

## Guangdong Sunray Power Co.,Ltd

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SOLAR  
INVERTER

广东三瑞电源有限公司  
GUANGDONG SUNRAY POWER CO.,LTD



R&D and sales center



Huizhou plant area(61000M<sup>2</sup>)

# Company Profile



GuangDong Sunray Power Co.,Ltd. is a large group company, under the brand Sunray Power Supply and Next Power Technology. GuangDong Sunray is a production-oriented comprehensive enterprise specializing in the research and development, production, and sales of inverters, uninterruptible power supply systems, and solar power supply systems. The company covers a total area of 82691 square meters and has built its own property, the "Sunray Huizhou Science and Technology Park", as the research and development and production base. In addition, GuangDong Sunray also has sub bases for product sales and research and development in Shenzhen and other places. With over 1000 employees, our sales and after-sales service network covers the world and radiates to more than 20 countries and regions in Southeast Asia, America, Europe, and the Middle East.

GuangDong Sunray has a sound production management system, advanced production equipment, and various quality system certifications. It has successively obtained ISO9001 international quality management system certification, EU CE certification, TUV certification, and VDE certification. The company has internationally standardized production workshops and modern laboratories, as well as a professional management, research and development, production, sales, and service team, providing strong support for promoting product standardization, scaling, and branding.

The company has a wide range of product categories and complete specifications. The main products include off grid low-frequency inverters, off grid high-frequency inverters, off grid solar inverters, grid connected solar inverters, grid connected/off grid hybrid solar inverters, MPPT controllers, lithium batteries, portable mobile power supplies. The products are widely used in various fields such as national defense, scientific research, communication, transportation, and new energy.

We are committed to creating efficient products and high-end brands. Through a strict quality management system, outstanding scientific research capabilities, and continuous innovative research, we aim to make GuangDong Sunray a leading brand in the field of power supply, and expand its products to more fields around the world.



## COMPANY

Founded in 2004, We have more than 20 years of experience



## QUALITY

Strictly control each step of QC&QA system processes



## SELF BUILT FACTORY BUILDING

Shenzhen plant area(20691M<sup>2</sup>) and Huizhou plant area(61000M<sup>2</sup>)



## TEAM

We have Professional R & D team and fast response sales team



## Vision

Committed to become a global leading supplier of energy equipment and system solutions

## Mission

Pursue the material and spiritual happiness of all partners

## Core values

University, effort, modesty, introspection, gratitude, altruism, optimism, innovation

## Future development mission

Sunray power will adhere to the corporate mission of "abiding by the principle of heart based management, adhering to the spirit of altruism, and actively undertaking social responsibility". Based on the energy equipment business, it will accelerate the development of energy system integration business, innovate and expand energy generation and power electronics technology, closely integrate them, keep close to customer needs, actively participate in global competition, and jointly promote the clean and efficient development of human and society sunray people are willing to fight for green energy all their lives.



# Corporate Culture



# Company History



Provide support and services to global inverter customers



## 2004-2005

In 2004, Shenzhen Qingneng Electronics Co., Ltd. was established

In 2005, the company completed the team building and started product development

## 2007-2011

In 2007, it became a famous UPS supplier at home and abroad

In 2008, Shenzhen Sunray Power Co.,Ltd.was established

In 2009, off grid inverter and grid connected inverter were launched

In 2010, solar inverter and parallel off grid integrated inverter were launched

In 2011, TUV certification was obtained

## 2012-2016

In 2012, the company entered the self built plant and began to enter the photovoltaic inverter industry

In 2014, it obtained the EU CE certification and VDE certification

In 2015, Pakistan factory was responsible for the localization operation service of the company's products, and the company established its first overseas project

In 2015, the company established four foreign trade platforms of Ali international station

In 2017, it won the national high-tech enterprise certification and Shenzhen high-tech enterprise certification

## 2017-2019

2017, Shenzhen NextPower Technology Co.,Ltd was established. Three people formed a R&D team.

In 2018, We obtained patent certificate of appearance Design for Energy storage solar inverters. VICTOR XM series and VICTOR NM II series came out.

In 2018, the company's performance exceeded 100 million yuan for the first time, and the business market was divided into global regions

In 2019, obtained ISO9001 quality management system certification

In 2019, Island detection control software V1.0 for NEXTPOWER PV 500E on grid solar system. PV 500V off grid MPPT charger controller software for solar inverters. Solar inverter software V1.0 that can support mutiple monitoring methods such as WIFI/GPRS/RS232/USB.

## 2020-2021

In 2020, Certificate of high-tech enterprise ISO9001 quality management system certification Control software 1.0 for 1-10KW off grid solar inverters Victor NM Series 3.2KW off grid solar inverters came out Employees up to 20 members.

In 2021, Patent certificate of appearance Design for off grid solar inverters Software (Android version) V1.0 for Fronus Solar CE certification for Victor NM series, Victor NM-IV Plus series Victor NM II PLUS series and Victor NM III series, 3.5kW and 5.5KW off grid solar inverters. Strategic Cooperation with Fronus, the 1st overseas project. The 1st production line was established Turnover 30 million USD

## 2022-2023

In 2022, Victor NM Series, 1.5KW/1.6KW/2.4KW/3KW off grid solar inverters. Victor NM-IV PLUS Series and Victor NM-PRO Series, 3.6KW, 4.2KW and 6.2KW hybrid solar inverters. CE for Victor NM MAX, Victor NML. 4 production lines. 150 employees. Turnover 75 million USD.

In 2022 Sales performance reached 1 billion yuan

In 2023, Victor NML Series, 1.6KW, 3.0KW off grid solar inverters Victor ECO Series, 3.6KW, 6.2KW hybrid solar inverters Victor MAX Series, 7.2KW/8.2KW/10.2KW hybrid solar inverters. CE for Victor NM ECO. Strategic cooperation with Fronus 6 production lines. 300 employees. Estimated turnover 1 billion USD.

## 2024

In 2024, Shenzhen Sunray Power and Shenzhen Next Power Technology merged to form Guangdong Sunray

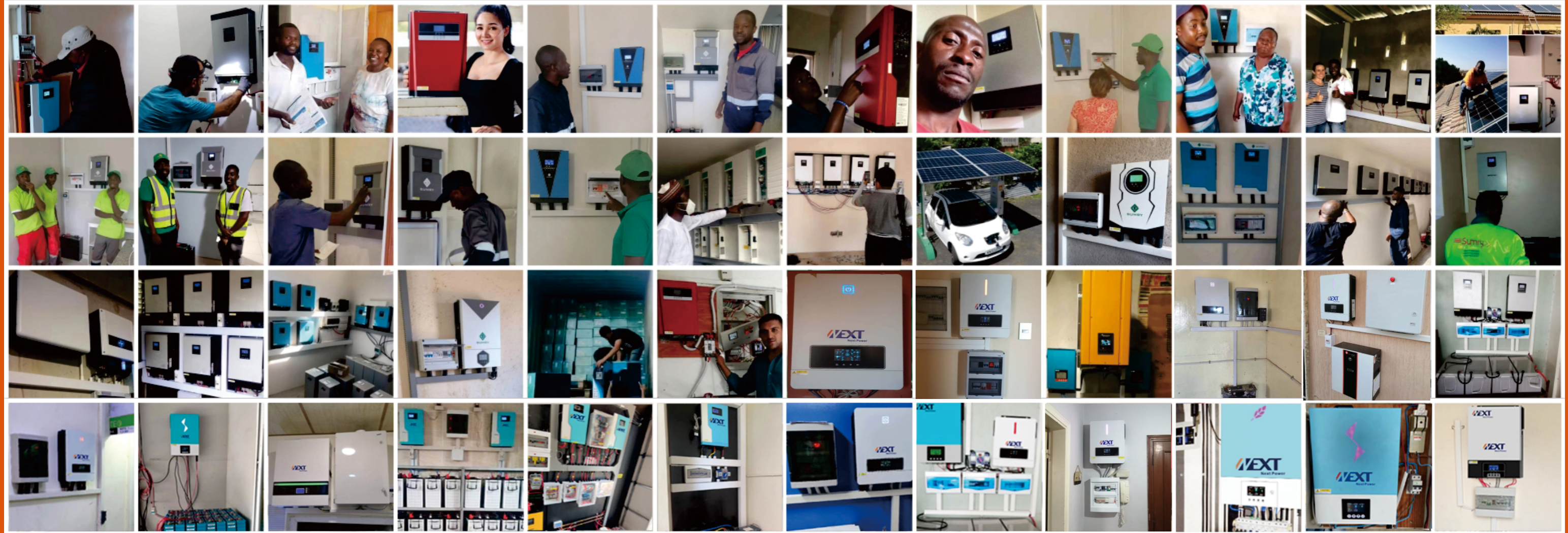
# Qualifications

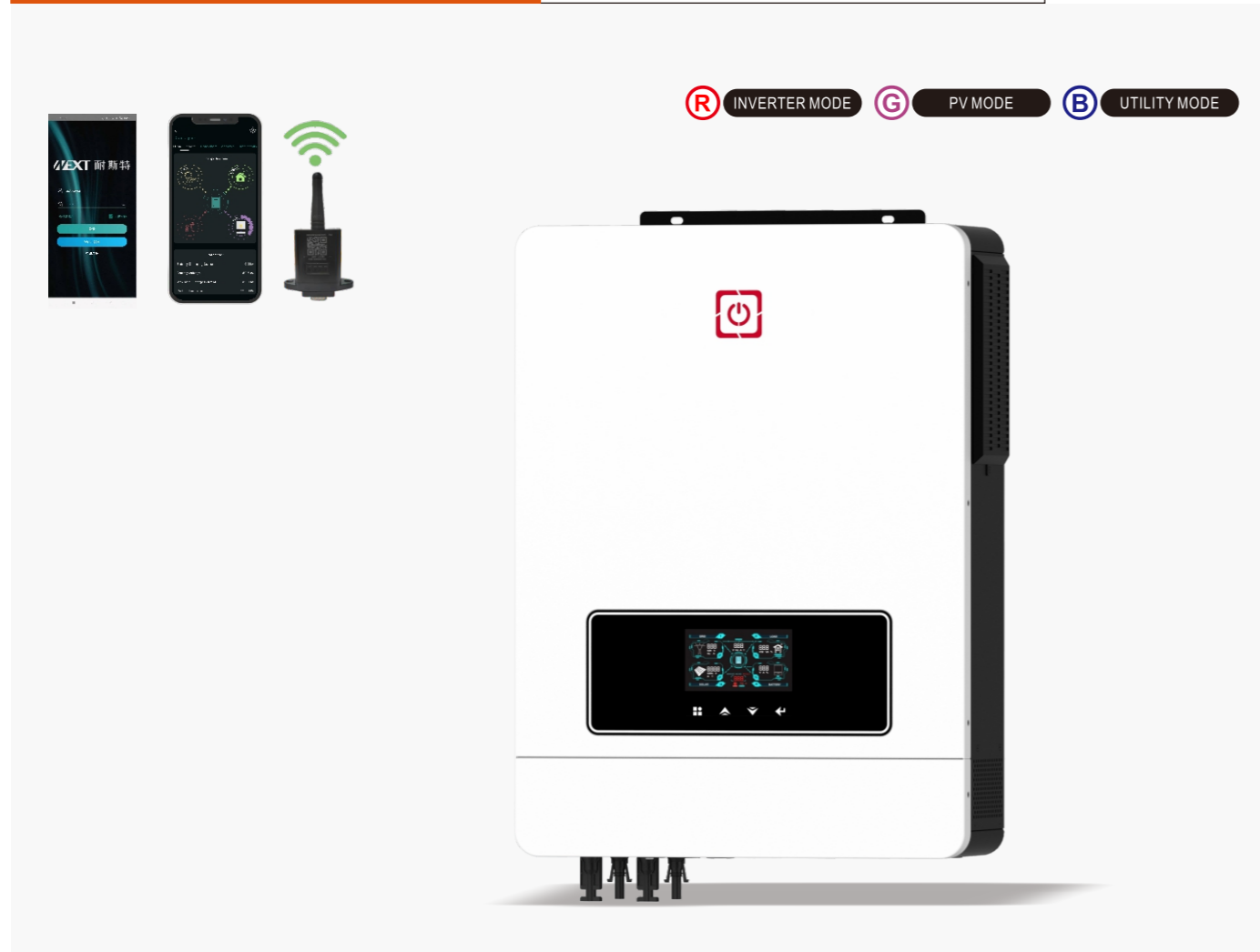


# Qualifications



# Global Customers





»» Features

- Pure sine wave solar inverter(on/off Grid)
- Output power factor 1.0
- WiFi&GPRS available for IOS and Android
- Inverter can run without battery
- One-key restoration to factory Settings
- Built-in Lithium battery automatic activation
- Built-in 160A MPPT solar charger (for 8.2kw,10.2kw)
- Dual communication ports for Battery communication and Wifi communication
- High PV input voltage range(90~ 500VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Dual output
- Dual PV input
- Touch button
- On Off Grid Work Mode

