SUMRY NEXT Next Power

GUANGDONG SUNRAY POWER CO.,LTD

Guangdong Ruili lithium Energy Co., Ltd

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Company website

VERSION:V20250612

SUMRY

广东瑞锂新能源有限公司

Guangdong Ruili lithium Energy Co., Ltd

广东三瑞电源有限公司

GUANGDONG SUNRAYPOWERCO.,LTD

HuiZhou Industrial Park
Huizhou plant area(61000M^2)

R&D and sales center

ABOUT US

COMPANY PROFILE

Guangdong Ruili lithium Energy Co., Ltd is a wholly-owned subsidiary of GUANGDONG SUNRAY POWER CO., LTD. Since its establishment, Guangdong Ruili lithium Energy Co., Ltd. has always been focusing on lithium battery and battery pack integrated machine field, and is a high-tech enterprise integrating research and development, production, sales and service.

We have a research and development team composed of senior industry experts and professional technical personnel, and continue to invest a lot of resources in technological innovation, so far we have more than 800 patented technologies.

The company has established a modern production base, covering an area of 61,000 square meters, equipped with a number of advanced automated production lines, introducing the world's leading production equipment and testing instruments, every link strictly follows the ISO9001 quality management system standards, to ensure the reliability and consistency of product quality.

The company's products cover a variety of types and specifications of lithium batteries, battery pack all-in-one machines, widely used in household electricity, outdoor energy storage, new energy vehicles, energy storage systems, power tools, smart wearable devices, medical equipment and other fields. The products are sold well in the domestic market, and exported to Africa, Asia Pacific, the Middle East, Europe and America and other countries and regions.

In terms of service, the company has built a perfect pre-sale, sales and after-sales service system to provide customers with a full range of solutions and technical support.

Guangdong Ruili lithium Energy Co., Ltd adheres to the development concept of "innovation driven, quality first, customer first", constantly improving technological innovation ability and product quality, expanding market areas.

Industry Experience
20+ yers

Patents
800+ sum

Team Members
1000+ people

Installation Case
100+ countries or regions

Corporate Mission

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

Corporate Vision

Pursue the material and spiritual happiness of all partners

Core Values

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

Enterprise Spirit

Swift and resolute, truly practical and diligent

QUALIFICATIONS

COMPANY HISTORY >>>>>

Company History

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 afamous UPS supplier athome and abroad

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

In 2009.
off grid inver terand 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 companyentered the self built plantand began to enter the photovoltaic inverterindustry

In 2014.
obtained the EU CE certification and VDE certification

In 2015.
Pakistan factory was responsible for the localization operation service of the company'sproducts,and the company established its first overseas project; the company established four foreign trade platforms of Ali international station

In 2017.
obtained the EU CE certification and VDE certification

2017 - 2019

In 2017.
Shenzhen Next Power 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 I series came out.

In 2018.
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 IS09001 quality management system certification

In 2019.
Island detection control software V1.0for NEXT POWER 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 asWIF/GPRS/RS232/USB

2020 - 2021

In 2020.
Certificate of high-tech enterprise Is09001 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 SolarCE certification for Victor NM series, Victor NM-IV Plus series Victor NM II PLUS series and Victor NM II series, 3.5kW and5.5KW off grid solar inverters.Strategic Cooperation with Fronus, the 1st overseas projectThe1st production line was established Turnover 30 millionUSD

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 lines150 employees.Turnover 75 million USD

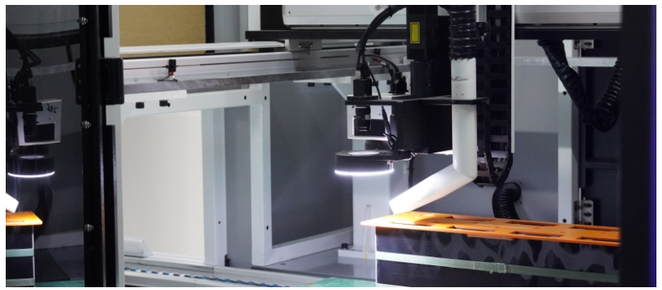
In 2022.
Sales performance reached 1 billion yuan

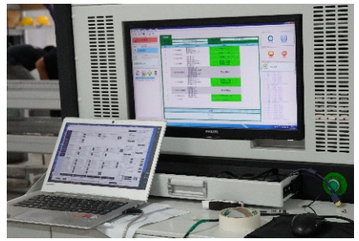
In 2023.
Victor NML Series, 1.6kW,3.0KW off grid solar inverters Victor ECO Series,3.6kW,6.2kW hybrid solar inverters Victor MAX Series ,7.2KW/8.2KW/10.2KW hybrid solar inverters.CE for Victor NM ECO Strategic cooperation with Fronus 6 production lines 300 employees Estimated turnover 1 billion USD

