%	>85%
Self-consumption with no load	0.7A	0.8A	1.0A
Self-consumption with no load /standby/for LCD type only	0.1A	0.1A	0.1A
<b>Full intellectual protection</b>			
	Over voltage/AC short circuit/overload/battery discharge voltage/battery over voltage/over temperature/over current/overheat protection/ dc polarity label		
Transfer time	≤ 4ms		
Dimension (L×W×H) mm	384×190×142	424×190×177	424×190×177
Net Weight kgs	15	17	19
Operating temperature range	-20°C~45°C	-20°C~45°C	-20°C~45°C
Degree of protection according to IEC60529	IP20	IP20	IP20
Noise emission typical	≤30dB (1M)		
Humidity Percent range	0% ~ 95%		
<b>Accessories</b>			
DC terminal	Anderson connector	Anderson connector	Anderson connector
AC terminal	Europe terminal	Europe terminal	Europe terminal
Warranty	2year		
Certificate	CE/ISO9001		
Instruction Manual	yes		
<b>Optional Function</b>			
Battery Cable	Optional	Optional	Optional
Interface USB/RS232	Optional	Optional	Optional
SNMP Card	Optional	Optional	Optional
Software CD	Optional	Optional	Optional
Internet monitor	Optional	Optional	Optional
Remoted control	Optional	Optional	Optional
DC reverse polarity protection	Optional	Optional	Optional
Automatically restart after cut off	Optional	Optional	Optional
Split phase 220V/110V±5%:output	Optional	Optional	Optional
Inverter mode/silence	Optional	Optional	Optional
LCD Display	Optional	Optional	Optional

## Technical Data Power Sun

AC output Load	VMI-D 1500W	VMI-D 2000W
Nominal AC voltage	220V/200-240V	220V/200-240V
Optional 220V/120V	120V/105V-132V	120V/105V-132V
Nominal AC frequency	50Hz/60Hz	50Hz/60Hz
Continuous AC power for 3 hours 25°C	1500W	2000W
Continuous AC power 25°C	1350W	1800W
Nominal AC current / Max.AC current(peak)	6.15A/18.5A 1ms 11.25A/33.75A 1ms	8.17A/24.55 1ms 15.0A/45A 1ms
THD output voltage	≤3%	≤3%
Power Factor	0.9	0.9
<b>AC input (generator or grid)</b>		
AC input voltage/range	220V/165-270V 120V/105V-132V	220V/165-270V 120V/105V-132V
AC input frequency	50Hz/60Hz	50Hz/60Hz
<b>Battery DC input</b>		
Battery voltage/range	12V/10-16V	12V/10-16V
Optional	24V/20-32V 48V/40-64V	24V/20-32V 48V/40-64V
Max.battery charging current / continuous charging current at 25°C	30A/10-30A	30A/10-30A
Battery type/Battery Capacity	Lead acid 100-1000Ah	Lead acid 100-1000Ah
Charge control mode	3 stage	3 stage
<b>Efficiency/Self-consumption</b>		
Max. efficiency	>85%	>85%
Self-consumption with no load	20W	25W
Self-consumption with no load /standby/for LCD type only	5W	5W
<b>Full intellectual protection</b>		
	Over voltage/AC short circuit/overload/battery discharge voltage/battery over voltage/over temperature/over current/overheat protection/ dc polarity label	
Transfer time	≤ 4ms	
Dimension (L×W×H) mm	456×250×196	456×250×196
Net Weight kgs	24	26
Operating temperature range	-20°C ~ 45°C	
Degree of protection according to IEC60529	IP20	
Noise emission typical	≤30dB (1M)	
Humidity Percent range	0% ~ 95%	
<b>Accessories</b>		
DC terminal	Anderson connector	Anderson connector
AC terminal	Europe terminal	Europe terminal
Warranty	2year	
Certificate	CE/ISO9001	
Instruction Manual	yes	
<b>Optional Function</b>		
Battery Cable	Optional	Optional
Interface USB/RS232	Optional	Optional
SNMP Card	Optional	Optional
Software CD	Optional	Optional
Internet monitor	Optional	Optional
Remoted control	Optional	Optional
DC reverse polarity protection	Optional	Optional
Automatically restart after cut off	Optional	Optional
Split phase 220V/110V±5%:output	Optional	Optional
Inverter mode/silence	Optional	Optional
LCD Display	Optional	Optional