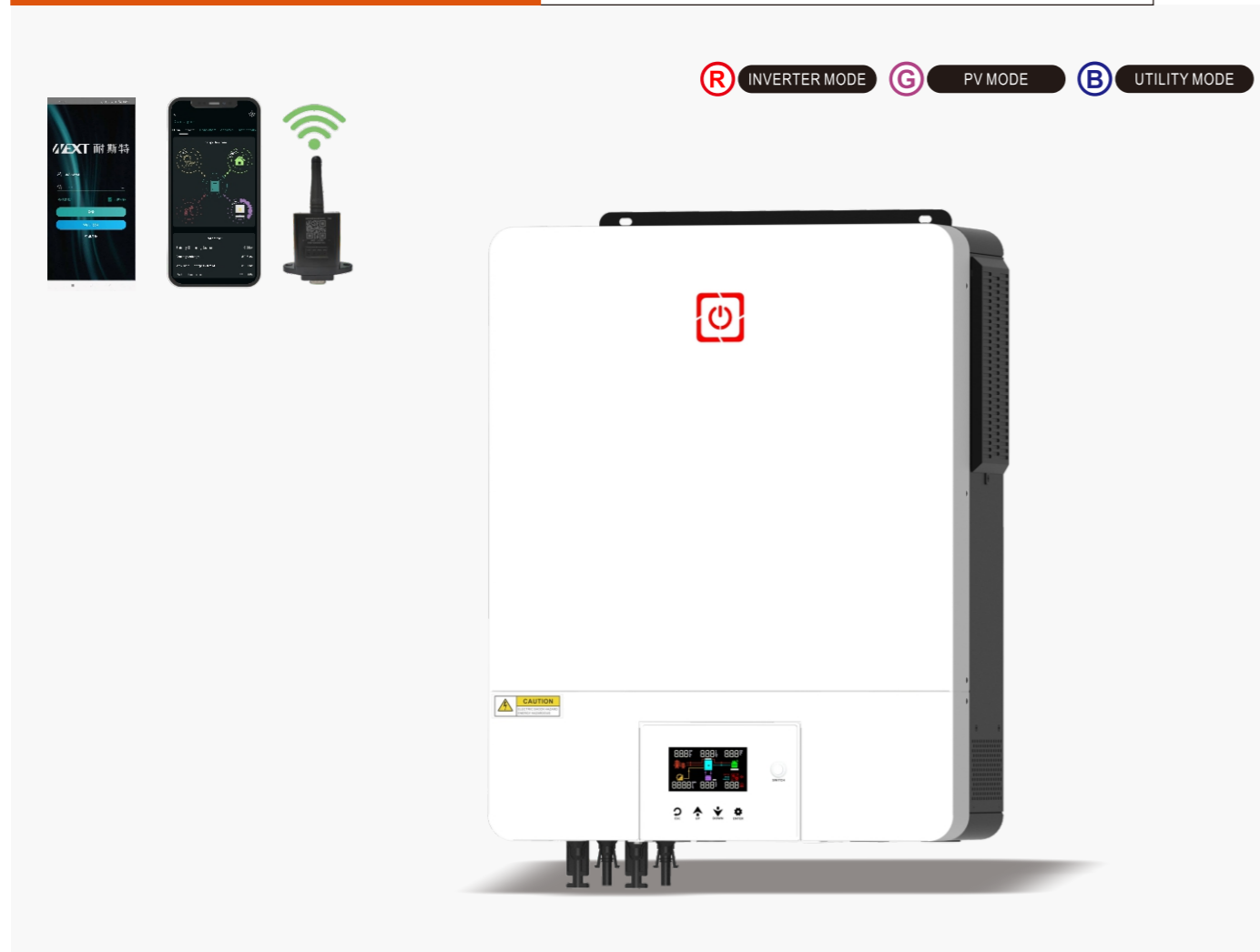
»» Product Data Sheet

MODEL	VICTOR MAX-8.2KW	VICTOR MAX-10.2KW
Phase	1-phase	
Maximum PV Input Power	5400W+5400W	
Rated Output Power	8200W/8200VA	10200W/10200VA
Maximum Solar Charging Current	160A	

GRID-TIE OPERATION

<b>PV INPUT (DC)</b>		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage / Initial Feeding Voltage	90VDC/120VDC	
MPPT Voltage Range	90~450VDC	
Maximum Input Current	2/18A	
<b>GRID OUTPUT (AC)</b>		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195~253VAC	
Nominal Output Current	35.6A	44.3A
Power Factor	>0.99	
<b>EFFICIENCY</b>		
Maximum Conversion Efficiency (DC/AC)	98%	
<b>TWO LOAD OUTPUT POWER</b>		
Full Load	8200W	10200W
Maximum Main Load	8200W	10200W
Maximum Second Load(battery mode)	2733W	3400W
Maximum Load Cut Off Voltage	52VDC	
Maximum Load Return Voltage	54VDC	
<b>OFF-GRID OPERATION</b>		
<b>AC INPUT</b>		
AC Start-up Voltage / Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Frequency Range	59~61±1HZ	
Maximum AC Input Current	48.2A	60A
<b>PV INPUT (DC)</b>		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
MPPT Voltage Range	90~450VDC	
Maximum Input Current	2/18A	
<b>BATTERY MODE OUTPUT (AC)</b>		
Nominal Output Voltage	220/230/240VAC	
Output Waveform	Pure sine wave	
Efficiency (DC to AC)	94%	
<b>BATTERY &amp; CHARGER</b>		
Nominal DC Voltage	48VDC	
Maximum Solar Charging Current	160A	
Maximum AC Charging Current	140A	
Maximum Solar+AC Charging Current	160A	
<b>HYBRID OPERATION</b>		
<b>PV INPUT (DC)</b>		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage / Initial Feeding Voltage	90VDC/120VDC	
MPPT Voltage Range	90~450VDC	
Maximum Input Current	2/18A	
<b>GRID OUTPUT (AC)</b>		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195~253VAC	
Nominal Output Current	35.6A	44.3A
<b>AC INPUT</b>		
AC Start-up Voltage / Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Maximum AC Input Current	48.2A	60A
Maximum AC Charging Current	140A	
<b>GENERAL</b>		
<b>PHYSICAL</b>		
Dimension, D*W*H(mm)	530*390*130	
Cartoon Dimension, D *W *H(mm)	618*463*205	
Net Weight (kgs)	14.2	14.7
Gross Weight(kgs)	15.7	16.2
<b>INTERACE</b>		
Communication Port	RS232/RS485/WIFI/GPRS/LITHIUM BATTERY	
<b>ENVIRONMENT</b>		
Humidity	5% to 95% Relative Humidity(Non~condensing)	
Operating Temperature	-10°C~50°C	
<b>STANDARD</b>		
Compliance Safety	CE	





»» Features

- Pure sine wave solar inverter(on/off Grid)
- Output power factor 1.0
- WIFI&GPRS available for IOS and Android
- Inverter can run without battery
- One-key restoration to factory Settings
- Built-in Lithium battery automatic activation
- Built-in 160A MPPT solar charger (for 8.2kw,10.2kw)
- High PV input voltage range(90~ 500VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Dual output
- Dual PV input
- Touch button
- On Off Grid Work Mode
- Built Remove LCD Display and Key

»» Product Data Sheet

MODEL	VICTOR MAX PRO-8.2KW	VICTOR MAX PRO-10.2KW
Phase	1-phase	
Maximum PV Input Power	5400W+5400W	
Rated Output Power	8200W/8200VA	10200W/10200VA
Maximum Solar Charging Current	160A	

GRID-TIE OPERATION

<b>PV INPUT (DC)</b>		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage / Initial Feeding Voltage	90VDC/120VDC	
MPPT Voltage Range	90~450VDC	
Maximum Input Current	2/18A	
<b>GRID OUTPUT (AC)</b>		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195~253VAC	
Nominal Output Current	35.6A	44.3A
Power Factor	>0.99	
<b>EFFICIENCY</b>		
Maximum Conversion Efficiency (DC/AC)	98%	
<b>TWO LOAD OUTPUT POWER</b>		
Full Load	8200W	10200W
Maxium Main Load	8200W	10200W
Maxium Second Load(battery mode)	2733W	3400W
Maxium Load Cut Off Voltage	52VDC	
Maxium Load Return Voltage	54VDC	

OFF-GRID OPERATION

<b>AC INPUT</b>		
AC Start-up Voltage / Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Frequency Range	59~61±1HZ	
Maximum AC Input Current	48.2A	60A
<b>PV INPUT (DC)</b>		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
MPPT Voltage Range	90~450VDC	
Maximum Input Current	2/18A	
<b>BATTERY MODE OUTPUT (AC)</b>		
Nominal Output Voltage	220/230/240VAC	
Output Waveform	Pure sine wave	
Efficiency (DC to AC)	94%	
<b>BATTERY &amp; CHARGER</b>		
Nominal DC Voltage	48VDC	
Maximum Solar Charging Current	160A	
Maximum AC Charging Current	140A	
Maximum Solar+AC Charging Current	160A	

HYBRID OPERATION

<b>PV INPUT (DC)</b>		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage / Initial Feeding Voltage	90VDC/120VDC	
MPPT Voltage Range	90~450VDC	
Maximum Input Current	2/18A	
<b>GRID OUTPUT (AC)</b>		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195~253VAC	
Nominal Output Current	35.6A	44.3A
<b>AC INPUT</b>		
AC Start-up Voltage / Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Maximum AC Input Current	48.2A	60A
Maximum AC Charging Current	140A	

GENERAL

<b>PHYSICAL</b>		
Dimension, D*W*H(mm)	530*390*170	
Cartoon Dimension, D *W *H(mm)	618*463*242	
Net Weight (kgs)	15.8	16.2
Gross Weight(kgs)	16.4	16.8

INTERACE

Communication Port	RS232/RS485/WIFI/GPRS/LITHIUM BATTERY	
<b>ENVIRONMENT</b>		
Humidity	5% to 95% Relative Humidity(Non-condensing)	
Operating Temperature	-10°C~50°C	

STANDARD

Compliance Safety	CE	
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ON/OFF GRID SOLAR INVERTER

VICTOR NM-ECO SERIES



**R** INVERTER MODE **G** PV MODE **B** UTILITY MODE



»» Features

- Pure sine wave solar inverter(on/off Grid)
- Output power factor 1.0
- WIFI&GPRS available for IOS and Android
- Inverter can run without battery
- One-key restoration to factory Settings
- Built-in Lithium battery automatic activation
- Dual communication ports for Battery communication and Wifi communication
- Built-in 120A MPPT Solar charge:max 6200W (for 3.6KW/4.2KW),max 6500W (for 6.2KW)
- Built-in 80A MPPT Solar charge: max 6500W (for 3.6KW / 48V)
- High PV input voltage range(60~500VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Dual output

»» Product Data Sheet

MODEL	VICTOR NM-ECO-3.6KW PLUS	VICTOR NM-ECO-4.2KW PLUS	VICTOR NM-ECO-6.2KW PLUS
Phase	1-phase		
Maximum PV Input Power	6200W	6500W	6200W
Rated Output Power	3600W/3600VA		6200W/6200VA
Maximum Solar Charging Current	120A	80A	120A

GRID-TIE OPERATION			
<b>PV INPUT(DC)</b>			
Nominal DC Voltage/Maximum DC Voltage	360/500VDC		
Start-up Voltage/Initial Feeding Voltage	60VDC/90VDC		
MPPT Voltage Range	60~450VDC		
Maximum Input Current	1/18A	1/22A	1/22A
<b>GRID OUTPUT(AC)</b>			
Nominal Output Voltage	220/230/240VAC		
Output Voltage Range	195~253VAC		
Nominal Output Current	15.7A	18.2A	27.0A
Power Factor	>0.99		
<b>EFFICIENCY</b>			
Maximum Conversion Efficiency(DC/AC)	98%		
<b>TWO LOAD OUTPUT POWER</b>			
Full Load	3600W	4200W	6200W
Maximum Main Load	3600W	4200W	6200W
Maximum Second Load(battery mode)	1200W	1400W	2067W
Maximum Load Cut Off Voltage	26VDC	52VDC	26VDC
Maximum Load Return Voltage	27VDC	54VDC	27VDC
<b>OFF-GRID OPERATION</b>			
<b>AC INPUT</b>			
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC		
Acceptable Input Voltage Range	90-280VAC or 170-280VAC		
Frequency Range	59~61±1HZ		
Maximum AC Input Current	21.1A	24.7A	36.4A
<b>PV INPUT (DC)</b>			
Nominal DC Voltage/Maximum DC Voltage	360/500VDC		
MPPT Voltage Range	60~450VDC		
Maximum Input Current	1/18A	1/22A	1/22A
<b>BATTERY MODE OUTPUT(AC)</b>			
Nominal Output Voltage	220/230/240VAC		
Output Waveform	Pure sine wave		
Efficiency (DC to AC)	94%		
<b>BATTERY &amp; CHARGER</b>			
Nominal DC Voltage	24VDC	48VDC	24VDC
Maximum Solar Charging Current	120A	80A	120A
Maximum AC Charging Current	100A	60A	100A
Maximum Solar+AC Charging Current	120A	80A	120A
<b>HYBRID OPERATION</b>			
<b>PV INPUT(DC)</b>			
Nominal DC Voltage/Maximum DC Voltage	360/500VDC		
Start-up Voltage/Initial Feeding Voltage	90VDC/120VDC		
MPPT Voltage Range	60~450VDC		
Maximum Input Current	1/18A	1/22A	1/22A
<b>GRID OUTPUT(AC)</b>			
Nominal Output Voltage	220/230/240VAC		
Output Voltage Range	195~253VAC		
Nominal Output Current	15.7A	18.2A	27.0A
<b>AC INPUT</b>			
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC		
Acceptable Input Voltage Range	90-280VAC or 170-280VAC		
Maximum AC Input Current	21.1A	24.7A	36.4A
Maximum AC Charging Current	100A		
<b>GENERAL</b>			
<b>PHYSICAL</b>			
Dimension,D*W*H(mm)	420*350*110		
Cartoon Dimension,D*W*H(mm)	500*415*180		
Net Weight (kgs)	8.0	8.0	8.9
Gross Weight (kgs)	9.0	9.0	10.0
<b>INTERACE</b>			
Communication Port	RS232/RS485/WIFI/GPRS/LITHIUM BATTERY		
<b>ENVIRONMENT</b>			
Humidity	5% to 95% Relative Humidity(Non-condensing)		
Operating Temperature	-10°C~50°C		
<b>STANDARD</b>			
Compliance Safety	CE		



»» Features

- Pure sine wave solar inverter(on/off Grid)
- Output power factor 1.0
- WIFI&GPRS available for IOS and Android
- Inverter can run without battery
- One-key restoration to factory Settings
- Built-in Lithium battery automatic activation
- Dual communication ports for Battery communication and Wifi communication
- Built Remove LCD Display and Key
- Built-in 120A MPPT Solar charge:max 6200W (for 3.6KW/4.2KW),max 6500W (for 6.2KW)
- High PV input voltage range (60~500VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Dual output