2024

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

FACTORY





CAREFULLY CRAFTED

ABUNDANT INVENTORY

EXQUISITE WORKMANSHIP

CORE ADVANTAGES

MES System

Increase product traceability and monitor product quality throughout the entire process

Complete Processing Technology

Reduce outsourcing quality risks and meet the needs of customers in the photovoltaic industry

ONE STOP SERVICE

Provide one-stop services from complete machine production to overall design solutions for customers in the photovoltaic industry

High Quality Partners

Strategic cooperation with top equipment and material suppliers both domestically and internationally

Experienced R&D Team

More than 50 professional technical talents with over 20 years of experience in the photovoltaic industry have been dedicated to R&D and manufacturing for 20 years

Intelligent Manufacturing Enterprise

Production efficiency increased by 30%
Artificial reduction of 50%
Scrap reduced by 40%

Quick View Guide

LITHIUM BATTERY

EB SERIES

25.6V 100AH

25.6V 200AH
51.2V 100AH

PAGE:11-12

EB PLUS SERIES

51.2V 200AH

51.2V 300AH

PAGE:13-14

ENERGY STORAGE SYSTEM

ESSM SERIES

1KW/1.5KW

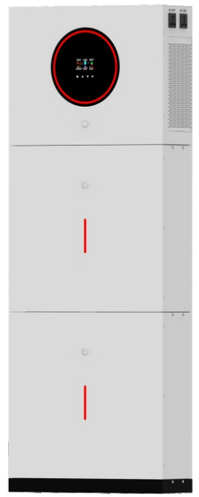
PAGE:15-16

4.2KW/6.2KW

PAGE:17-20

ENERGY STORAGE SYSTEM

ESS SERIES



4.2KW / 6.2KW

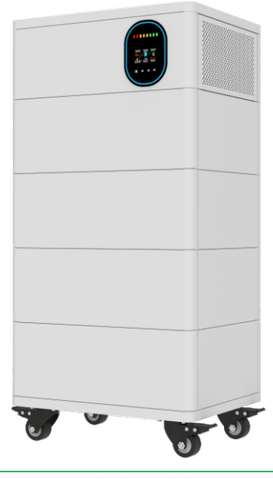
PAGE:21-24

8.2KW / 10.2KW

PAGE:25-28

ENERGY STORAGE SYSTEM

ESSM PLUS SERIES



4.2KW/6.2KW

PAGE:29-32

PORTABLE POWER STATION

ESP SERIES

250W 500W/1000W

PAGE:33-36

Wall Mounted Lithium Battery

EB SERIES

- Using safe and eco-friendly LiFePO4 battery,with MSDS,UN38.3,ROHS,IEC62619,UL
- Equipped with BMS Battery management system to intelligently manage and maintain each battery unit
- Support for up to 16 batteries in parallel
- 6000+Cycle Life,intelligent balance
- Quality of vehicle specification,high quality battery
- Low power and no relay design,milliwatt standby loss
- The safest,environmentally friendly Lithium ion Phosphate technology
- Higher energy density and efficiency
- 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

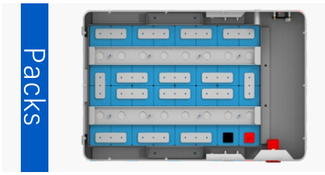
Multiple Modes Of Operation | Customized Logo | Multiple Shell Colors | Customized Capacity