# MULTIFIT

## Technical Data Power Sun

AC output Load	VMI-D 3000W	VMI-D 4000W	VMI-D 5000W
Nominal AC voltage	220V/200-240V	220V/200-240V	220V/200-240V
Optional 220V/120V	120V/105V-132V	120V/105V-132V	120V/105V-132V
Nominal AC frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Continuous AC power for 3 hours 25°C	2700W	3600W	4500W
Continuous AC power 25°C	2400W	3200W	4000W
Nominal AC current / Max.AC current(peak)	10.91A/32.73A 1ms 20.0A/60.0A 1ms	14.55A/43.63A 1ms 26.66A/80.0A 1ms	18.19A/54.55A 1ms 33.33A/99.99A 1ms
THD output voltage	≤3%	≤3%	≤3%
Power Factor	0.8	0.8	0.8
<b>AC input ( generator or grid)</b>			
AC input voltage/range	220V/165-270V 120V/105V-132V	220V/165-270V 120V/105V-132V	220V/165-270V 120V/105V-132V
AC input frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
<b>Battery DC input</b>			
Battery voltage/range	12V/10-16V	24V/20-32V	24V/20-32V
Optional	24V/20-32V 48V/40-64V	48V/40-64V	48V/40-64V
Max.battery charging current / continuous charging current at 25°C	30A/10-30A/50A	30A/10-30A/50A	30A/10-30A/50A
Battery type/Battery Capacity	Lead acid 100-1000Ah	Lead acid 100-1000Ah	Lead acid 100-1000Ah
Charge control mode	3 stage	3 stage	3 stage
<b>Efficiency/Self-consumption</b>			
Max. efficiency	>85%	>85%	>85%
Self-consumption with no load	30W	30W	30W
Self-consumption with no load /standby/for LCD type only	5W	5W	6W
<b>Full intellectual protection</b> Over voltage/AC short circuit/overload/battery discharge voltage/battery over voltage /over temperature/over current/overheat protection/ dc polarity label			
Transfer time	≤ 4ms		
Dimension (L×W×H)mm	540×250×196	540×250×196	540×250×196
Net Weight kgs	29	32	36
Operating temperature range	-20°C~45°C	-20°C~45°C	-20°C~45°C
Degree of protection according to IEC60529	IP20	IP20	IP20
Noise emission typical	≤30dB (1M)	≤30dB (1M)	≤30dB (1M)
Humidity Percent range	0% ~ 95%	0% ~ 95%	0% ~ 95%
<b>Accessories</b>			
DC terminal	Anderson connector	Anderson connector	Anderson connector
AC terminal	Europe terminal	Europe terminal	Europe terminal
Warranty	2year	2year	2year
Certificate	CE/ISO9001	CE/ISO9001	CE/ISO9001
Instruction Manual	yes	yes	yes
<b>Optional Function</b>			
Battery Cable	Optional	Optional	Optional
Interface USB/RS232	Optional	Optional	Optional
SNMP Card	Optional	Optional	Optional
Software CD	Optional	Optional	Optional
Internet monitor	Optional	Optional	Optional
Remoted control	Optional	Optional	Optional
DC reverse polarity protection	Optional	Optional	Optional
Automatically restart after cut off	Optional	Optional	Optional
Split phase 220V/110V±5%:output	Optional	Optional	Optional
Inverter mode/silence	Optional	Optional	Optional
LCD Display	Optional	Optional	Optional

## Technical Data Power Sun

AC output Load	VMI-D 6000W	VMI-D 8000W
Nominal AC voltage	220V/200-240V	220V/200-240V
Optional 220V/120V	120V/105V-132V	120V/105V-132V
Nominal AC frequency	50Hz/60Hz	50Hz/60Hz
Continuous AC power for 3 hours 25°C	5400W	7000W
Continuous AC power 25°C	5000W	6000W
Nominal AC current / Max.AC current(peak)	22.78A/68.18A 1ms 41.67A/125.00A 1ms	27.28A/81.81 1ms 50A/150A 1ms
THD output voltage	≤3%	≤3%
Power Factor	0.8	0.8
<b>AC input ( generator or grid)</b>		
AC input voltage/range	220V/165-270V 120V/105V-132V	220V/165-270V 120V/105V-132V
AC input frequency	50Hz/60Hz	50Hz/60Hz
<b>Battery DC input</b>		
Battery voltage/range	24V/20-32V	48V/40-64V
Optional	48V/40-64V	
Max.battery charging current/continuous charging current at 25°C	30A/10-30A	30A/10-30A
Battery type/Battery Capacity	Lead acid 100-1000Ah	Lead acid 100-1000Ah
Charge control mode	3 stage	3 stage
<b>Efficiency/Self-consumption</b>		
Max. efficiency	>85%	>85%
Self-consumption with no load	35W	50W
Self-consumption with no load /standby/for LCD type only	5W	5W
<b>Full intellectual protection</b> Over voltage/AC short circuit/overload/battery discharge voltage/battery over voltage /over temperature/over current/overheat protection/ dc polarity label		
Transfer time	≤ 4ms	≤ 4ms
Dimension (L×W×H) mm	590×270×196	590×270×196
Net Weight kgs	40	42
Operating temperature range	-20°C ~ 45°C	-20°C ~ 45°C
Degree of protection according to IEC60529	IP20	IP20
Noise emission typical	≤30dB (1M)	≤30dB (1M)
Humidity Percent range	0% ~ 95%	0% ~ 95%
<b>Accessories</b>		
DC terminal	Anderson connector	Anderson connector
AC terminal	Europe terminal	Europe terminal
Warranty	2year	2year
Certificate	CE/ISO9001	CE/ISO9001
Instruction Manual	yes	yes
<b>Optional Function</b>		
Battery Cable	Optional	Optional
Interface USB/RS232	Optional	Optional
SNMP Card	Optional	Optional
Software CD	Optional	Optional
Internet monitor	Optional	Optional
Remoted control	Optional	Optional
DC reverse polarity protection	Optional	Optional
Automatically restart after cut off	Optional	Optional
Split phase 220V/110V±5%:output	Optional	Optional
Inverter mode/silence	Optional	Optional
LCD Display	Optional	Optional

Inverter with Charger

Inverter with Charger



# MULTIFIT

## Technical Data Power Sun

AC output Load	VMI-D 10000W	VMI-D 12000W
Nominal AC voltage	220V/200-240V	220V/200-240V
Optional 220V/120V	120V/105V-132V	120V/105V-132V
Nominal AC frequency	50Hz/60Hz	50Hz/60Hz
Continuous AC power for 3 hours 25°C	8000W	10000W
Continuous AC power 25°C	8000W	10000W
Nominal AC current/ Max.AC current(peak)	36.38A/109.26A 1ms 72.67A/215.00A 1ms	45.60A/136.80 1ms 90A/270A 1ms
THD output voltage	≤3%	≤3%
Power Factor	0.8	0.8
AC input (generator or grid)		
AC input voltage/range	220V/165-270V 120V/105V-132V	220V/165-270V 120V/105V-132V
AC input frequency	50Hz/60Hz	50Hz/60Hz
Battery DC input		
Battery voltage/rangeOptional	48V/40-64V	48V/40-64V
Max.battery charging current/continuous charging current at 25°C	30A/10-30A	30A/10-30A
Battery type/Battery Capacity	Lead acid 100-1000Ah	Lead acid 100-1000Ah
Charge control mode	3 stage	3 stage
Efficiency/Self-consumption		
Max. efficiency	>85%	>85%
Self-consumption with no load	70W	80W
Self-consumption with no load /standby/for LCD type only	5W	5W
Full intellectual protection	Over voltage/AC short circuit/overload/battery discharge voltage/ battery over voltage/over temperature/over current/overheat protection/ dc polarity label	
Transfer time	≤ 4ms	≤ 4ms
Dimension (L×W×H) mm	450×444×225	450×444×225
Net Weight kgs	55	68
Operating temperature range	-20°C~45°C	-20°C~45°C
Degree of protection according to IEC60529	IP20	IP20
Noise emission typical	≤30dB (1M)	≤30dB (1M)
Humidity Percent range	0% ~ 95%	0% ~ 95%
Accessories		
DC terminal	Anderson connector	Anderson connector
AC terminal	Europe terminal	Europe terminal
Warranty	2year	2year
Certificate	CE/ISO9001	CE/ISO9001
Instruction Manual	yes	yes
Optional Function		
Battery Cable	Optional	Optional
Interface USB/RS232	Optional	Optional
SNMP Card	Optional	Optional
Software CD	Optional	Optional
Internet monitor	Optional	Optional
Remoted control	Optional	Optional
DC reverse polarity protection	Optional	Optional
Automatically restart after cut off	Optional	Optional
Split phase 220V/110V+-5%:output	Optional	Optional
Inverter mode/silence	Optional	Optional
LCD Display	Optional	Optional