»» Product Data Sheet

MODEL	VICTOR NM-ECO PRO 3.6KW	VICTOR NM-ECO PRO 4.2KW	VICTOR NM-ECO PRO 6.2KW
Phase	1-phase		
Maximum PV Input Power	6200W	6200W	6500W
Rated Output Power	3600W/3600VA	4200W/4200VA	6200W/6200VA
Maximum Solar Charging Current	120A		
<b>GRID-TIE OPERATION</b>			
<b>PV INPUT (DC)</b>			
Nominal DC Voltage/Maximum DC Voltage	360/500VDC		
Start-up Voltage / Initial Feeding Voltage	60VDC/90VDC		
MPPT Voltage Range	60~450VDC		
Maximum Input Current	1/18A		1/22A
<b>EFFICIENCY</b>			
Maximum Conversion Efficiency (DC/AC)	98%		
<b>TWO LOAD OUTPUT POWER</b>			
Full Load	3600W	4200W	6200W
Maximum Main Load	3600W	4200W	6200W
Maximum Second Load(battery mode)	1200W	1400W	2067W
Maximum Load Cut Off Voltage	26VDC	26VDC	52VDC
Maximum Load Return Voltage	27VDC	27VDC	54VDC
<b>OFF-GRID OPERATION</b>			
<b>AC INPUT</b>			
AC Start-up Voltage / Auto Restart Voltage	120-140VAC/180VAC		
Acceptable Input Voltage Range	90-280VAC or 170-280VAC		
Frequency Range	59~61±1HZ		
Maximum AC Input Current	21.1A	24.7A	36.4A
<b>PV INPUT (DC)</b>			
Nominal DC Voltage/Maximum DC Voltage	360/500VDC		
MPPT Voltage Range	60~450VDC		
Maximum Input Current	1/18A		1/22A
<b>BATTERY MODE OUTPUT (AC)</b>			
Nominal Output Voltage	220/230/240VAC		
Output Waveform	Pure sine wave		
Efficiency (DC to AC)	94%		
<b>BATTERY &amp; CHARGER</b>			
Nominal DC Voltage	24VDC		48VDC
Maximum Solar Charging Current	120A		
Maximum AC Charging Current	100A		
Maximum Solar+AC Charging Current	120A		
<b>HYBRID OPERATION</b>			
<b>PV INPUT (DC)</b>			
Nominal DC Voltage/Maximum DC Voltage	360/500VDC		
Start-up Voltage / Initial Feeding Voltage	90VDC/120VDC		
MPPT Voltage Range	60~450VDC		
Maximum Input Current	1/18A		1/22A
<b>GRID OUTPUT (AC)</b>			
Nominal Output Voltage	220/230/240VAC		
Output Voltage Range	195~253VAC		
Nominal Output Current	15.7A	18.2A	27.0A
<b>AC INPUT</b>			
AC Start-up Voltage / Auto Restart Voltage	120-140VAC/180VAC		
Acceptable Input Voltage Range	90-280VAC or 170-280VAC		
Maximum AC Input Current	21.1A	24.7A	36.4A
Maximum AC Charging Current	100A		
<b>GENERAL</b>			
<b>PHYSICAL</b>			
Dimension,D*W*H(mm)	442*358*155		
Cartoon Dimension,D *W *H(mm)	500*415*215		
Net Weight (kgs)	8.8	9.3	9.8
Gross Weight(kgs)	10.0	10.5	11.0
<b>INTERACE</b>			
Communication Port	RS232/RS485/REMOVE LCD/WIFI/GPRS/LITHIUM BATTERY		
<b>ENVIRONMENT</b>			
Humidity	5% to 95% Relative Humidity(Non~condensing)		
Operating Temperature	-10°C~50°C		
<b>STANDARD</b>			
Compliance Safety	CE		

ON/OFF GRID SOLAR INVERTER

VICTOR NM-ECO-LV SERIES



»» Features

- Pure sine wave solar inverter(on/off Grid)
- Output power factor 1.0
- WIFI&GPRS available for IOS and Android
- Inverter can run without battery
- One-key restoration to factory Settings
- Built-in Lithium battery automatic activation
- AC output voltage 120VAC
- Built-in 120AMPPT Solar charge: max 4200W (for 3.6KW); max 6000W (for 6.2KW)
- High PV input voltage range(60~ 500VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Dual output

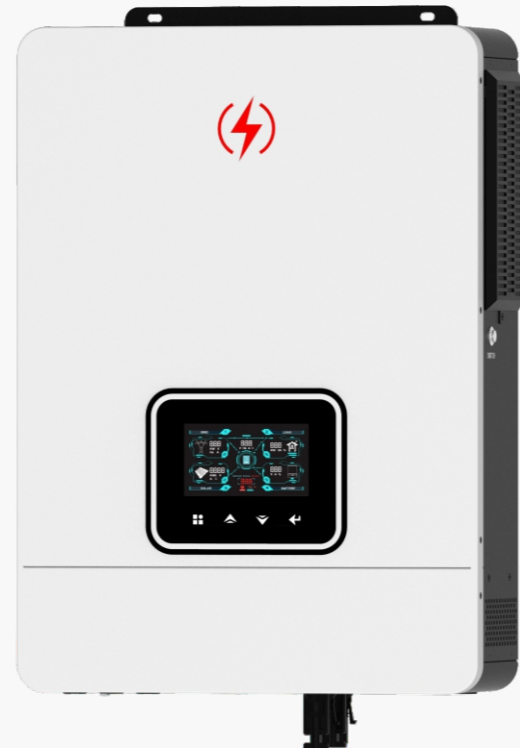
»» Product Data Sheet

MODEL	VICTOR NM-ECO-LV-3.6KW PLUS	VICTOR NM-ECO-LV-6.2KW PLUS
Phase	1-phase	
Maximum PV Input Power	4200W	6000W
Rated Output Power	3600W/3600VA(3000/3150/3300)	6200W/6200VA(5300/5500/5700)
Maximum Solar Charging Current	120A	

<b>GRID-TIE OPERATION</b>		
<b>PV INPUT (DC)</b>		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage / Initial Feeding Voltage	60VDC/90VDC	
MPPT Voltage Range	60~450VDC	
Maximum Input Current	1/18A	1/22A
<b>GRID OUTPUT (AC)</b>		
Nominal Output Voltage	120VAC(100/105/115V settable)	
Output Voltage Range	90-150VAC	
Nominal Output Current	30A	51.7A
Power Factor	>0.99	
<b>EFFICIENCY</b>		
Maximum Conversion Efficiency (DC/AC)	98%	
<b>TWO LOAD OUTPUT POWER</b>		
Full Load	3600W	6200W
Maxium Main Load	3600W	6200W
Maxium Second Load(battery mode)	1200W	2067W
Maxium Load Cut Off Voltage	26VDC	52VDC
Maxium Load Return Voltage	27VDC	54VDC
<b>OFF-GRID OPERATION</b>		
<b>AC INPUT</b>		
AC Start-up Voltage / Auto Restart Voltage	110VAC/120VAC	
Acceptable Input Voltage Range	90~150AC±2%	
Frequency Range	49-51±1HZ	
Maximum AC Input Current	40A	80A
<b>PV INPUT (DC)</b>		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
MPPT Voltage Range	60~450VDC	
Maximum Input Current	1/18A	1/22A
<b>BATTERY MODE OUTPUT (AC)</b>		
Nominal Output Voltage	120VAC(100/105/115V settable)	
Output Waveform	Pure sine wave	
Efficiency (DC to AC)	94%	
<b>BATTERY &amp; CHARGER</b>		
Nominal DC Voltage	24VDC	48VDC
Maximum Solar Charging Current	120A	120A
Maximum AC Charging Current	100A	100A
Maximum Solar+AC Charging Current	120A	120A
<b>HYBRID OPERATION</b>		
<b>PV INPUT (DC)</b>		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage / Initial Feeding Voltage	90VDC/120VDC	
MPPT Voltage Range	60~450VDC	
Maximum Input Current	1/18A	1/22A
<b>GRID OUTPUT (AC)</b>		
Nominal Output Voltage	120VAC(100/105/115V settable)	
Output Voltage Range	90-150VAC	
Nominal Output Current	30A	51.6A
<b>AC INPUT</b>		
AC Start-up Voltage / Auto Restart Voltage	120-140VAC/100VAC	
Acceptable Input Voltage Range	90-150VAC	
Maximum AC Input Current	40A	80A
Maximum Charging Current	120A	
<b>GENERAL</b>		
<b>PHYSICAL</b>		
Dimension,D*W*H(mm)	420*350*110	
Cartoon Dimension,D *W *H(mm)	500*415*180	
Net Weight (kgs)	8.8	9.5
Gross Weight(kgs)	10	11.5
<b>INTERACE</b>		
Communication Port	RS232/RS485/WIFI/GPRS/LITHIUM BATTERY	
<b>ENVIRONMENT</b>		
Humidity	5% to 95% Relative Humidity(Non~condensing)	
Operating Temperature	-10°C~50°C	
<b>STANDARD</b>		
Compliance Safety	CE	

# ON/OFF GRID SOLAR INVERTER

# VICTOR TURBO SERIES

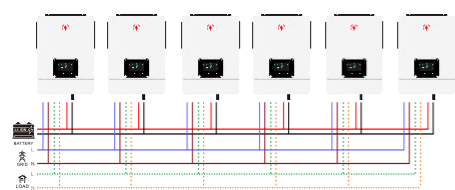


## »» Features

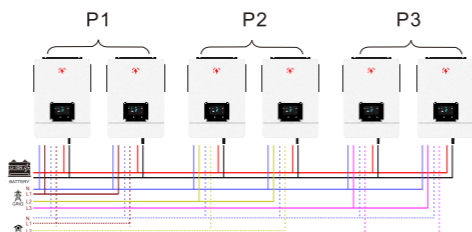
- Pure sine wave solar inverter(on/off Grid)
- Output power factor 1.0
- WIFI&GPRS available for IOS and Android
- Inverter can run without battery
- One-key restoration to factory Settings
- Built-in 120A MPPT Solar charge:max 6200W (for 3.6KW), max 7200W (for 6KW)
- Built-in Lithium battery automatic activation
- High PV input voltage range(60~500VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Dual output (only single phase)
- Can running three phase output
- Parallel operation up to 6 units
- Automatic access to the generator
- Dual PV input (only 6KW)
- Dual communication ports for Battery communication and Wifi communication



Parallel Operation in Single phase Six inverters in parallel power Connection



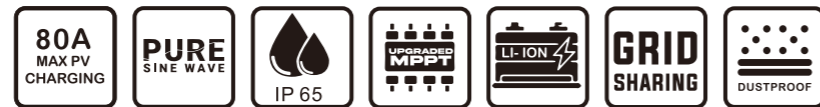
Parallel Operation in 3 phase Six inverters in parallel power Connection



## »» Product Data Sheet

MODEL	VICTOR Turbo 3.6KW	VICTOR Turbo 6KW
Phase	1-phase	
Maximum PV Input Power	6200W	7200W
Rated Output Power	3600W/3600VA	6000W/6000VA
Maximum Solar Charging Current	120A	
<b>GRID-TIE OPERATION</b>		
<b>PV INPUT (DC)</b>		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage / Initial Feeding Voltage	90VDC/120VDC	

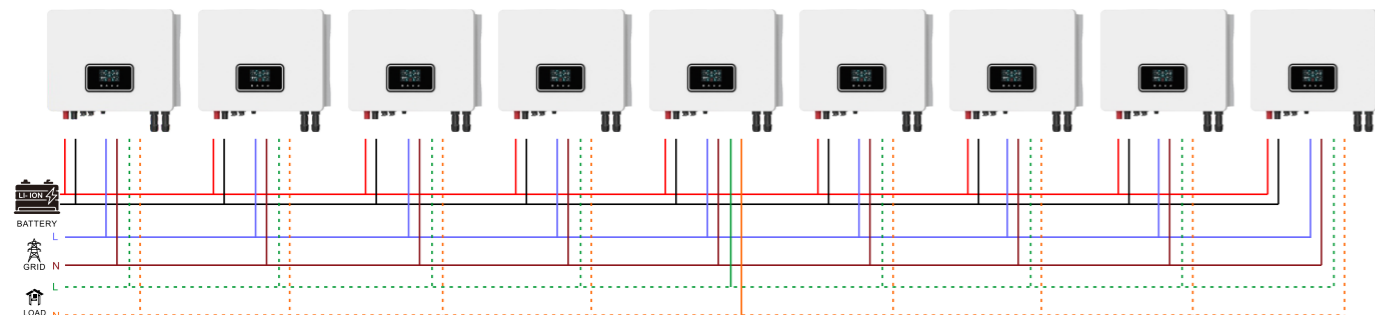
MPPT Voltage Range	60~450VDC	
Number of MPPT Trakers/Maximum Input current	1/22A	2/18A
<b>GRID OUTPUT (AC)</b>		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195.5~253VAC	
Nominal Output Current	15.2	26.1
Power Factor	>0.99	
Feed-in Grid Frequency Range	49~51±Hz	
<b>EFFICIENCY</b>		
Maximum Conversion Efficiency( Sloar to AC )	98%	
<b>TWO LOAD OUTPUT POWER(V2.0)</b>		
Full Load	3600W	6000W
Maxium Main Load	3600W	6000W
Maxium Second Load(battery mode)	1200W	2000W
Maxium Load Cut Off Voltage	26VDC	52VDC
Maxium Load Return Voltage	27VDC	54VDC
<b>OFF-GRID OPERATION</b>		
<b>AC INPUT</b>		
AC Start-up Voltage / Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Maximum AC Input Current	21.1A	35.3A
Nominal operating frequency	47~55±0.3HZ/57~65±0.3HZ	
Surge power	7200W	12000W
<b>PV INPUT (DC)</b>		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage/Initial Feeding Voltage	90VDC/120VDC	
MPPT Voltage Range	60~450VDC	
Number of MPPT Trakers/Maximum Input current	1/22A	2/18A
<b>BATTERY MODE OUTPUT (AC)</b>		
Nominal Output Voltage	220/230/240VAC	
Output Wave form	Pure sine wave	
Efficiency (DC to AC)	94%	
<b>HYBRID OPERATION</b>		
<b>PV INPUT (DC)</b>		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage/Initial Feeding Voltage	90VDC/120VDC	
MPPT Voltage Range	60~450VDC	
Number of MPPT Trakers/Maximum Input current	1/22A	2/18A
<b>GRID OUTPUT (AC)</b>		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195.5~253VAC	
Nominal Output Current	15.2	26.1
<b>AC INPUT</b>		
AC Start-up Voltage / Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Maximum AC Input Current	21.1A	35.3A
<b>BATTERY MODE OUTPUT(AC)</b>		
Nominal Output Voltage	220/230/240VAC	
Efficiency(DC to AC )	94%	
<b>BATTERY &amp; CHARGE</b>		
Nominal DC Voltage	24VDC	48VDC
Maximum AC Charging Current	100A	
Maximum Solar Charging Current	120A	
Maximum Solar+AC Charging Current	120A	
<b>GENERAL</b>		
<b>PHYSICAL</b>		
Dimension,D*W*H(mm)	316*430*115	
Cartoon Dimension,D *W *H(mm)	500*390*195	
Net Weight (kgs)	9	10
Gross Weight(kgs)	10	11
<b>INTERACE</b>		
Parallel Function	6 units	
Communication Port	RS232/RS485/WIFI/CAN/PARALLEL	
<b>OPERATING ENVIRONMENT</b>		
Humidity	5% to 95% Relative Humidity(Non~condensing)	
Operating Temperature	-10°C~50°C	
<b>STANDARD</b>		
Compliance Safety	CE	