BATTERY

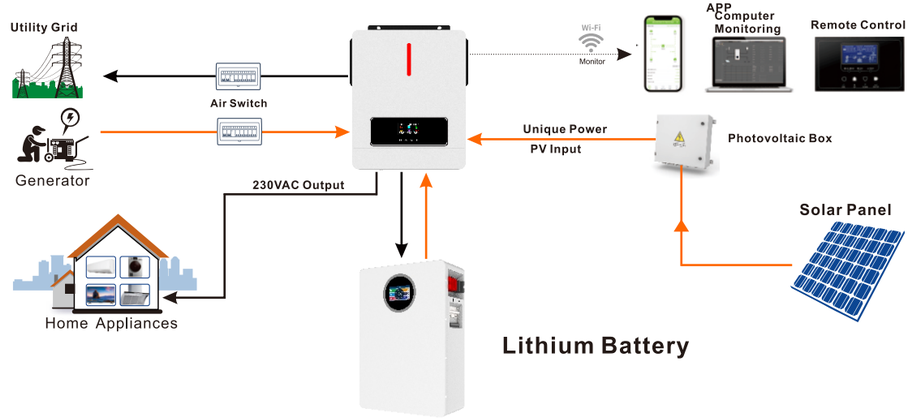
MODEL	25.6V 100AH	25.6V 200AH	51.2V 100AH
Rated Voltage	25.6V		51.2V
Rated Capacity	100Ah	200Ah	100Ah
Rated Energy	2.56kWh	5.12kWh	5.12kWh
Output Voltage Range	21.6V~29.2V		43.2V~58.4V
Charging Voltage	28.8~29.2V		57.6~58.4V
Cut-off Voltage	21.6V		43.2V
Max.Charging Current	100A		
Recommended Charging Current	50A		
Max.Discharging Current	100A		
Efficiency	98%		
Dimension H*W*D(mm)	410*300*185	550*370*185	
Carton Dimension,H*W*D(mm)	530*395*235	630*460*235	
Net Weight(kg)	25	45	
Gross Weight(kg)	26.5	47	
Humidity	5%~95%Relative humidity		
Charging Temperature	-20℃~65℃		
Discharging Temperature	-20℃~60℃		
Storage Temperature	-10℃~50℃		
Cycle Life	>6000 times(0.2C,@25℃,80%DOD)		
Design Life	>10 years		
Operating Mode	Touchable Screen		

DETAILS

Packs



SYSTEM DIAGRAM



Wheel-Mounted Lithium Battery

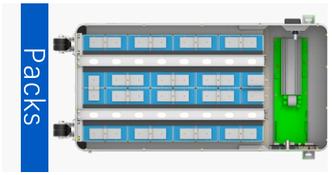
EB-PLUS SERIES

- Using safe and eco-friendly LiFePO4 battery,with MSDS,UN38.3,ROHS,IEC62619,UL
- Equipped with BMS Battery management system to intelligently manage and maintain each battery unit
- Support for up to 16 batteries in parallel
- 6000+Cycle Life,intelligent balance
- Quality of vehicle specification,high quality battery
- Low power and no relay design,milliwatt standby loss
- The safest,environmentally friendly Lithium ion Phosphate technology
- Higher energy density and efficiency
- 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

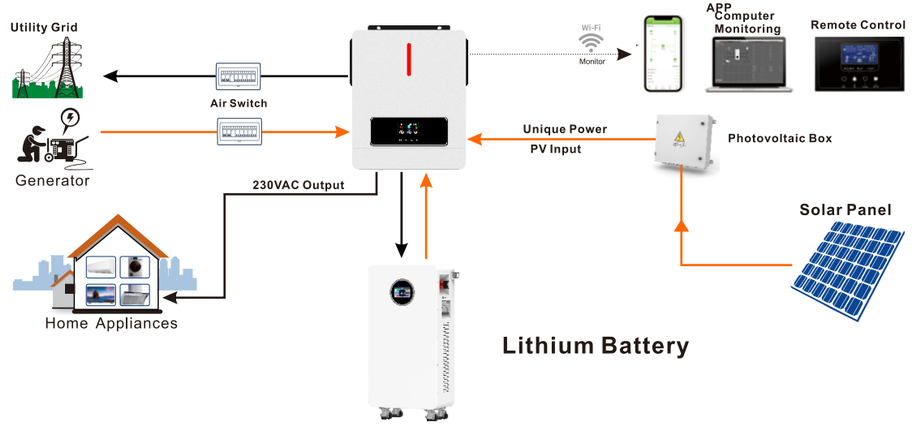
Multiple Modes Of Operation | Customized Logo | Multiple Shell Colors | Customized Capacity

BATTERY				
MODEL	51.2V 200AH	51.2V 300AH		
Rated Voltage	51.2V			
Rated Capacity	200Ah	280Ah	300Ah	314Ah
Rated Energy	10.24kWh	14.336kWh	15.36kWh	16.076kWh
Output Voltage Range	43.2V~58.4V			
Charging Voltage	57.6~58.4V			
Cut-off Voltage	43.2V			
Max.Charging Current	200A	200A		
Recommended Charging Current	50A	50A		
Max.Discharging Current	200A	200A		
Efficiency	98%			
Dimension H*W*D(mm)	750*415*235	895*415*235		
Carton Dimension,H*W*D(mm)	760*505*420	980*495*440		
Net Weight(kg)	89	120		
Gross Weight(kg)	115	142		
Humidity	5%~95%Relative humidity			
Charging Temperature	-20℃~65℃			
Discharging Temperature	-20℃~60℃			
Storage Temperature	-10℃~50℃			
Cycle Life	>6000 times(0.2C,@25℃,80%DOD)			
Design Life	>10 years			
Operating Mode	Press Button	Touchable Screen		