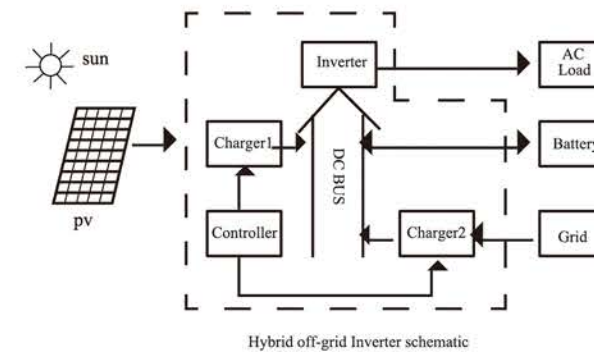
Inverter with charger

## SUNINVM MPPT series

### Solar/Grid Hybrid Inverter with Charger and MPPT Solar charge controller

#### 1. System Introduction

Solar/Grid Hybrid Inverter with Charger and MPPT Solar charge controller system is a set of battery charging and discharging control, PV mains switch control and inverter control in one multi functional integrated system, mainly including PV array, grid, battery, hybrid off-grid inverter and the AC load, PV array absorption of solar radiation and translate into electrical energy to provide power for the entire system, utility power switch over and Inverting control function, also could converting DC power from battery to supply power for AC loads. System Priority mode is PV mode. PV controller and Grid charger achieves the intelligent battery -charging control. The inverter inverts the DC to AC for the load power supplying ;and automatic control the start-stop of Grid charger if needed.the best to use the solar energy and the continuous demand of electricity. It's the preferred solution to solve the public grid or less developed areas residents daily electricity



#### 2. Internal structure

Hybrid Inverter including PV Charger, Grid Charger, Inverter and Controller, using a common DC Bus mode, as the output of Battery, PV Charger, Grid Charger and Inverter merge into DC Bus. Meanwhile, DC Bus is battery's charging current path, and PV charging is priority than Grid.

#### Product Features

- Independent patent technology MPPT control algorithm, Max MPPT tracking efficiency ≥99%;
- Modular design, high power density;
- With high frequency isolation method, significantly reduce product dimensions and weight;
- High conversion efficiency, low temperature rise, low noise;
- With independent patent technology to run and control automatically;
- Complete system protection mechanism, and high reliability;
- Intelligent air cooling design, Effective solution to the system cooling, improve the efficiency of the system;
- Key parts mainly adopt international well-known brands, ensure security and reliability;
- Well user experience, user-friendly man-machine interface, easy to operate ;
- Support RS485 communication, remote monitoring;
- Wide array input voltage range and power input voltage range;
- Feature-rich, stable and reliable, with high cost performance.

Hybrid Inverter with MPPT Solar controller



## Technical parameters:

Type(unit)	SuninvM MPPT 1K 24V	SuninvM MPPT 2K 48V	SuninvM MPPT 3K 48V	SuninvM MPPT 5K 48V	
Rated capacity (KVA)	1	2	3	5	
Battery rated voltage (V)	24	48	48	48	
PV Input	PV maximum input open voltage (V)	225	225	225	
	MPPT voltage range (V)	100	150	150	
Grid Input	Voltage range (VAC)	110/220±15%			
	Frequency (Hz)	50/60			
	Rated charge current (A)	30	30	30	
output	Rated output voltage (V)	110/220±15%			
	Rated output frequency (Hz)	50/60±1%			
	Rated output current (A)	5.5	9.1	13.6	22.7
	Output power factor	≥0.8			
	THD	<3%			
	Output wave	Sine wave			
	Output phase	Single phase			
	Peak factor	3:1			
	PV charge current	2*20A	2*20A	2*30A	2*50A
	Efficiency	≥85%			
Dynamic response	5% (load from 0 to 100%)				
Noise level	≤40dB (1m distance)				
Display interface	LCD				
Communication interface	USB				
Environmental Temperature (°C)	-30+55				
Environmental Humidity	10%-90%(non condensing)				
Protection level	IP21				
Others	Protection function	Array/ Over voltage / Over current / Short circuit/ Reverse connection ect protection function.			
	Altitude (m)	≤2000(above 1000m need according GB/T3859.2 to derate operating )			
	Dimensions (mm)	420*640*210 (W*H*D)	420*640*210 (W*H*D)	420*640*210 (W*H*D)	420*640*210 (W*H*D)
	Weight (kg)	20	25	25	30



## Solar Inverter With Controller

SUNINVP series Hybrid Inverter with Charger&PWM controller

### Advantage

SUNINVP Series Inverters/charger/controller are the Latest Developed Solar and Grid combination inverter by Multifit Company. The feature of this inverter is with the bypass solution between the grid power supply and battery bank charged by hybrid solutions like PV.

It has the solar charger controller and battery charger function.

It is known as an Inverter with ATS function from the Solar Power to the Mains Power.