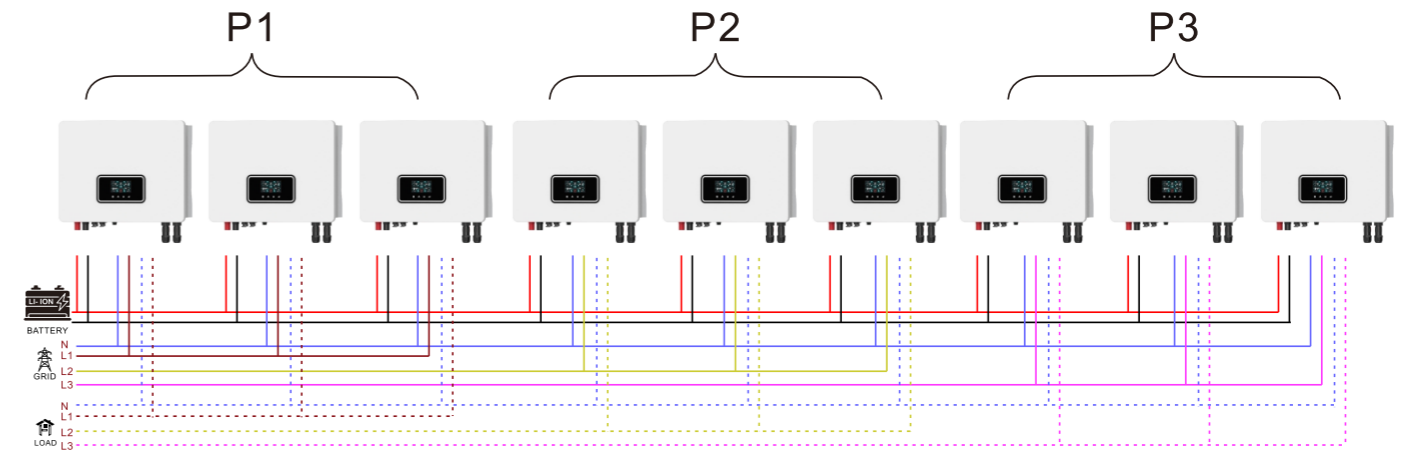
»» Features

- Ip65 degree of protection
- Pure sine wave solar inverter(Hybrid Inverter)
- WIFI & GPRS available for IOS and Android
- One-key restoration to factory Settings
- Built-in Lithium battery automatic activation
- Built-in 80A MPPT Solar charge :max 6000W
- High PV input voltage range(60~550VDC)
- Smart battery charge design to optimize battery life
- Dual PV input
- DRMS
- Extrapolation CT
- Parallel operation up to 9 units

Parallel Operation in Single phase Nine inverters in parallel power Connection



Parallel Operation in 3 phase Nine inverters in parallel power Connection



»» Product Data Sheet

MODEL	SUN-6.0KW-L1P-EU
<b>PV TERMINAL</b>	
Maximum PV Input Power	6000W
Maximum PV Array Open Circuit Voltage	550VDC
MPPT Voltage Range	60~500VDC
MPPT Full Load Voltage Range	230~500VDC
Maximum Input Current	1/13.5A
Maximum Short circuit Current	16.5
MPPT Traker/Strings	2
<b>ON-GRID TERMINAL</b>	
Nominal Output Apparent Power	5000VA
Maximum Output Apparent Power	5000VA
Nominal Output Voltage	230VAC
Nominal Operating frequency	50Hz
Nominal Output Current	22A
Power Factor(Cos phi),Adjustable	0.8 leading~0.8 lagging
<b>BATTERY TERMINAL</b>	
Battery Voltage	48VDC
Battery Voltage Range	40~60VDC
Maximum Charging Current	80A
Maximum Discharge Current	105A
<b>BACK-UP TERMINAL</b>	
Nominal Output Apparent Power	6000VA/6000W
Nominal Output Current	30A
Nominal Output Voltage	220/230/240Vac
Nominal Operating frequency	50/60Hz
<b>INTERACE</b>	
Parallel Function	9 units
<b>PHYSICAL</b>	
Dimension,D*W*H(mm)	520*350*200
Cartoon Dimension,D *W *H(mm)	635*500*300
Net Weight (kgs)	20
Gross Weight(kgs)	23
<b>OPERATING ENVIRONMENT</b>	
Altitude	≤2000m
Operating Temperature	-25°C~60°C,derating 45°C
<b>STANDARD</b>	
Compliance Safety	CE



»» Features

- Pure sine wave solar inverter
- WIFI&GPRS available for IOS and Android
- Built-in 60A MPPT solar charger
- PV input voltage range 20-150VDC (for 2000W),30~150VDC(for 3200W)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Meet rich customized demands
- Solar energy is provided directly to the load first
- Regular charging of municipal electricity

»» Product Data Sheet

MODEL	VICTOR LS-2000-12	VICTOR LS-3200-24
Rated Power	2000W/2000VA	3200W/3200VA
<b>AC INPUT</b>		
Voltage	230VAC	
Selectable Voltage Range	170~280VAC(For Personal Computers) 90~280VAC(For Home Appliances)	
Frequency Range	50 Hz/60Hz(Auto sensing)	
<b>AC OUTPUT</b>		
AC Voltage Regulation	230VAC±5%	
Surge Power	2000VA	3000VA
Efficiency(Peak)PV to INV	98%	
Efficiency(Peak)Battery to INV	92%	
Transfer Time	10 ms	
<b>BATTERY</b>		
Battery Voltage	12VDC	24VDC
Floating Charge Voltage	13.5VDC	27VDC
Overcharge Protection	16VDC	32VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>		
Solar Charger Type	MPPT	
Maximum PV Array Power	900W	1800W
MPPT Range @ Operating Voltage	20~150VDC	30~150VDC
Maximum PV Array Open Circuit Voltage Solar	150VDC	
Maximum Solar Charging Current	60A	
Maximum AC Charging Current	80A	
Maximum Solar+AC Charging Current	140A	
<b>PHYSICAL</b>		
Dimension, D*W*H(mm)	416*291*116	
Cartoon Dimension, D*W*H(mm)	490*370*190	
Net Weight(kgs)	7.1	7.3
Gross Weight(kgs)	8.1	8.3
<b>ENVIRONMENT</b>		
Humidity	5% to 95% Relative Humidity(Non~condensing)	
Operating Temperature	-10°C~50°C	
<b>STANDARD</b>		
Compliance Safety	CE	



»» Features

- Pure sine wave solar inverter
- Built-in 40A MPPT solar charger
- PV input voltage range 20~150VDC (for 1000W), 30~150VDC (for 1500W)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- meet rich customized demands
- Solar energy is provided directly to the load first

»» Product Data Sheet

MODEL	VICTOR NMS-1000-12	VICTOR NMS-1500-24
Rated Power	1000W/1000VA	1500W/1500VA
<b>AC INPUT</b>		
Voltage	230VAC	
Selectable Voltage Range	170~280VAC(For Personal Computers) 90~280VAC(For Home Appliances)	
Frequency Range	50 Hz/60Hz(Auto sensing)	
<b>AC OUTPUT</b>		
AC Voltage Regulation	230VAC± 5%	
Surge Power	2000VA	3000VA
Efficiency(Peak)PV to INV	98%	
Efficiency(Peak)Battery to INV	94%	
Transfer Time	10 ms	
<b>BATTERY</b>		
Battery Voltage	12VDC	24VDC
Floating Charge Voltage	13.5VDC	27VDC
Overcharge Protection	16VDC	32VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>		
Solar Charger Type	MPPT	
Maximum PV Array Power	600W	1200W
MPPT Range @ Operating Voltage	20~150VDC	30~150VDC
Maximum PV Array Open Circuit Voltage Solar	150VDC	
Maximum Solar Charging Current	40A	
Maximum AC Charging Current	40A	
Maximum Solar+AC Charging Current	80A	
<b>PHYSICAL</b>		
Dimension, D*W*H(mm)	290*240*91	
Cartoon Dimension, D*W*H(mm)	340*295*145	
Net Weight(kgs)	3.5	3.6
Gross Weight(kgs)	4.0	4.2
<b>ENVIRONMENT</b>		
Humidity	5% to 95% Relative Humidity(Non~condensing)	
Operating Temperature	-10°C~50°C	
<b>STANDARD</b>		
Compliance Safety	CE	



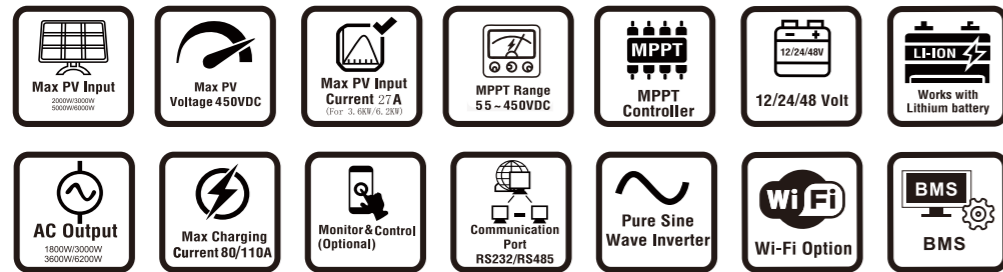


»» Features

- Pure sine wave solar inverter
- WIFI&GPRS available for IOS and Android
- Built-in 80A MPPT solar charger
- High PV input voltage range( 30~400VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Meet rich customized demands
- Compatible with lithium battery
- Solar energy is provided directly to the load first

»» Product Data Sheet

MODEL	VICTOR NML-2000-12	VICTOR NML-3200-24
Rated Power	2000VA/1600W	3200VA/3000W
<b>AC INPUT</b>		
Voltage	230VAC	
Selectable Voltage Range	170~280VAC(For Personal Computers) 90~280VAC(For Home Appliances)	
Frequency Range	50 Hz/60Hz(Auto sensing)	
<b>AC OUTPUT</b>		
AC Voltage Regulation	230VAC±5%	
Surge Power	4000VA	6400VA
Efficiency(Peak)PV to INV	98%	
Efficiency(Peak)Battery to INV	94%	
Transfer Time	10 ms (For Personal Computers);20 ms (For Home Appliances)	
<b>BATTERY</b>		
Battery Voltage	12VDC	24VDC
Floating Charge Voltage	13.5VDC	27VDC
Overcharge Protection	16VDC	33VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>		
Solar Charger Type	MPPT	
Maximum PV Array Power	3000W	3000W
MPPT Range @ Operating Voltage	30~400VDC	
Maximum PV Array Open Circuit Voltage Solar	400VDC	
Max Input Current	1/13A	
Maximum Solar Charging Current	80A	
Maximum AC Charging Current	60A	
Maximum Solar+AC Charging Current	80A	
<b>PHYSICAL</b>		
Dimension, D*W*H(mm)	357*273*95	
Cartoon Dimension, D*W*H(mm)	435*335*165	
Net Weight(kgs)	4.6	4.8
Gross Weight(kgs)	5.6	5.8
Communication Interface	RS232/GPRS/WIFI	
<b>ENVIRONMENT</b>		
Humidity	5% to 95% Relative Humidity(Non-condensing)	
Operating Temperature	-10°C~50°C	
<b>STANDARD</b>		
Compliance Safety	CE	

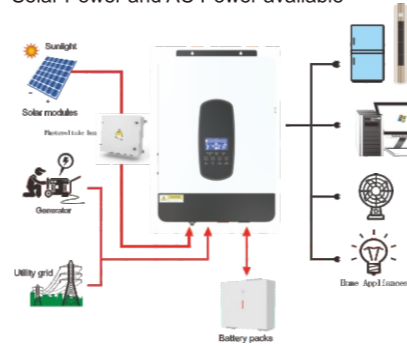


»» Features

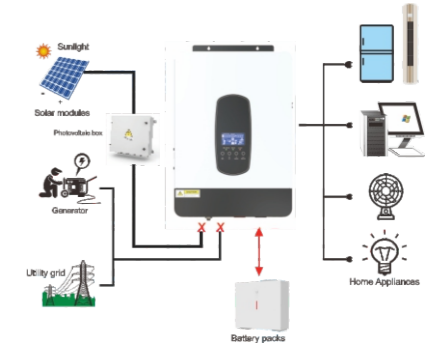
- Pure sine wave inverter
- Programmable supply priority for PV, battery or Grid
- High PV input voltage range(55-450VDC)
- Built-in Max 110A(3.8KW&6.2KW) MPPT solar charge
- Compatible with lithium-ion battery
- Support BMS communication with Lithium battery
- Smart battery charge design to optimize battery life
- Overload, high temperature, inverter output short circuit protection
- Cold start function
- Intelligent fan speed adjustment
- Built-in anti-dusk kit for harsh environment(optional)
- WIFI&GPRS available for IOS and android

»» Solar System Connection

■ Operation with battery connected  
Solar Power and AC Power available

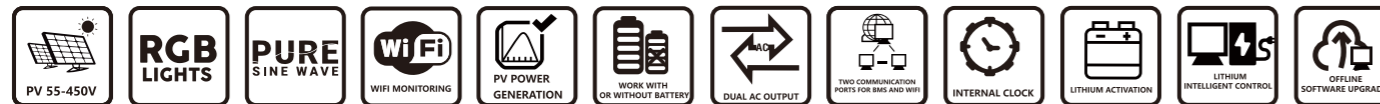


Solar Power and AC Power not available



»» Product Data Sheet

MODEL	SP-2200	SP-3200	SP-4200	SP-4200	SP-7000
Rated Power	2200VA/1800W	3200VA/3000W	4200VA/3800W	4200VA/3800W	7000VA/6200W
<b>INPUT</b>					
Voltage	230VAC				
Selectable Voltage Range	170-280VAC(for personal computers) 90-280VAC(for home appliances)				
Frequency Range	50Hz/60Hz(Auto sensing)				
<b>OUTPUT</b>					
AC Voltage Regulation (Batt.Mode)	230VAC±5%				
Surge power	4400VA	6400VA	8400VA	8400VA	14000VA
Transfer Time	10ms(for personal computers) 20ms(for home appliances)				
Waveform	Pure Sine Wave				
<b>BATTERY&amp;ACCHARGER</b>					
Battery Voltage	12VDC	24VDC	24VDC	48VDC	48VDC
Floating Charge Voltage	13.5VDC	27VDC	27VDC	54VDC	54VDC
Over charge Protection	15.5VDC	31VDC	31VDC	61VDC	61VDC
Maximum charge current	60A		80A	60A	80A
<b>SOLAR CHARGER</b>					
MAX.PV Array Power	2000W	3000W	6000W		
MPPT Range @ Operating Voltage	55-450VDC				
Maximum PV Array Open Circuit Voltage	450VDC				
Maximum Charging Current	80A		110A	80A	110A
Maximum Efficiency	98%				
<b>PHYSICAL</b>					
Dimension.D*W*H(mm)	405*286*98mm		423*290*100mm	423*290*105mm	
Net Weight(kgs)	4.5kg	5.0kg	6.8kg	6.9kg	7.5kg
Communication Interface	RS232/RS485(Standard) WIFI(Optional)				
<b>OPERATING ENVIRONMENT</b>					
Humidity	5% to 95% Relative Humidity(Non-condensing)				
Operating Temperature	-10°C to 55°C				
Storage Temperature	-15°C to 60°C				