DETAILS



SYSTEM DIAGRAM



Energy Storage System

ESSM SERIES

- Integrated design
- Handles
- BMS protection
- Built-in 40A MPPT solar charger
- PV input voltage range 20~150VDC (for 1000W)30~150VDC(for1500W)
- Smart battery charge design to optimize battery life
- Solar energyis provided directly to the load first
- Receptacle
- Universal wheel
- Pure sine wave solar inverter
- Built-in Lithium battery automatic activation
- Built-in anti-dust kit for harsh environment
- Meet rich customized demands
- Constant voltage technology protects the circuit

Multiple Modes Of Operation | Customized Logo | Multiple Shell Colors | Customized Capacity

SUMRY NEXT Next Power

INVERTER

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

BATTERY

MODEL	12.8V100AH	25.6V100AH
Normal Charging Coltage	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 Over Voltage Protection	3.75V	3.65A
Over Voltage 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 Over Current Protection	110A	
Discharge Over Current 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℃~65℃	
Storage Temperature	-10℃~50℃	
PHYSICAL		
Dimension,H*W*D(mm)	491*320*140	546*360*140
Carton Dimension,H*W*D(mm)	570*390*230	625*430*230
Net Weight(kg)	17.3	32.3
Gross Weight(kg)	19.2	34.5
ENVIRONMENT		
Humidity	5%to 95%Relative Humidity(Non~condensing)	
STANDARD		
Compliance Safety	CE UN38.3;MSDS	

Energy Storage System

ESSM SERIES

- Integrated design
- RGB light
- BMS protection
- Built-in 120A MPPT Solar charge max6200W(for 4.2kW);max6500W(for 6.2KW)
- High PV input voltage range(60~500VDC)
- WIF1&GPRS available for IOS and Android
- Dual output
- Receptacle
- Universal wheel
- Pure sine wave solar inverter(on/off Grid)
- Built-in Lithium battery automatic activation
- Built-in anti-dust kit for harsh environment
- One-key restoration to factory Settings
- Constant voltage technology protects the circuit

Multiple Modes Of Operation | Customized Logo | Multiple Shell Colors | Customized Capacity