It is applying the automatic CPU Control, and the Energy Saving Function as a common property.

Multifit Company is the only one Manufacturer of this new inverter (SunINVP series).

Traditional Solar Inverter which is used on the stand Alone Solar Power Station simply, when the Energy Produced from the Solar Panel is running out, or the Battery Bank is not full charged, the Power Supply will be cut off, and the system is not going to supply any other energy. Our SunINVP Series new Inverter solved this problem absolutely. When the energy produced from the solar Panel is not enough, the Inverter will change to the Grid Power and continue to supply the power to AC Equipment and charge the battery at the same time. The customer can used the power without any break down. Our SunINVP Inverter had been widely used on the mountainous area and Island. The area where have not enough power and less.

Solar power or wind power primary or grid power primary can be setted by customers.



## Product Characteristic

- High Efficiency/Energy Saving
- Low self-Consumption below 1.2A.It can reach to zero at the energy saving mode.
- Make sure the load capacity is above 10W. Or the inverter can not be restarted automatically
- Leading energy saving technology
- With the AVR function.AC voltage fluctuated is within  $\pm 5\%$
- Pure sine wave
- Extreme overload capacity and super load capacity
- Working Appliance: Air-conditioners, Refrigerators, Water pumps, TV, Lights, Fans and other household appliances and office appliances etc.
- Durable. LF transformer technology design. It is suitable for the poor working conditions or where the grid power is not stable
- LED display/ LCD display / Digital display
- DC reverse polarity protection

## Performance Characteristic

- CPU Technology control
- Large charging current. up to 70Amp.
- Intelligent LED display:Grid power.battery.AC output.Fault.Saving.Low voltage.Charging.
- Charging current.Battery capacity.
- Intelligent battery management for maximum battery life
- Automatically switch between the grid and inverter mode
- Transfer time is below 4 ms if the grid power is cut off
- 220V/110V AC 50/60Hz is optional
- It can work with the generator
- Intelligent fan control mode.The fan work at Temperature  $\geq 30^{\circ}\text{C}$ .The inverter will protect by itself at temperature  $\geq 100^{\circ}\text{C}$

## LCD Display Data

Input/Output voltage	Output Power	Battery Voltage	Charge current	Input Frequency	Charge current setting
Language Version	Discharging	Battery	Battery	Solar Prior	Energy
Chinese/English/French/Russian	Protection	Capacity	type	Grid prior	saving
	Voltage Setting	setting	setting	setting	

## Communication Data

Current	Rated power of load	Input/output voltage	Frequency
Battery capacity	Temperature	Remote control operation	Record of history data

## Technical Data SuninvP

AC output Load	SuninvP 500W	SuninvP 800W	SuninvP 1000W
Nominal AC voltage	220V/200-240V	220V/200-240V	220V/200-240V
Optional 220V/120V	120V/105V-132V	120V/105V-132V	120V/105V-132V
Nominal AC frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
Continuous AC power for 3 hours 25°C	500W	800W	1050W
Continuous AC power 25°C	500W	800W	1000W
Nominal AC current/ Max.AC current(peak)	2.28A/6.81A 1ms 4.15A/12.5A 1ms	3.63A/10.9A 1ms 6.66A/20A 1ms	4.55A/13.63A 1ms 8.34A/24.9A 1ms
THD output voltage	$\leq 3\%$	$\leq 3\%$	$\leq 3\%$
Power Factor	1.0	1.0	1.0
<b>AC input (generator or grid)</b>			
AC input voltage/range	220V/165-270V 120V/105V-132V	220V/165-270V 120V/105V-132V	220V/165-270V 120V/105V-132V
AC input frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
<b>Solar charge controller</b>			
Rated Power	600W	960W	1200W
PV Charge Voltage	12V/24V/48V	12V/24V/48V	12V/24V/48V
PV Charge Current	50A/25A/15A	80A/40A/20A	100A/50A/25A
<b>Battery DC input</b>			
Battery voltage/range	12V/10-16V	12V/10-16V	12V/10-16V
Optional	24V/20-32V 48V/40-64V	24V/20-32V 48V/40-64V	24V/20-32V 48V/40-64V
Max.battery charging current/continuous charging current at 25°C	30A/10-30A	30A/10-30A	30A/10-30A
Battery type/Battery Capacity	Lead acid 100-1000Ah	Lead acid 100-1000Ah	Lead acid 100-1000Ah
Charge control mode	3 stage	3 stage	3 stage
<b>Efficiency/Self-consumption</b>			
Max. efficiency	>90%	>90%	>90%
Self-consumption with no load	0.5A	0.6A	12W
Self-consumption with no load /standby/for LCD type only	0.1A	0.1A	5W
<b>Full intellectual protection</b>			
	Over voltage / Over charge /AC short circuit/ Over load / Battery discharger voltage/ Battery over voltage / Over temperature/ Over current / Over heat protection /DC polarity label		
Transfer time	$\leq 4\text{ms}$		
Dimension (L×W×H)mm	350×160×290	350×160×290	350×160×290
Net Weight kgs	15	17	19
Operating temperature range	-20°C~45°C	-20°C~45°C	-20°C~45°C
Degree of protection according to IEC60529	IP20	IP20	IP20
Noise emission typical	$\leq 30\text{dB (1M)}$	$\leq 30\text{dB (1M)}$	$\leq 30\text{dB (1M)}$
Humidity Percent range	0% ~ 95%	0% ~ 95%	0% ~ 95%
<b>Accessories</b>			
DC terminal	Anderson connector	Anderson connector	Anderson connector
AC terminal	Europe terminal	Europe terminal	Europe terminal
Warranty	2year	2year	2year
Certificate	CE/ISO9001	CE/ISO9001	CE/ISO9001
Instruction Manual	yes	yes	yes
<b>Optional Function</b>			
Battery Cable	Optional	Optional	Optional
Interface USB/RS232	Optional	Optional	Optional
SNMP Card	Optional	Optional	Optional
Software CD	Optional	Optional	Optional
Internet monitor	Optional	Optional	Optional
Remoted control	Optional	Optional	Optional
DC reverse polarity protection	Optional	Optional	Optional
Automatically restart after cut off	Optional	Optional	Optional
Split phase 220V/110V+-5%.output	Optional	Optional	Optional
Inverter mode/silence	Optional	Optional	Optional
LCD Display	Optional	Optional	Optional