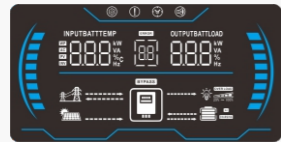
»» Features

- Pure sine Wave solar inverter
- Big LCD Screen with richer content
- Two communication Ports for BMS and WiFi
- Dual AC output available for 4.2KVA and 7KVA
- RGB Lighting for different working mode
- Inverter running with or without battery
- Built-in Lithium Battery automatic activation
- Lithium battery intelligent charge control system : adjust the inverter charging current according to the battery information.
- Internal clock function for showing PV power generation and setting AC charging time and running loads time by user
- Offline software upgrade function for adding new functions and fixing software errors
- Wide PV input voltage range 55-450VDC
- Built in 80A and 110A MPPT solar charger
- WIFI available for IOS and Android

»» Product Data Sheet

MODEL	RS-2200	RS-3200	RS-4200	RS-4200	RS-7000
Rated Power	2200VA/1800W	3200VA/3000W	4200VA/3800W	4200VA/3800W	7000VA/6200W
INPUT					
Voltage	230VAC				
Selectable Voltage Range	170-280VAC(for personal computers) 90-280VAC(for home appliances)				
Frequency Range	50Hz/60Hz(Auto sensing)				
OUTPUT					
AC Voltage Regulation(Batt.Mode)	230VAC±5%				
Surge power	4400VA	6400VA	8400VA	8400VA	14000VA
Transfer Time	10ms(for personal computers) 20ms(for home appliances)				
Wave form	Pure Sine Wave				
TWO LOAD OUTPUT POWER					
Full Load	1800W	3000W	3800W	3800W	6200W
Maximum Main Load	-	-	3800W	3800W	6200W
Maximum EPS Load ( Battery mode )	-	-	1200W	1200W	2000W
Main Load Cut Off Voltage	-	-	22V	44V	44V
Main Load Return Voltage	-	-	27V	54V	54V
BATTERY & AC CHARGER					
Battery Voltage	12VDC	24VDC	24VDC	48VDC	48VDC
Floating Charge Voltage	13.5VDC	27VDC	27VDC	54VDC	54VDC
Over charge Protection	15.5VDC	31VDC	31VDC	61VDC	61VDC
Maximum charge current	60A		80A	60A	80A
SOLAR CHARGER					
MAX.PV Array Power	2000W	3000W	6000W		
MPPT Range@ Operating Voltage	55-450VDC				
Maximum PV Array Open Circuit Voltage	450VDC				
Maximum Charging Current	80A		110A	80A	110A
Maximum Efficiency	98%				
PHYSICAL					
Dimension D*W*H(mm)	405*286*98mm		423*300*120mm	423*300*120mm	
Net Weight(kgs)	5kg	5.5kg	6.8kg	6.9kg	8kg
Communication Interface	Two communication ports ,One RS485 port for BMS , Another RS485/RS232 for remote monitoring				
OPERATING ENVIRONMENT					
Humidity	5% to 95% Relative Humidity(Non-condensing)				
Operating Temperature	-10°C to 55°C				
Storage Temperature	-15°C to 60°C				

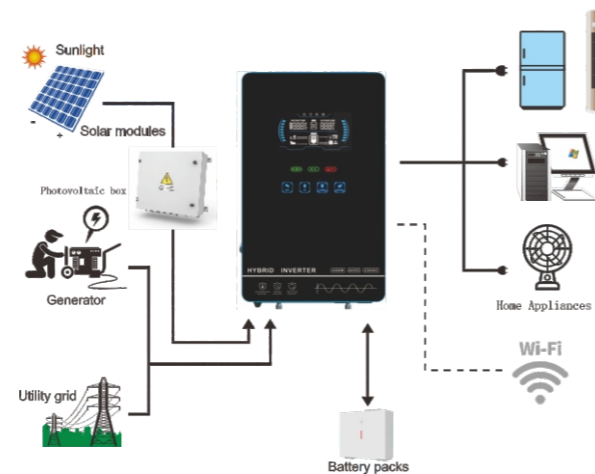
LCD remote control(optional)



»» Features

- On/Off Grid Solar Inverter
- Working without batteries in sunny day
- Under Battery Mode can adjust ac voltage to 110vac or 220vac
- SBU Mode : Utility Power ,battery and PV Power complement each other
- Pure sine wave solar inverter
- Unique glass top cover design with 6.25inch LCD display and touchable buttons
- Built-in 150A MPPT (Max PV 8000W) solar charger
- High PV input range from 55V-450Vdc
- Smart battery charger design for optimized battery performance
- Configurable AC/Battery input priority via LCD setting
- Auto restart while PV is recovering
- Over-load , over temperature and output short circuit protection
- Cold restart function
- Built-in lithium battery automatic activation
- Communication with RS232/RS485
- WiFi monitoring function (optional )
- Anti-dust kit for harsh environment(optional)
- Restore default Settings with one click

»» Solar System Connection



»» Product Data Sheet

MODEL	MPS-VX4.5KW	MPS-VX6.5KW
Rated Power	4500W	6500W
INPUT		
Voltage	230VAC	
Selectable Voltage Range	175-265VAC(for personal computers) 90-265VAC(for home appliances)	
Frequency Range	50Hz/60Hz(Auto sensing)	
OUTPUT		
AC VoltageRegulation(Batt.Mode)	230VAC±5%	
Surge power	2* rated power for 5 seconds	
Efficiency (Peak)PV to INV	97%	
Efficiency(Peak) BA to INV	94%	
TransferTime	10ms(for personal computers) 20ms(for home appliances)	
Wave form	Pure Sine Wave	
BATTERY&AC CHARGER		
Battery Voltage	24VDC	48VDC
Bulk Charging Voltage	Flooded Battery	29.2VDC
	AGM/GEL Battery	28.2VDC
Floating Charge Voltage	27.6VDC	54VDC
Overcharge Protection	32VDC	63VDC
Maximum charge current	140A	110A
SOLAR CHARGER		
MAX.PV Array Power	7200W	7200W
MPPT Range@ OperatingVoltage	55-450VDC	
Maximum PV Array Open Circuit Voltage	450VDC	
Maximum Charging Current	150A	130A
Maximum Efficiency	99%	
GRID-TIE OPERATION		
PV INPUT(DC)	55-450Vdc	
Nominal DC Voltage/Maximum DC Volatge	360Vdc/450Vdc	
Start-up Voltage/Initial Feeding Voltage	55Vdc	
MPPT VoltageRange	55Vdc-360Vdc	
Number of MPPT Trackers/Maximum Input Current	1/20A	
GRID OUTPUT(AC)		
Nominal Output Voltage	230Vac	
Output Voltage Range	176V-264V	
Nominal Output Current	19.5A	28.2A
Power Factor	>0.99	
Feed-in Grid Frequency Range	49~51+1Hz	
EFFICIENCY		
Maximum Conversion Efficiency(DC/AC)	98%	
MPPT Efficiency	99.90%	
PHYSICAL		
Dimension.D*W*H(mm)	400*250*89mm	
Net Weight(kgs)	7.5kg	8.5kg
Communication Interface	RS485/RS232(Standard) LCD remote/WIFI(Optional)	
OPERATING ENVIRONMENT		
Humidity	5% to 95% Relative Humidity(Non-condensing)	
Operating Temperature	0°C to 55°C	
Storage Temperature	-15°C to 60°C	



»» Features

- Built-in 140A MPPT solar charger(only for 24V/48V);  
80A MPPT solar charger (only for 96V)
- PV input voltage range 60-500VDC
- Smart battery charge design to optimize battery life
- Built-in anti-dust kit for harsh environment
- Timed charging
- Countable power generation (day/month/year)
- Dual MPPT(only for 96V)

»» Product Data Sheet

MODEL	XMC-140-24V	XMC-140-48V	XMC-80-96V
<b>BATTERY</b>			
Battery Voltage	24VDC	48VDC	96VDC
Floating Charge Voltage	27VDC	54VDC	118VDC
Overcharge Protection	31VDC	62VDC	124VDC
Charging Current	140A		80A
<b>SOLAR CHARGER</b>			
Solar Charger Type	MPPT		
Maximum PV Array Power	4200W	6500W	9600W
MPPT Range @ Operating Voltage	60~450VDC		
Maximum PV Array Open Circuit Voltage	500V		
Number of MPPT Trakers/Maximum Input current	1/22A		
<b>PHYSICAL</b>			
Dimension,D*W*H(mm)	380*249*115		415*300*115
Cartoon Dimension,D *W *H(mm)	435*310*180		470*360*180
Net Weight(kgs)	5.6	5.8	7
Gross Weight(kgs)	6.2	6.4	7.6
<b>OPERATING ENVIRONMENT</b>			
Humidity	5% to 95% Relative Humidity(Non-condensing)		
Operating Temperature	-10°C~50°C		
<b>STANDARD</b>			
Compliance Safety	CE		

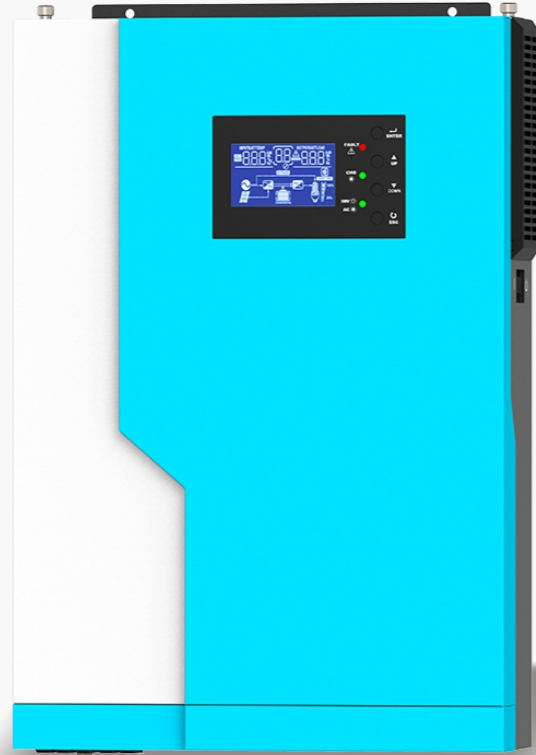


»» Features

- Pure sine wave solar inverter(on/off Grid)
- Output power factor 1.0
- WIFI&GPRS available for IOS and Android
- Inverter can run without battery
- One-key restoration to factory Settings
- Built-in Lithium battery automatic activation
- Built-in 120A(for 3.6KW/6.2KW)/140A(for 4. 2KW) MPPT Solar charge: max 6200w(for 3.6kw/4.2kw), max 6500w (for 6.2kw)
- High PV input voltage range(90~500VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Built Remove LCD Display and Key

»» Product Data Sheet

MODEL	VICTOR NM-PRO-3.6KW	VICTOR NM-PRO-4.2KW	VICTOR NM-PRO-6.2KW
Phase	1-phase		
Maximum PV Input Power	6200W	6200W	6200W
Rated Output Power	3600W/3600VA	4200W/4200VA	6200W/6200VA
<b>INPUT</b>			
Voltage	120-140VAC/180VAC		
Selectable Voltage Range	90-280VAC or 170-280VAC		
Frequency Range	50/60Hz		
<b>GRID OUTPUT(AC)</b>			
Nominal Output Voltage	220/230/240VAC		
Output Voltage Range	195.5~253VAC		
Nominal Output Current	15.7A	18.2A	27.0A
Power Factor	>0.99		
Feed-in Grid Frequency Range	49~51±1Hz		
<b>OUTPUT</b>			
AC Voltage Regulation (Batt. Mode)	230VAC±5%		
Surge Power	7200W	8400W	12400W
Efficiency (Peak)	94%		
Transfer Time	10 ms (For Personal Computers);20 ms (For Home Appliances)		
Waveform	Pure sine wave		
No Load Power Consumption	35W	42W	62W
<b>BATTERY</b>			
Battery Voltage	24VDC	24VDC	48VDC
Floating Charge Voltage	29.2VDC	29.2VDC	58.4VDC
Overcharge Protection	28.2VDC	28.2VDC	56.4VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>			
Solar Charger Type	MPPT		
Maximum PV Array Power	6200W	6200W	6500W
MPPT Range & Operating Voltage	90~450VDC		
Maximum PV Array Open Circuit Voltage	500VDC		
Maximum PV Input Current	30A	30A	40A
Maximum AC Charging Current	120A	140A	120A
Maximum Solar Charging Current	100A		
Maximum Solar+AC Charging Current	120A	140A	120A
<b>PHYSICAL</b>			
Dimension,D*W*H(mm)	440*310*140		
Cartoon Dimension,D *W *H(mm)	555*393*225		
Net Weight (kgs)	10.0	10.5	11.0
Gross Weight(kgs)	11.0	11.5	12.0
Communication Interface	RS232/WIFI/Remove LCD/GPRS		
<b>ENVIRONMENT</b>			
Humidity	5% to 95% Relative Humidity(Non~condensing)		
Operating Temperature	-10°C~50°C		
<b>STANDARD</b>			
Compliance Safety	CE		



»» Features









- Pure sine wave solar inverter
- Output power factor 1.0
- Wifi&GPRS available for IOS and android
- Inverter can run without battery
- Built-in 100A MPPT solar charger
- High PV input voltage range(120~450VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life

»» Product Data Sheet

Model	VICTOR NM-II-3500W-PLUS	VICTOR NM-II-5500W-PLUS
RATED POWER	3500VA/3500W	5500VA/5500W
<b>Input</b>		
Voltage	230VAC	
Selectable Voltage Range	170~280VAC(For Personal Computers) 90~280VAC(For Home Appliances)	
Frequency Range	50 Hz/60Hz(Auto sensing)	
<b>OUTPUT</b>		
AC Voltage Regulation(Batt.Mode)	230VAC±5%	
Surge Power	7000VA	11000VA
Efficiency(Peak)PV to INV	97%	
Efficiency(Peak)Battery to INV	94%	
Transfer Time	10 ms (For Personal Computers);20 ms (For Home Appliances)	
<b>BATTERY &amp; AC CHARGER</b>		
Battery Voltage	24VDC	48VDC
Floating Charge Voltage	27VDC	54VDC
Overcharge Protection	33VDC	63VDC
Maximum Charge Current	80A	80A
<b>SOLAR CHARGER</b>		
Maximum PV Array Power	5000W	6000W
MPPT Range @ Operating Voltage	120~450VDC	
Maximum PV Array Open Circuit Voltage	500VDC	
Maximum Charging Current	100A	100A
Maximum Efficiency	98%	
<b>PHYSICAL</b>		
Dimension,D*W*H(mm)	440*310*110	
Cartoon Dimension,D *W *H(mm)	590*390*208	
Net Weight(kgs)	8.5	9.5
Gross Weight(kgs)	9.5	10.5
Communication interface	RS232/GPRS/WIFI	
<b>ENVIRONMENT</b>		
Humidity	5% to 95% Relative Humidity(Non~condensing)	
Operating Temperature	-10°C~50°C	
<b>STANDARD</b>		
Compliance Safety	CE	