## Technical Data SuninvP

AC output Load	SuninvP 1500W	SuninvP 2000W
Nominal AC voltage	220V/200-240V	220V/200-240V
Optional 220V/120V	120V/105V-132V	120V/105V-132V
Nominal AC frequency	50Hz/60Hz	50Hz/60Hz
Continuous AC power for 3 hours 25°C	1500W	2100W
Continuous AC power 25°C	1500W	2000W
Nominal AC current/ Max.AC current(peak)	6.85A/20.45A 1ms 12.50A/37.55A 1ms	9.10A/27.28 1ms 16.67A/50A 1ms
THD output voltage	≤3%	≤3%
Power Factor	1.0	1.0
<b>AC input (generator or grid)</b>		
AC input voltage/range	220V/165-270V 120V/105V-132V	220V/165-270V 120V/105V-132V
AC input frequency	50Hz/60Hz	50Hz/60Hz
<b>Solar charge controller</b>		
Rated Power	1440W	1920W
PV Charge current	120A /60A / 30A	80A/40A
PV Charge Voltage	12V/24V/48V	24V/48V
<b>Battery DC input</b>		
Battery voltage/range	12V/10-16V 24V/20-32V Optional 48V/40-64V	24V/20-32V 48V/40-64V
Max.battery charging current/continuous charging current at 25°C	30A/10-30A	30A/10-30A
Battery type/Battery Capacity	Lead acid 100-1000Ah	Lead acid 100-1000Ah
Charge control mode	3 stage	3 stage
<b>Efficiency/Self-consumption</b>		
Max. efficiency	>90%	>90%
Self-consumption with no load	15W	20W
Self-consumption with no load /standby/for LCD type only	5W	5W
<b>Full intellectual protection</b>		
	Over voltage / Over charge /AC short circuit/ Over load / Battery discharger voltage/ Battery over voltage / Over temperature/ Over current / Over heat protection /DC polarity label	
Transfer time	≤ 4ms	≤ 4ms
Dimension (L×W×H)mm	440×305×200	440×305×200
Net Weight kgs	25	27
Operating temperature range	-20°C~45°C	-20°C~45°C
Degree of protection according to IEC60529	IP20	IP20
Noise emission typical	≤30dB (1M)	≤30dB (1M)
Humidity Percent range	0% ~ 95%	0% ~ 95%
<b>Accessories</b>		
DC terminal	Anderson connector	Anderson connector
AC terminal	Europe terminal	Europe terminal
Warranty	2year	2year
Certificate	CE/ISO9001	CE/ISO9001
Instruction Manual	yes	yes
<b>Optional Function</b>		
Battery Cable	Optional	Optional
Interface USB/RS232	Optional	Optional
SNMP Card	Optional	Optional
Software CD	Optional	Optional
Internet monitor	Optional	Optional
Remoted control	Optional	Optional
DC reverse polarity protection	Optional	Optional
Automatically restart after cut off	Optional	Optional
Split phase 220V/110V+-5%:output	Optional	Optional
Inverter mode/silence	Optional	Optional
LCD Display	Optional	Optional

## Technical Data SuninvP

AC output Load	SuninvP 3000W	SuninvP 4000W
Nominal AC voltage	220V/200-240V	220V/200-240V
Optional 220V/120V	120V/105V-132V	120V/105V-132V
Nominal AC frequency	50Hz/60Hz	50Hz/60Hz
Continuous AC power for 3 hours 25°C	3000W	4200W
Continuous AC power 25°C	3000W	4000W
Nominal AC current/ Max.AC current(peak)	13.64A/40.91A 1ms 25.0A/75.0A 1ms	18.55A/54.63A 1ms 33.33A/99.99A 1ms
THD output voltage	≤3%	≤3%
Power Factor	1.0	1.0
<b>AC input (generator or grid)</b>		
AC input voltage/range	220V/165-270V 120V/105V-132V	220V/165-270V 120V/105V-132V
AC input frequency	50Hz/60Hz	50Hz/60Hz
<b>Solar charge controller</b>		
Rated Power	2880W	2880W
PV Charge current	48V	48V
PV Charge Voltage	60A	60A
<b>Battery DC input</b>		
Battery voltage/range	12V/10-16V 24V/20-32V Optional 48V/40-64V	24V/20-32V 48V/40-64V
Max.battery charging current/continuous charging current at 25°C	30A/10-30A/50A	30A/10-30A/50A
Battery type/Battery Capacity	Lead acid 100-1000Ah	Lead acid 100-1000Ah
Charge control mode	3 stage	3 stage
<b>Efficiency/Self-consumption</b>		
Max. efficiency	>90%	>90%
Self-consumption with no load	35W	42W
Self-consumption with no load /standby/for LCD type only	5W	5W
<b>Full intellectual protection</b>		
	Over voltage / Over charge /AC short circuit/ Over load / Battery discharger voltage/ Battery over voltage / Over temperature/ Over current / Over heat protection /DC polarity label	
Transfer time	≤ 4ms	≤ 4ms
Dimension (L×W×H)mm	440×305×200	440×305×200
Net Weight kgs	33	35
Operating temperature range	-20°C~45°C	-20°C~45°C
Degree of protection according to IEC60529	IP20	IP20
Noise emission typical	≤30dB (1M)	≤30dB (1M)
Humidity Percent range	0% ~ 95%	0% ~ 95%
<b>Accessories</b>		
DC terminal	Anderson connector	Anderson connector
AC terminal	Europe terminal	Europe terminal
Warranty	2year	2year
Certificate	CE/ISO9001	CE/ISO9001
Instruction Manual	yes	yes
<b>Optional Function</b>		
Battery Cable	Optional	Optional
Interface USB/RS232	Optional	Optional
SNMP Card	Optional	Optional
Software CD	Optional	Optional
Internet monitor	Optional	Optional
Remoted control	Optional	Optional
DC reverse polarity protection	Optional	Optional
Automatically restart after cut off	Optional	Optional
Split phase 220V/110V+-5%:output	Optional	Optional
Inverter mode/silence	Optional	Optional
LCD Display	Optional	Optional



## Hybrid Energy Storage Inverter With Battery

### Product Characteristic

Available with Frequency and High Frequency inverter and VRLA Battery and Li-Battery and LiFe PO4 battery. All ILPB's are fully Solar and can be connected to more added batteries for more back-up time. All ILPB units have built in AC battery chargers .

Highly integrated multi-function portable inverter generator.

Featured with charging & discharging control, inverter, energy storage.

Good load capability. Powerful for wide applications (AC, DC, USB etc.).



Lead acid battery



Lithium battery



LiFePO4 battery

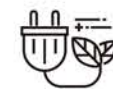
Built-in Lithium battery. Lead acid battery optional.

LiFePO4 Battery life over 5 years. Battery shelf-life (no charging) greater than a year.

### Advantages



Easy to move



Energy saving



Dust prevention

## Technical Data VMI-D-WB

Model Number		VMI-D-WB-1000Va	VMI-D-WB-2000Va	VMI-D-WB-3000Va
Built-in Battery	Battery Type	Maintenance-free LiFe PO4 Battery	Maintenance-free LiFe PO4 Battery	Maintenance-free LiFe PO4 Battery
	Rated Voltage	12.8V	25.6V	25.6V
	Voltage Range	10-15V	19-30V	19-30V
	Battery Capacity	80Ah	60Ah	100Ah
	Cycle Life	2350+cycles	2350+cycles	2350+cycles
AC Charge Input	AC Input Voltage	165VAC-275VAC	165VAC-275VAC	165VAC-275VAC
	Max Charging Current	15A	10A	10A
	Charging Efficiency	≥80%	≥80%	≥80%
AC Output Via Inverter	Display	LCD Display	LCD Display	LCD Display
	Continuous Power	800W	1500W	2400W
	Peak Power	2000W	4000W	6000W
	AC output socket	2 Pieces/Universal socket	2 Pieces/Universal socket	2 Pieces/Universal socket
	AC Output Voltage	220V±5% (optional)	220V±5% (optional)	220V±5% (optional)
	Frequency	50Hz±5% (optional)	50Hz±5% (optional)	50Hz±5% (optional)
	Charging Efficiency	≥87%	≥87%	≥87%
	Output Power Type	Frequency type with Transformer	Frequency type with Transformer	Frequency type with Transformer
	Wave Form	Pure Sine Wave	Pure Sine Wave	Pure Sine Wave
	Total Harmonic Distortion	≤5% at nominal power	≤5% at nominal power	≤5% at nominal power
	Display	LCD Display	LCD Display	LCD Display
	DC Outputs	USB Output Voltage	5V(for iPhones, iPads or other 5V gadgets)	
USB Output Current (4 options)		1A /2.1A Two USB port with 3.1A		
Net Weight		40kgs	45.5kgs	65.5kgs
Loading	20GP/40GP/40HQ	150/300/420 sets	150/300/420 sets	150/300/420 sets





# MULTIFIT

## Hybrid Inverter With MPPT Controller



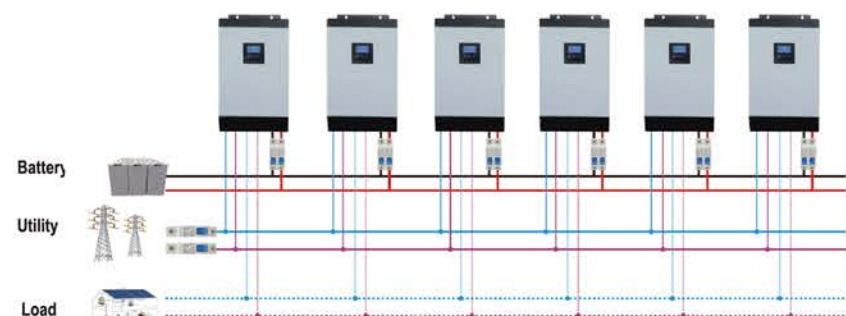
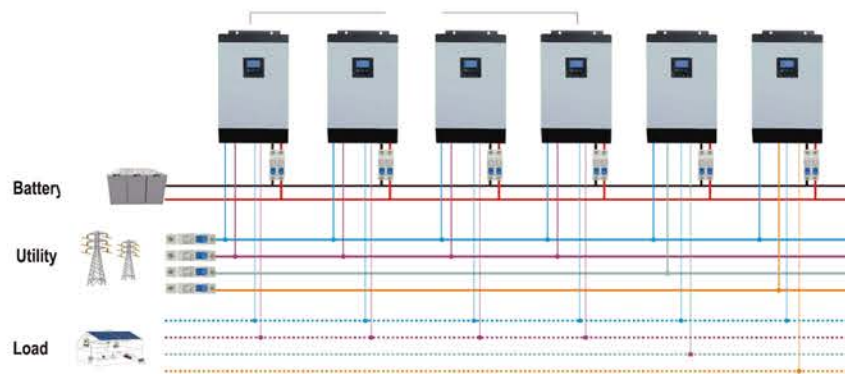
### Product Snapshot

Model :1-5KVA  
 Nominal Voltage :220/230VAC  
 Nominal Frequency :50/60HZ  
 Output Power Factor :0.8

### Key Features

- Pure sine wave inverter , Cold start function, Auto restart while AC is recovering
- Overload and short circuit protection, Optional remote panel available
- Selectable charging current based on applications
- Configurable AC/Solar input priority via LCD setting
- Compatible to mains voltage or generator power
- Smart battery charger design for optimized battery performance
- Parallel operation with up to 6 units only available for 4KVA/5KVA
- Selectable input voltage range for home appliances and personal computers

Three phase output using either 3 units(12kw) or max 6 units(24kw)