- R INVERTER MODE
- G PV MODE
- B UTILITY MODE

 Built-in Lithium battery automatic activation	 BMS protection	 Integrated design	 Receptacle
 RGB lights	 Universal wheel	 Constant voltage technology protects the circuit	 Dustproof

»» Features

- Pure sine wave solar inverter(on/off Grid)
- Output power factor 1.0
- WIFI&GPRS available for IOS and Android
- One-key restoration to factory Settings
- Built-in Lithium battery automatic activation
- Integrated design
- Built-in 120A MPPT Solar charge: max 6200W(for 4.2KW); max 6500W(for 6.2KW)
- High PV input voltage range(60~ 500VDC)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Dual output

»» Product Data Sheet

MODEL	VICTOR NM-ESSM-4.2KW PLUS-100AH/200AH	VICTOR NM-ESSM-6.2KW PLUS-100AH
Phase		
Maximum PV Input Power	6200W	6500W
Rated Output Power	4200W/4200VA	6200W/6200VA
Maximum Solar Charging Current	120A	
<b>GRID-TIE OPERATION</b>		
<b>PV INPUT (DC)</b>		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage / Initial Feeding Voltage	60VDC/90VDC	
MPPT Voltage Range	60~450VDC	
Maximum Input Current	1/18A	1/22A
<b>GRID OUTPUT (AC)</b>		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195.5~253VAC	
Nominal Output Current	18.2A	27.0A
Power Factor	>0.99	
<b>EFFICIENCY</b>		
Maximum Conversion Efficiency (DC/AC)	98%	
<b>TWO LOAD OUTPUT POWER</b>		
Full Load	4200W	6200W
Maxium Main Load	4200W	6200W
Maxium Second Load(battery mode)	1400W	2067W
Maxium Load Cut Off Voltage	26VDC	52VDC
Maxium Load Return Voltage	27VDC	54VDC
<b>OFF-GRID OPERATION</b>		
<b>AC INPUT</b>		
AC Start-up Voltage / Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Frequency Range	49~51±1HZ	
Maximum AC Input Current	24.7A	36.4A
<b>PV INPUT (DC)</b>		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
MPPT Voltage Range	60~450VDC	
Maximum Input Current	1/18A	1/22A
<b>BATTERY MODE OUTPUT (AC)</b>		
Nominal Output Voltage	220/230/240VAC	
Output Waveform	Pure sine wave	
Efficiency (DC to AC)	94%	
<b>BATTERY &amp; CHARGER</b>		
Nominal DC Voltage	24VDC	48VDC
Maximum Solar Charging Current	120A	140A
Maximum AC Charging Current	100A	100A
Maximum Solar+AC Charging Current	120A	140A
<b>HYBRID OPERATION</b>		
<b>PV INPUT (DC)</b>		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage / Initial Feeding Voltage	90VDC/120VDC	
MPPT Voltage Range	60~450VDC	
Maximum Input Current	1/18A	1/22A
<b>GRID OUTPUT (AC)</b>		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195.5~253VAC	
Nominal Output Current	18.2A	27.0A
<b>AC INPUT</b>		
AC Start-up Voltage / Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VAC or 170-280VAC	
Maximum AC Input Current	24.7A	36.4A
Maximum AC Charging Current	100A	



MODEL	VICTOR NM-ESSM-4.2KW PLUS-100AH/200AH	VICTOR NM-ESSM-6.2KW PLUS-100AH	
<b>BATTERY</b>			
MODEL	25.6V100AH	25.6V200AH	48V100AH
Normal charging voltage	29.2V	29.2V	54.75V
Maximum charging current	100A(Recommended)	100A/200A (Recommended 100A)	100A(Recommended)
Discharge termination voltage	20V	20V	37.5V
Recommended discharge termination voltage	22.4V	22.4V	42V
Maximum discharge current	100A	100A/200A	100A
Single cell charging overvoltage protection	3.65V	3.65V	3.65V
Overvoltage protection for the whole battery	29.2V	29.2V	54.75V
Low voltage protection for single cell discharge	2.5V	2.5V	2.5V
Low voltage protection for whole group discharge	20V	20V	37.5V
Charge overcurrent protection	110A	110A/220A	110A
Discharge overcurrent protection	110A	110A/220A	110A
BMS Features	High accuracy cell level voltage, current measuring Over-charge, over-discharge protection Short-circuit protection Self-learning intelligent SOC calculation Cell level active equalization Multiple communication type Parallel connect function		
Working temperature	-20℃~+65℃		
Storage temperature	0℃~+65℃		
<b>GENERAL</b>			
<b>PHYSICAL</b>			
Dimension,D*W*H(mm)	701*441*231		
Cartoon Dimension,D *W *H(mm)	800*530*340		
Net Weight (kgs)	42KG	59 KG	58KG
Gross Weight(kgs)	44.7KG	61.7KG	60KG
<b>INTERACE</b>			
Communication Port	RS232/RS485/WIFI/GPRS		
<b>ENVIRONMENT</b>			
Humidity	5% to 95% Relative Humidity(Non-condensing)		
<b>STANDARD</b>			
Compliance Safety	CE UN38.3;MSDS		

## ENERGY STORAGE SYSTEM

## VICTOR NM-ESSM SERIES



Built-in Lithium battery automatic activation



BMS protection



Integrated design



Receptacle



40A MPPT



Universal wheel



Constant voltage technology protects the circuit



Dustproof

### »» Features

- Integrated design
- Pure sine wave solar inverter
- Built-in 40A MPPT solar charger
- PV input voltage range 20~150VDC (for 1000W) 30~150VDC(for 1500W)
- Built-in anti-dust kit for harsh environment
- Smart battery charge design to optimize battery life
- Meet rich customized demands
- Solar energy is provided directly to the load first

## »» Product Data Sheet

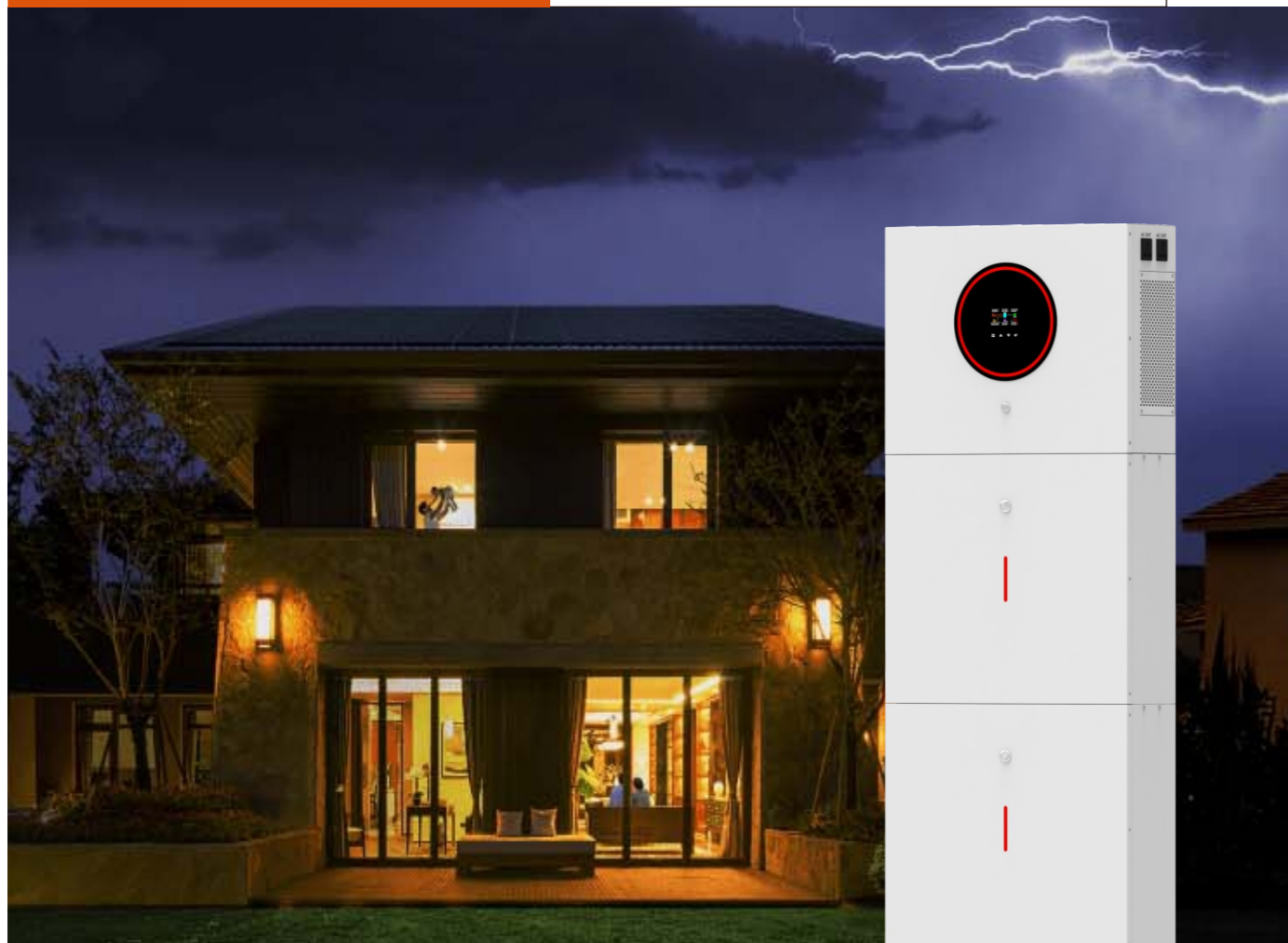
Model	VICTOR NM-ESSM-1.0KW PLUS-100AH	VICTOR NM-ESSM-1.5KW PLUS-100AH
RATED POWER	1000W/1000VA	1500W/1500VA
<b>AC Input</b>		
Voltage	230VAC	
Selectable Voltage Range	170~280VAC(For Personal Computers)	
	90~280VAC(For Home Appliances)	
Frequency Range	50 Hz/60Hz(Auto sensing)	
<b>AC OUTPUT</b>		
AC Voltage Regulation	230VAC±5%	
Surge Power	2000 VA	3000VA
Efficiency(Peak)PV to INV	98%	
Efficiency(Peak)Battery to INV	94%	
Transfer Time	10 ms	
<b>BATTERY</b>		
Battery Voltage	12VDC	24VDC
Floating Charge Voltage	13.5VDC	27VDC
Overcharge Protection	16VDC	32VDC
<b>SOLAR CHARGER &amp; AC CHARGER</b>		
Solar Charger Type	MPPT	
Maximum PV Array Power	600W	1200W
MPPT Range @ Operating Voltage	20~150VDC	30~150VDC
Maximum PV Array Open Circuit Voltage solar	150VDC	
Maximum Solar Charge Current	40A	
Maximum AC Charge Current	40A	
Maximum Solar+AC Charging Current	80A	

<b>BATTERY</b>		
MODEL	12.8V100AH	25.6V100AH
Normal charging voltage	14.2V	29.2V
Maximum charging current	100A	100A
Discharge termination voltage	9.2V	20V
Recommended discharge termination voltage	10V	22.4V
Maximum discharge current	100A	100A
Single cell charging overvoltage protection	3.75V	3.65V
Overvoltage protection for the whole battery	15V	29.2V
Low voltage protection for single cell discharge	2.3V	2.5V
Low voltage protection for whole group discharge	10V	20V
Charge overcurrent protection	110A	
Discharge overcurrent protection	110A	

## BMS Features

High accuracy cell level voltage, current measuring  
 Over-charge, over-discharge protection  
 Short-circuit protection  
 Self-learning intelligent SOC calculation  
 Cell level active equalization  
 Multiple communication type  
 Parallel connect function

Working temperature	-20°C~+65°C	
Storage temperature	0°C~+65°C	
<b>PHYSICAL</b>		
Dimension,D*W*H(mm)	491*320*140	
Cartoon Dimension,D *W *H(mm)	570*390*230	
Net Weight(kgs)	17.3	32.3
Gross Weight(kgs)	19.2	34.5
<b>ENVIRONMENT</b>		
Humidity	5% to 95% Relative Humidity(Non-condensing)	
<b>STANDARD</b>		
Compliance Safety	CE UN38.3;MSDS	



**R** INVERTER MODE    **G** PV MODE    **B** UTILITY MODE



»» Features

- Pure sine wave solar inverter(on/off Grid)
- Output power factor 1.0
- WIFI&GPRS available for IOS and Android
- Inverter can run without battery
- One-key restoration to factory Settings
- Built-in Lithium battery automatic activation
- Built-in anti-dust kit for harsh environment
- Built-in 120A (for 4.2KW/6.2KW), 160A(for 10.2KW) MPPT Solar charge : max 6200W (for 4.2KW) max 6500 (for 6.2KW),max 10200W (for 10.2)
- High PV input voltage range(60~500VDC)
- Smart battery charge design to optimize battery life
- Dual output

»» Product Data Sheet

**INVERTER**

MODEL	VICTOR NM-ESS-4.2KW PLUS	VICTOR NM-ESS-6.2KW PLUS	VICTOR NM-ESS-10.2KW PLUS
Phase	1-phase		
Maximum PV Input Power	6200W	6500W	5400W+5400W
Rated Output Power	4200W/4200VA	6200W/6200VA	10200W/10200VA
Maximum Solar Charging Current	120A		

**GRID-TIE OPERATION**

<b>PV INPUT (DC)</b>			
Nominal DC Voltage/Maximum DC Voltage	360/500VDC		
Start-up Voltage / Initial Feeding Voltage	60VDC/90VDC	90VDC/120VDC	
MPPT Voltage Range	60~450VDC		90~450VDC
Maximum Input Current	1/18A	1/22A	2/18A
<b>GRID OUTPUT (AC)</b>			
Nominal Output Voltage	220/230/240VAC		
Output Voltage Range	195~253VAC		190~253VAC
Nominal Output Current	18.2A	27.0A	44.3A
Power Factor	>0.99		
<b>EFFICIENCY</b>			
Maximum Conversion Efficiency (DC/AC)	98%		
<b>TWO LOAD OUTPUT POWER</b>			
Full Load	4200W	6200W	10200W
Maxium Main Load	4200W	6200W	10200W
Maxium Second Load(battery mode)	1400W	2067W	3400W
Maxium Load Cut Off Voltage	26VDC	52VDC	
Maxium Load Return Voltage	27VDC	54VDC	

**OFF-GRID OPERATION**

<b>AC INPUT</b>			
AC Start-up Voltage / Auto Restart Voltage	120-140VAC/180VAC		
Acceptable Input Voltage Range	90-280VAC or 170-280VAC		
Frequency Range	59~61±1HZ		
Maximum AC Input Current	24.7A	36.4A	60A
<b>PV INPUT (DC)</b>			
Nominal DC Voltage/Maximum DC Voltage	360/500VDC		
MPPT Voltage Range	60~450VDC		90~450VDC
Maximum Input Current	1/18A	1/22A	2/18A
<b>BATTERY MODE OUTPUT (AC)</b>			
Nominal Output Voltage	220/230/240VAC		
Output Waveform	Pure sine wave		
Efficiency (DC to AC)	94%		
<b>BATTERY &amp; CHARGER</b>			
Nominal DC Voltage	24VDC	48VDC	
Maximum Solar Charging Current	120A	160A	
Maximum AC Charging Current	100A	140A	
Maximum Solar+AC Charging Current	120A	160A	

**HYBRID OPERATION**

<b>PV INPUT (DC)</b>			
Nominal DC Voltage/Maximum DC Voltage	360/500VDC		
Start-up Voltage / Initial Feeding Voltage	90VDC/120VDC		
MPPT Voltage Range	60~450VDC		90~450VDC
Maximum Input Current	1/18A	1/22A	2/18A
<b>GRID OUTPUT (AC)</b>			
Nominal Output Voltage	220/230/240VAC		
Output Voltage Range	195~253VAC		190~253VAC
Nominal Output Current	18.2A	27.0A	44.3A
<b>AC INPUT</b>			
AC Start-up Voltage / Auto Restart Voltage	120-140VAC/180VAC		
Acceptable Input Voltage Range	90-280VAC or 170-280VAC		
Maximum AC Input Current	24.7A	36.4A	60A
Maximum AC Charging Current	100A		140A

**GENERAL**

<b>PHYSICAL</b>			
Dimension, D*W*H(mm)	541*442*190		
Cartoon Dimension, D *W *H(mm)	600*550*240		
Net Weight (kgs)	18.5	27.8	25.5
Gross Weight(kgs)	20.5	29.4	27.5

**INTERACE**

Communication Port	RS232/WIFI/GPRS/LITHIUM BATTERY
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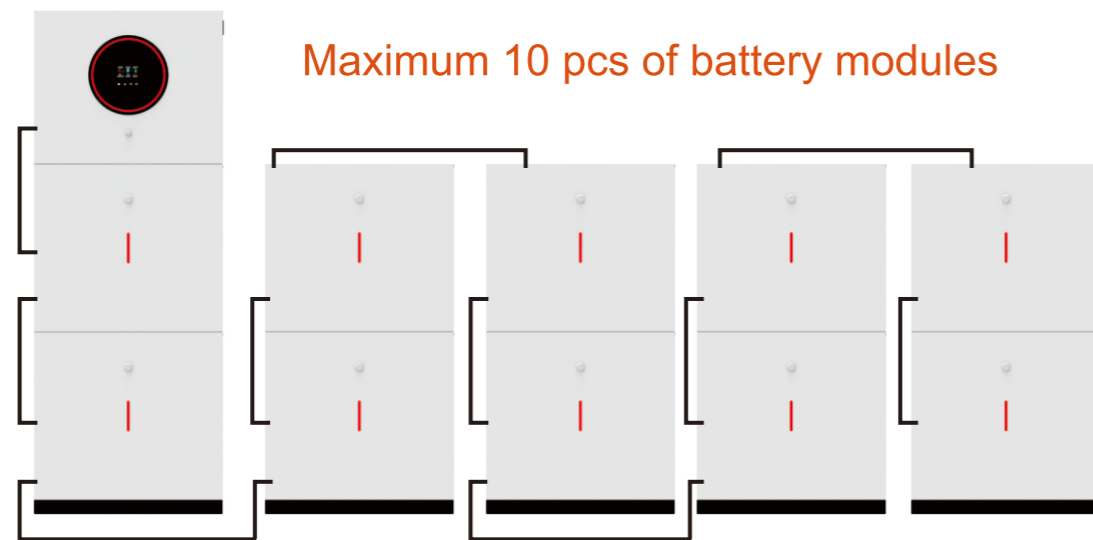
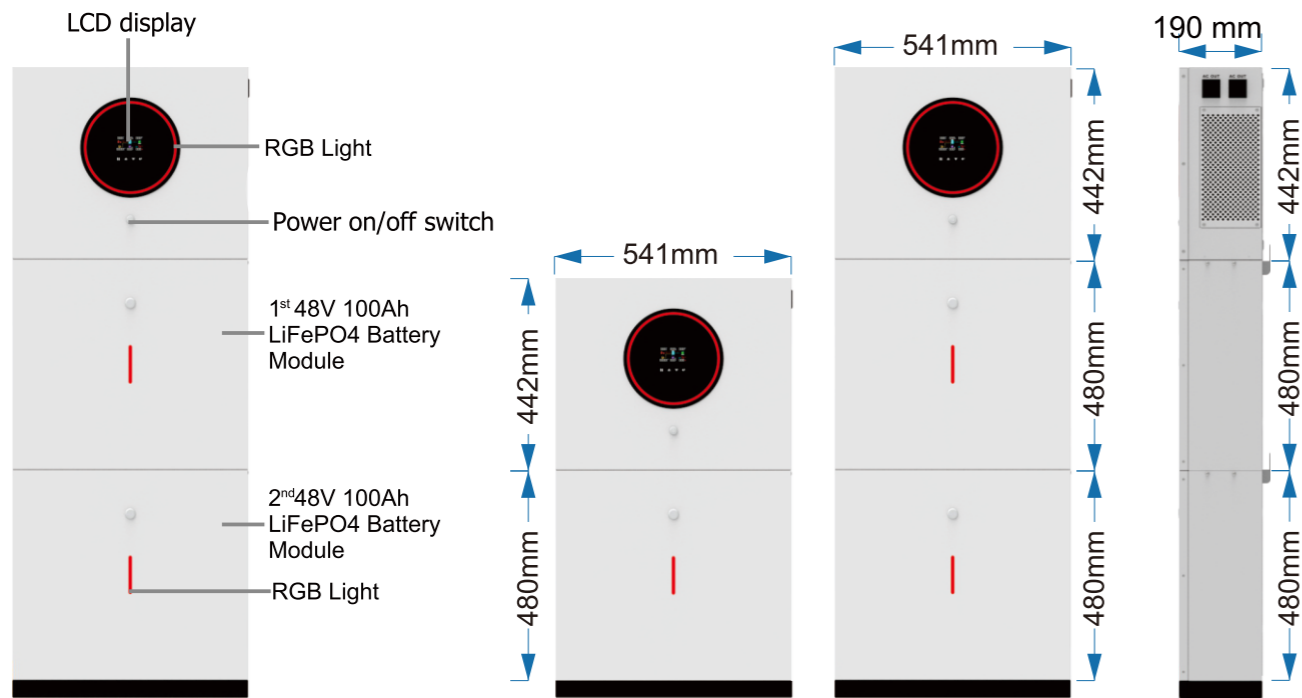
**ENVIRONMENT**

Humidity	5% to 95% Relative Humidity(Non-condensing)
Operating Temperature	-10°C~50°C

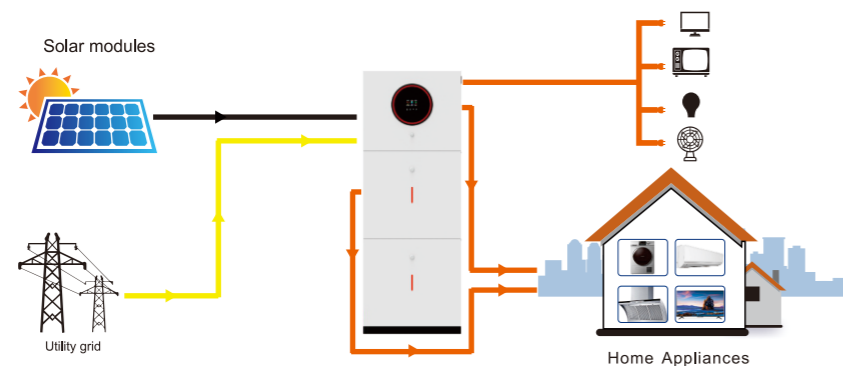
**STANDARD**

Compliance Safety	CE
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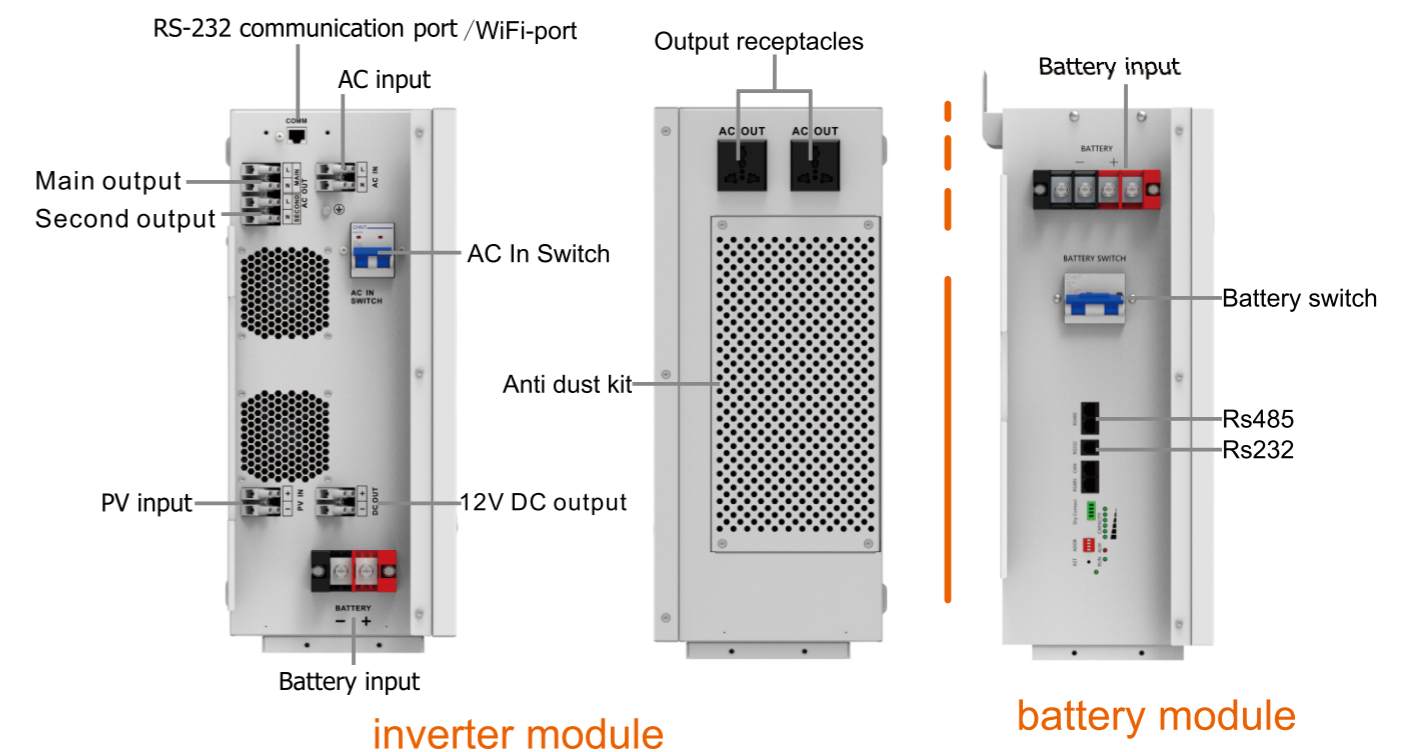
# Product Overview



# System Diagram



BATTERY					
MODEL	25.6V100AH	25.6V200AH	48V100AH	48V200AH	
Normal charging voltage	29.2V	29.2V	54.75V	54.75V	
Maximum charging current	100A	100A	100A	100A	
Discharge termination voltage	21.6V	21.6V	40.5V	40.5V	
Recommended discharge termination voltage	22.4V	22.4V	42V	42V	
Maximum discharge current	100A	100A	100A	100A	
Single cell charging overvoltage protection	3.8V	3.8V	3.8V	3.8V	
Overvoltage protection for the whole battery	29.2V	29.2V	54.75V	54.75V	
Low voltage protection for single cell discharge	2.7V	2.7V	2.7V	2.7V	
Low voltage protection for whole group discharge	21.6V	21.6V	40.5V	40.5V	
Charge overcurrent protection	102~112A	102~112A	102~112A	102~112A	
Discharge overcurrent protection	102~122A	102~122A	102~122A	102~122A	
BMS Features	High accuracy cell level voltage, current measuring Over-charge, over-discharge protection Short-circuit protection Self-learning intelligent SOC calculation Cell level active equalization Multiple communication type Parallel connect function				
Working temperature	-15°C~+55°C				
Storage temperature	-20°C~+50°C				
Single Battery Module	Dimensions (mm)	541*480*190	541*480*190	541*480*190	541*960*190
	Weight (Kg)	27KG	54KG	54KG	110KG



# WALL MOUNTED LITHIUM BATTERY LITHIUM BATTERY SERIES



## Features



### Security

Using safe and eco-friendly LiFePO4 battery, with MSDS, UN38.3, ROHS, IEC62619, UL



### More Usable Energy

Equipped with BMS Battery management system to intelligently manage and maintain each battery unit



### Grade

Quality of vehicle specification, high quality battery



### Capacity Expandable

Support for up to 10 batteries in parallel



### Long lasting

6000+ Cycle Life, intelligent balance



### High-tech

Focusing on the layout of the whole industrial chain of advanced lithium battery key materials, batteries, battery management and system integration, it has core technology intellectual property rights.