Single phase output up to 24kw using 6 units

### SUN INVM HF Series

Wall Mounted Integrated Solar Power Inverter technical specification Bulit-in MPPT Solar controller

## Technical Data Suninvm HF

MODEL	Suninvm HF 2K-2460	Suninvm HF 3K-2460	Suninvm HF 4K-4860	Suninvm HF 4K-4880	Suninvm HF 5K-4860	Suninvm HF 5K-4880
Rated Power	2KVA/1600W	3KVA/2400W	4KVA/3200W	4KVA/3200W	5KVA/4000W	5KVA/4000W
INPUT						
Voltage	230VAC					
Selectable Voltage Range	170-280VAC (For Personal Computers) 90-280VAC (For Home Appliances)					
Frequency Range	50HZ/60HZ					
OUTPUT						
AC Voltage Regulation (Batt.Mode)	230VAC±5%					
Surge Power	4000VA	6000VA	8000VA		10000VA	
Efficiency (Peak)	93%					
Transfer Time	10ms (For Personal Computers) 20ms (For Home Appliances)					
Waveform	Pure sine wave					
BATTERY						
Battery Voltage	24VDC		48VDC			
Floating Charge Voltage	27VDC		54VDC			
Overcharge Protection	31VDC		62VDC			
SOLAR CHARGER & AC CHARGER						
Maximum PV Array Power	1500W		3000W	4000W	3000W	4000W
MPPT Range & Operating Voltage	30-115VDC		60-115VDC			
Maximum PV Array Open Circuit Voltage	145VDC		145VDC			
Maximum Solar Charge Current	60A		60A	80A	60A	80A
Maximum AC Charge Current	20/30A	30A	60A	60A	60A	60A
Maximum Charge Current	60A		120A	140A	120A	140A
Maximum Efficiency	98%					
Standby Power Consumption	2W					
PHYSICAL						
Dimension, D × W × H(mm)	295×140×440			295×140×540		
Net Weight (kgs)	11.5			13.5		
OPERATING ENVIRONMENT						
Humidity	5% to 95% relative humidity (Non-condensing)					
Operating Temperature	0°C to 55°C					
Storage Temperature	-15°C to 60°C					

Hybrid Inverter With MPPT Controller

Hybrid Inverter With MPPT Controller



# MULTIFIT

## Hybrid Inverter With MPPT Controller-Pro



### Product Snapshot

Model :3KW&5KW  
 Nominal Voltage :220/230VAC  
 Nominal Frequency :50/60HZ  
 Output Power Factor :1.0

### Key Features

- Output Power factor 1.0
- Wide PV input range up to 500VDC
- Batteryless support, work without battery daytime
- Pure sine wave inverter
- Selectable high power charging current
- Selectable AC input voltage range for home appliances and personal computers
- Configurable AC/Solar input priority via LCD setting
- Compatible with mains voltage or generator power
- Auto restart while AC is recovering
- overload and short circuit protection
- Smart battery charge design for optimized battery performance
- Cold start function

### Operation with Battery Connected



### Operation without Battery Connected



This is a multi-function inverter/charger. Its comprehensive LCD display offers user-configurable and easy-accessible button operation such as battery charging current, AC/solar charger priority, and acceptable input voltage based on different applications.

## Technical Data SuninV HF-Pro

MODEL	SuninV HF-Pro 3KW	SuninV HF-Pro 5KW	
Rated Power	3KVA/3KW	5KVA/5KW	
PV INPUT (DC)			
Max. PV Array Power	4000 W		
Nominal PV Voltage	240VDC		
PV Array MPPT Voltage Range	120~450VDC		
Max. PV Array Open Circuit Voltage	500VDC		
Max. Charging Current (AC + solar)	80Amp		
AC INPUT (AC)			
Nominal Input Voltage	230 VAC		
Low Loss Voltage	170 VAC±7V(UPS); 90 VAC±7V(Appliances )		
Low Loss Return Voltage	180 VAC±7V(UPS); 100 VAC±7V(Appliances )		
High Loss Voltage	280 VAC±7V		
High Loss Return Voltage	270 VAC±7V		
Max. AC Input Voltage	300 VAC		
Nominal Input Frequency	50Hz/60Hz (Auto detection )		
Transfer Time	10ms typical(UPS); 20ms typical(Appliances )		
BATTERY MODE OUTPUT (AC)			
Nominal Output Power	3KVA/3KW	5KVA/5KW	
Surge Power	6000 VA	10000 VA	
Nominal Output Voltage	230 VAC±5%		
Output Waveform	Pure Sinewave		
Efficiency (DC to AC)(Peak)	93%		
UTILITY CHARGER			
Nominal DC Voltage	24VDC	48VDC	
Maximum Charging Current	60Amp		
Bulk Charging Voltage	Flooded Battery	29.2VDC	58.4VDC
	AGM/Gel Battery	28.2VDC	56.4VDC
Floating Charging Voltage	27VDC	54VDC	
OverCharge Protection	33VDC	63VDC	
GENERAL			
PHYSICAL			
Dimension , D× W × H (mm)	100 × 300 × 440		
Net Weight (kgs)	9	10	
Communication Port	RS-232/USB		
ENVIRONMENT			
Humidity	5 ~ 95% RH (Non condensing )		
Operating Temperature	-10 to 55°C		
Altitude	0 ~ 1000 m		

Hybrid Inverter With MPPT Controller

Hybrid Inverter With MPPT Controller



## Three-Phase Low Frequency Inverter



### PRODUCT OVERVIEW

The product applies to different types of loads because of its full digital design and real pure sine wave output. With power-frequency design and highly stable output voltage and frequency, it can operate continuously for a long time. Thus, it avoids the disadvantages of direct use of the mains supply, voltage instability, noise, and lightning attacks, and the disadvantage of short power supply time of small UPS, guaranteeing continuous and reliable operation for electrical equipment. Sine wave inverter supplies are the best guarantee for the safe and reliable operation of system. The product is now widely used in China Telecom, China Mobile, China Unicom, aerospace, railways, financial management, office automation, industrial automatic control, medical health, military scientific research, ect.