### Latest Technology

The safest, environmentally friendly Lithium Iron Phosphate technology



### Ultra low power consumption

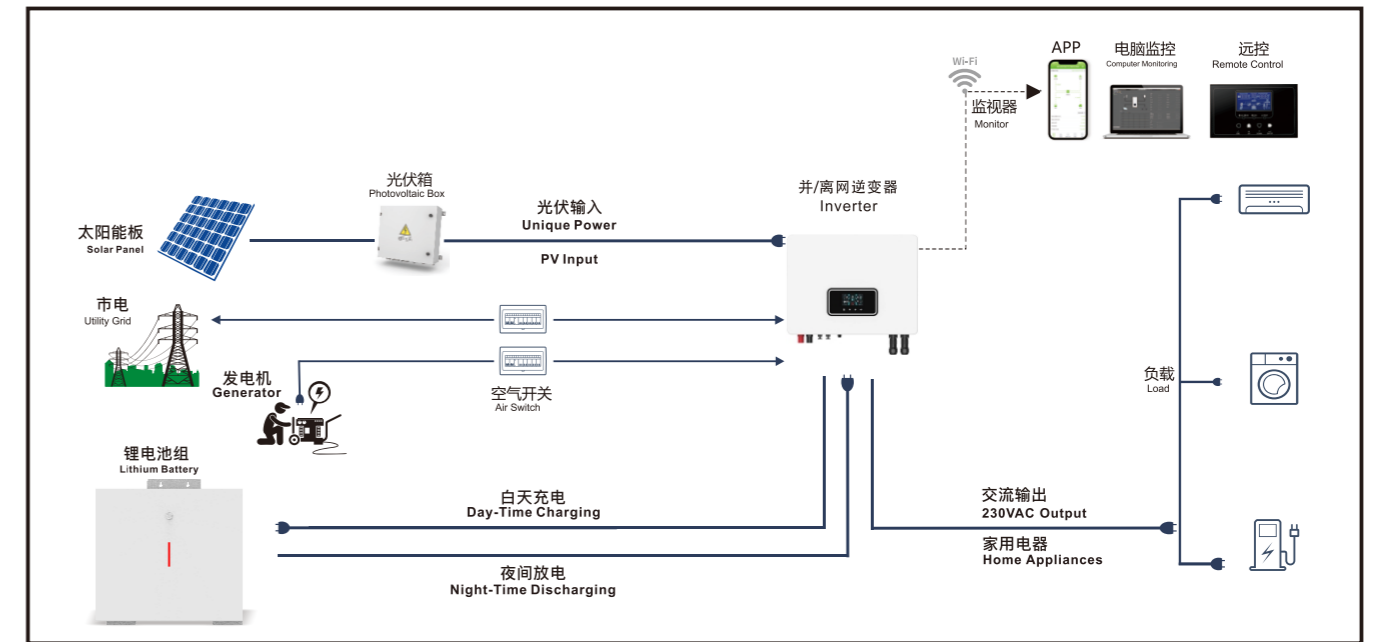
Low power and no relay design, milliwatt standby loss



### High quality

High quality, Grade A cell loss

## Introduction



## Product Data Sheet

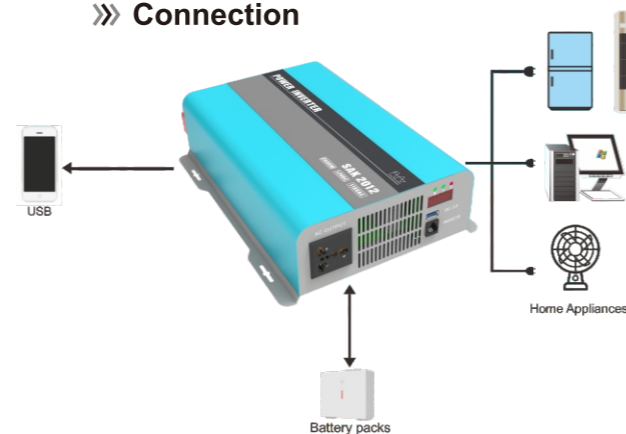
BATTERY					
MODEL	25.6V100AH	25.6V200AH	48V100AH	48V200AH	
Normal charging voltage	29.2V	29.2V	54.75V	54.75V	
Maximum charging current	100A	100A	100A	100A	
Discharge termination voltage	21.6V	21.6V	40.5V	40.5V	
Recommended discharge termination voltage	22.4V	22.4V	42V	42V	
Maximum discharge current	100A	100A	100A	100A	
Single cell charging overvoltage protection	3.8V	3.8V	3.8V	3.8V	
Overvoltage protection for the whole battery	29.2V	29.2V	54.75V	54.75V	
Low voltage protection for single cell discharge	2.7V	2.7V	2.7V	2.7V	
Low voltage protection for whole group discharge	21.6V	21.6V	40.5V	40.5V	
Charge overcurrent protection	102~112A	102~112A	102~112A	102~112A	
Discharge overcurrent protection	102~122A	102~122A	102~122A	102~122A	
BMS Features	High accuracy cell level voltage, current measuring Over-charge, over-discharge protection Short-circuit protection Self-learning intelligent SOC calculation Cell level active equalization Multiple communication type Parallel connect function				
Working temperature	-15°C~+55°C				
Storage temperature	-20°C~+50°C				
Single Battery Module	Dimensions (mm)	541*480*190	541*480*190	541*480*190	541*960*190
	Weight (Kg)	27KG	54KG	54KG	110KG



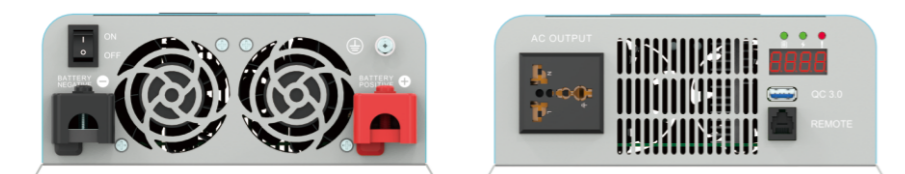
»» Features

- Pure sine wave inverter
- Maximum efficiency 90%
- Intelligent speed regulation of fan:the fan speed will be controlled according to the load and the temperature inside the fan
- Protection funtion:input under voltage protection, input over voltage protection,overload protection, short circuit protection,over temperature protection
- Application:home,office,vehice,yacht and other ocasions

»» Connection



»» Overview

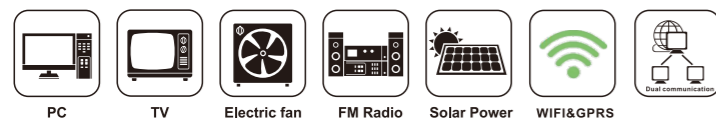


»» Remote(optional)



»» Product Data Sheet

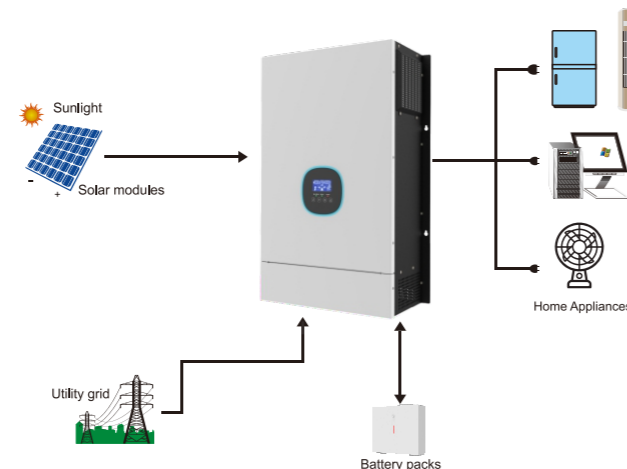
MODEL	SAK-0312E /SAK-0312	SAK-0324E /SAK-0324	SAK-0612E /SAK-0612	SAK-0624E /SAK-0624	SAK-1212E /SAK-1212	SAK-1224E /SAK-1224	SAK-2012E /SAK-2012	SAK-2024E /SAK-2024
<b>DC INPUT</b>								
Rated Input Voltage	12V	24V	12V	24V	12V	24V	12V	24V
Rated Current	30A	15A	56A	28A	112A	56A	210A	105A
Maximum Efficiency	90%							
Battery Type	Lead acid/Lithium battery							
<b>AC OUTPUT</b>								
Rated Power	300W		600W		1200W		2000W	
AC Voltage	220V/110V							
Frequency	50Hz/60Hz							
Wave Form	PURE SINE WAVE							
<b>INPUT PROTECTION</b>								
	12V				24V			
Battery Low Voltage Alarm	10.5V±0.5V				21.0V±0.5V			
Battery Low Voltage Recovery	11.0V±0.5V				22.0V±0.5V			
Battery Low Voltage Shutdown	10.0V±0.5V				20.0V±0.5V			
Battery High Voltage Alarm	15.0V±0.5V				30.0V±0.5V			
Battery High Voltage Alarm Recovery	14.5V±0.5V				29.0V±0.5V			
Battery High Voltage Shutdown	15.5V±0.5V				31.0V±0.5V			
<b>OUTPUT PROTECTION</b>								
Output Short Circuit Protection	After the fault is eliminated,it can be rebooted							
Overload Protection	110%≤Load<125%,1 minute shutdown; 125%≤Load<150%,30s shutdown; 150%≤Load,shut down immediately;							
Output Temperature Protection	Heat dissipation temperature > 90°C							
<b>OPERATING ENVIROMENT</b>								
Operating Temperature	0°C~40°C							
Humidity	0-80%							
<b>OTHER</b>								
Dimension	190*151*77(mm)	210*151*77(mm)	260*161*82(mm)	300*191*82(mm)	300*171*82(mm)			
Remote Control Switch Interface	Standard configuration							
USB	5V 2A							



»» Features

- Built-in MPPT solar charge controller
- Pure sine wave inverter
- Selectable charging current
- Selectable input voltage range
- Configurable AC/Battery input priority Via LCD setting
- Compatible with generator power
- Auto Restart while AC is recovering
- Overload and short circuit protection
- Color LCD display
- Support Lithium Battery
- WIFI&GPRS available for IOS and android
- Dual communication ports for Battery communication and Wifi communication

»» Connection



»» Product Data Sheet

MODEL	1012E	1024E	2012E	2024E	2048E	3012E	3024E	3048E	4024E	4048E	5024E	5048E	6024E	6048E
Rated Power	1000W		2000W		3000W		4000W		5000W		6000W			
INPUT														
Voltage	100/110/120VAC;220/230/240VAC													
Selectable Voltage Range	Wide Range:77VAC-138VAC;155VAC-275VAC(for home appliances) Narrow Range:85VAC-138VAC;170VAC-275VAC(for personal computer)													
Frequency Range	40Hz-70Hz (50Hz/60Hz)													
OUTPUT														
AC Voltage Regulation (Batt.Mode)	100/110/120VAC;220/230/240VAC													
Surge power	3000VA	6000VA	9000VA	12000VA	15000VA	18000VA								
Efficiency(Peak)	88%													
Transfer Time	< 10ms													
Wave form	Pure Sine Wave													
BATTERY & AC CHARGER														
Battery Voltage	12V	24V	12V	24V	48V	12V	24V	48V	24V	48V	24V	48V	24V	48V
Charge Current	35A	15A	65A	35A	15A	75A	50A	25A	70A	35A	75A	45A	75A	50A
Battery Voltage Range	For 12V:10VDC~16VDC±0. 3VDC/*2 for 24VDC/*4 for 48VDC													
Battery Low Voltage Alarm	For 12V:10.5VDC±0. 3VDC/*2 for 24VDC/*4 for 48VDC													
Battery Low Voltage Shutdown	For 12V:10VDC±0. 3VDC/*2 for 24VDC/*4 for 48VDC													
SOLAR CHARGER														
Charge voltage	12V:16V~150V; 24:28V~150V; 48V;52V~150V													
Over-voltage protection	156V ± 3V													
Over-voltage return voltage	150V ± 3V													
Max.PV input power	For 12V:1200W; For 24V:2400W; For 48V:4800W;													
Max.Charging current	80A ± 5A													
Battery ripple voltage	< 1%													
Efficiency	≥99.5%													
PHYSICAL														
Dimension.D*W*H(mm)	520*342*155mm										565*387*156mm			
OPERATING ENVIRONMENT														
Humidity	5% to 95% Relative Humidity(Non-condensing)													
Operating Temperature	-10°C to 50°C													
Storage Temperature	-15°C to 60°C													

# WiFi Module



## Wi-fi Module

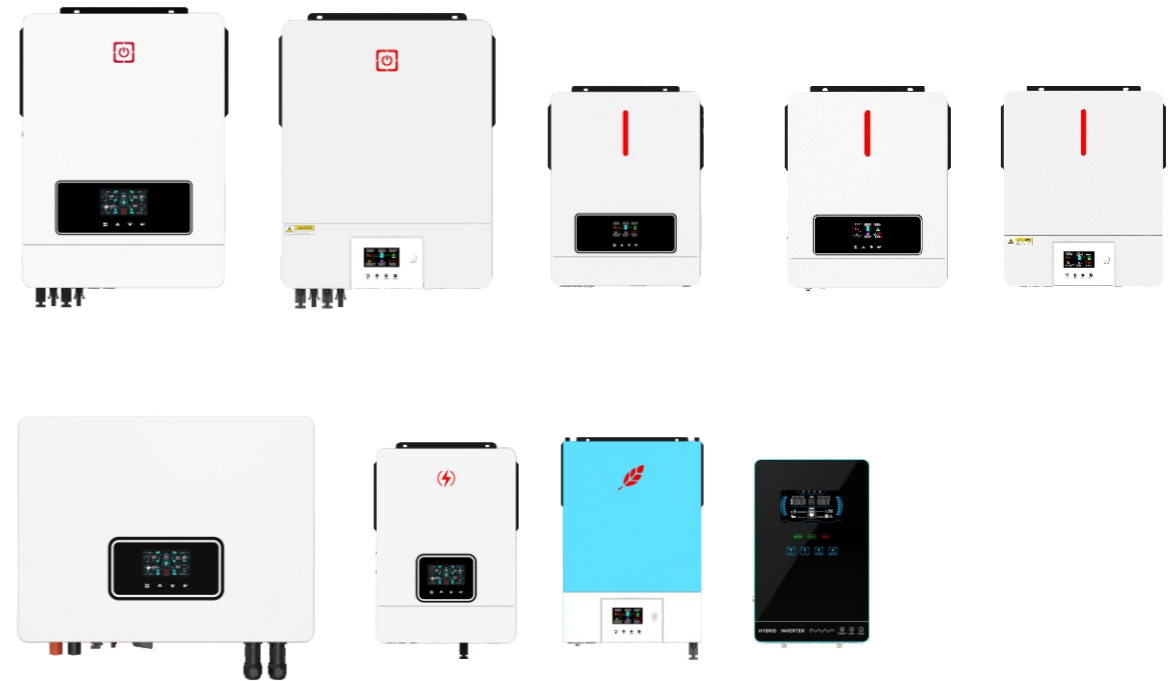
- Real-time dynamic graphs of inverter data
- Cloud storage for history data and event log
- Remote monitoring and control of multiple inverters via mobile APP(IOS and Android)
- Parameter setting available(output setting,output priority setting, AC input range, battery setting and etc.)



## »» Product Data Sheet

MODEL	Network Support	Communication Interface	Power Input	Power Consumption	Operating Temperature	Operating Humidity	Storage Temperature	Dimension,D*W*H(mm)
Wi-Fi Module	802.11 b/g/n, AP/STA	RS232/RS485	5V-12V	2watt(max.)	-20°C~75°C	0~95%	-30°C~80°C	28*46*172

# On/Off Grid Solar Inverter



# Off Grid Solar Inverter



# MPPT Charger



# Power Inverter



# Car Inverter



# Solar Energy Storage System





技术要求：

- 1.尺寸：420\*285
  - 2.材质：封面300克铜版纸，内页157克铜版纸，正反面CMYK彩色印刷
  - 3.装订：锁线胶装
  - 4.印刷：图片、字体、线条需清晰，无重影、无毛边、无多余杂点
- 此技术要求不用印书