### MAIN FEATURES

- Excellent performance because of an MCU intelligent control technology.
- A wide range of applicable loads because of power frequency transformer design and pure sine wave AC output.
- A wide range, high accuracy, and full automatic voltage stabilization.
- Overall protection functions (Overload protection, Short circuit protection, under voltage protection, over voltage protection and over temperature protection).
- Simple LED and LCD, for visualization of operation status of the equipment.

## Technical Data VMI-II

Model	VMI-II 1KW	VMI-II 2KW	VMI-II 3KW	VMI-II 4KW	VMI-II 5KW	VMI-II 7KW	VMI-II 8KW	VMI-II 10KW	VMI-II 12KW	VMI-II 15KW
Rated power	1KW	2KW	3KW	4KW	5KW	7KW	8KW	10KW	12KW	15KW
DC Voltage	48 VDC			48 VDC/96 VDC/192 VDC				192 VDC/240 VDC		
Input voltage	Three - phase four - wire system + ground wire 380 V±20%									
Input frequency	45 - 65 Hz									
Output Voltage	220 VAC±5% (Three - phase four - wire system)									
Output frequency	50 Hz±1%									
Switching time	Switching from the mains supply mode to the battery mode 50 ms switching from the battery mode to the mains supply mode 25 ms									
Charge current	Max 8 A								Max 8 A	
Inverter output protection	100 -120 % 30 s > 120 % 100 ms									
Noise	<45 dB									
Ambient temperature for operation	0-40 °C									
Ambient temperature for storage	-15 °C-50 °C									
Ambient temperature for operation /storage	0-90% ( no condensation )									
Altitude for operation	0-3000 m									
Altitude for storage	0-15000 m									
Product dimensions D×W×H(mm)	560×230×570					590×470×730				
Packing dimensions D×W×H(mm)	640×300×730					690×570×850				
Net weight/gross weight(kg)	29.7/30.7	38/46.5	40.7/50.4	49.7/55.3	58.7/64	104/123	113/37	123/150		



# MULTIFIT

## Three-Phase Low Frequency Inverter

### MAIN FEATURES

#### Advanced operation mode:

Frequency tracking, phase-locking voltage stabilization, noise filtering and prevention of impact by fluctuation of the power grid realized in output go the inverter. The best power supply guarantee for the loading equipment of users contributed by a full digital vector control technology based on real-time processing by DSP, MCU and DDC.



#### Efficient IGBT(Insulated Gate Bipolar Transistor)inversion technology:

The good high-speed Switching feature. Large-voltage and large current operating characteristic. And voltage drive of IGBT(The fifth-generation IGBT has a lower saturation voltage drop and higher operation efficiency and reliability) .

#### High adaptable:

A wide range of input frequency(45Hz~65Hz), which realizes stable operation of fuel generators.

#### Great loading capacity:

Suitability for industrial applications such as machine tools and wire cutters.

#### Reliable performance:

A power-on test function for timely discovery and elimination of potential hazards. High stability and reliability guaranteed by integration of functions including AC input over voltage protection, AC input undervoltage protection, output overload protection, short circuit protection, overcurrent protection, bus overvoltage protection,overheat protection, fan fault protection, auxiliary power supply fault protection, battery undervoltage warning protection, battery overcharge protection, etc.

#### Management function:

Big LCD display, with smart touch screen buttons.You can see the operation status of flow chart,technical data and event records,ect.

Visualization of parameters of the inverter by means of communication with a computer via a RS232/RS485 interface with help of intelligent monitoring software of the inverter.

#### Intelligent battery management:

Intelligent battery charge: Adjustment of the battery charge parameter according to the battery configuration of the user and switching between equalizing charge and floating charge , temperature compensating charge, and discharge management according to the power supply conditions, which may make the battery life longer and reduce burden of the administrator

Intelligent battery fault detection: Measurement of single parameters, display of the

measurement results on the LCD, and immediate alarming and notification for the administrator upon any battery fault.

#### Personalized settings:

Proper adjustment of the input parameters according to the input power supply conditions

## Technical Data VMI-III

Model: VMI-III	10KW	20KW	30KW	40KW	60KW	80KW	100KW	150KW	200KW	
Rated capacity	10KW	20KW	30KW	40KW	60KW	80KW	100KW	150KW	200KW	
Operation mode and principle	PWM(pulse width modulation) on DSP accurate control technology and double built-in MCUS Complete isolation of the output power supply									
AC INPUT	Phase number	Three-phase +N+G								
	Voltage	AC220V/AC380V+20%								
	Frequency	50Hz/60Hz±5%								
DC INPUT	DC voltage	DC192V/DC220V/DC384V (16to 32 pieces of 12V batteries )								
	Floating battery	13.6V of each battery×battery quantity(10.8V×16 batteries =217.6V)								
	Cut-off voltage	10.8V of each battery×battery quantity(10.8V×16 batteries =217.8V)								
AC OUTPUT	Phase number	Three-phase +N+G								
	Voltage	AC220V/AC380V±1%(steady load)								
	Frequency	50Hz/60Hz±5%(mains supply)50Hz±0.01%(battery)								
	Efficiency	≥95%(load: 100%)								
	Output waveform	Sine wave								
	THD	Linear load:<3% Non-linear load:<5%								
	Dynamic load voltage transient	<±5%(jump from 0-100%)								
	Instant recovery time	<10ms								
	Time of swithing between the battery and line mains supply	3s-5s								
	Unbalanced voltage	<±3%<±1%(balanced load voltage)								
System Index	Operation efficiency	≥95%(load: 100%)								
	Computer communication	RS 232/RS 485(SNMP remote monitoring network adapter )								
	Operating temperature	-10°C-40°C								
	Relative humidity	0-90% (no condensation)								
Structure	Noise	40-50dB 40-51dB			50-60dB			60-70dB		
	External dimension D×W×H(mm)	580×750×920			//			//		
	Weight(Kg)	180	220	300	360	600	850	950	1380	1560