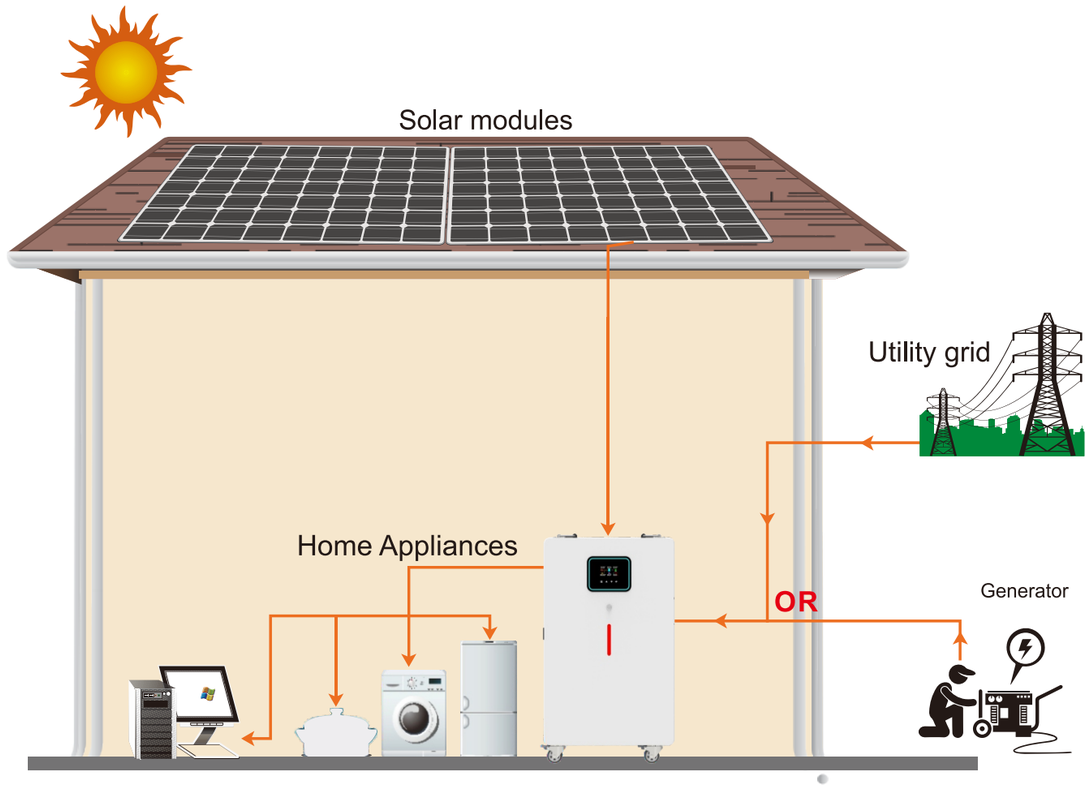
INVERTER		
MODEL	ESSM-4.2KW-100AH/200AH	ESSM-6.2KW-100AH
Phase		
Maximum PV Input Power	6200W	6500W
Rated Output Power	4200W/4200VA	6200W/6200VA
Maximum Solar Charging Current	120A	
GRID-TIE OPERATION		
PV INPUT(DC)		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage/Initial Feeding Voltage	60VDC/90VDC	
MPPT Voltage Range	60~450VDC	
Maximum Input Current	1/18A	1/22A
GRID OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195~253VAC	
Nominal Output Current	18.2A	27.0A
Power Factor	>0.99	
EFFICIENCY		
Maximum Conversion Effciency(DC/AC)	98%	
TWO LOAD OUTPUT POWER		
FullLoad	4200W	6200W
Maximum Main Load	4200W	6200W
Second Load Range	1400W	2067W
Maximum Load Cut OffVoltage	26VDC	52VDC
Maximum Load Return Voltage	27VDC	54VDC
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90~280VAC or 170~280VAC	
Frequency Range	49~51±1Hz	
MaximumAC Input Current	24.7A	36.4A
PV INPUT(DC)		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
MPPT Voltage Range	60~450VDC	
Maximum Input Current	1/18A	1/22A
BATTERY MODE OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Wave Form	Pure sine wave	
Effciency(DC to AC)	94%	
BATTERY&CHARGER		
Nominal DC Voltage	24VDC	48VDC
Maximum Solar Charging Current	120A / 140A	120A
MaximumAC Charging Current	100A / 100A	100A
Maximum Solar+AC Charging Current	120A / 140A	120A
HYBRID OPERATION		
PV INPUT(DC)		
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
GRID OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195~253VAC	
Nominal Output Current	18.2A	27.0A
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90-280VACor 170-280VAC	
MaximumAC Input Current	24.7A	36.4A
Maximum Charging Current	100A	

BATTERY

MODEL	ESSM-4.2KW-100AH/200AH		ESSM-6.2KW-100AH
	25.6V 100AH	25.6V 200AH	51.2V100AH
Normal charging voltage	29.2V	29.2V	54.75V
Maximum charging current	100A(Recommended)	100A/200A	100A(Recommended)
Discharge termination voltage	20V	(Recommended 100A) 20V	37.5V
Recommended discharge termination voltage	22.4V	22.4V	42V
Maximum discharge currentt	100A	100A/200A	100A
Single cell charging over voltage protection	3.65V	3.65V	3.65V
Over voltage 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 over current protection	110A	110A/220A	110A
Discharge over current 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	-10℃~50℃		
GENERAL			
PHYSICAL			
Dimension,H*W*D(mm)	780*440*230		
Carton Dimension,H*W*D(mm)	830*500*300		
Net Weight(kg)	42	58.5	
Gross Weight(kg)	47.4	63.9	
INTERACE			
Communication Port	RS232/RS485/WIFI/GPRS		
ENVIRONMENT			
Humidity	5%to 95%Relative Humidity(Non~condensing)		
STANDARD			
Compliance Safety	CE UN38.3;MSDS		

APPLICATION

SYSTEM DIAGRAM



Energy Storage System

ESS SERIES

- RGB light
- Output power factor 1.0
- Built-in 120A MPPT Solar charge max6200W(for 4.2kW);max6500W(for 6.2KW)
- High PV input voltage range(60~500VDC)
- WIF1&GPRS available for IOS and Android
- Inverter can run without battery
- Dual output
- Pure sine wave solar inverter(on/off Grid)
- Built-in Lithium battery automatic activation
- Built-in anti-dust kit for harsh environment
- One-key restoration to factory Settings
- Smart battery charge design to optimize battery life

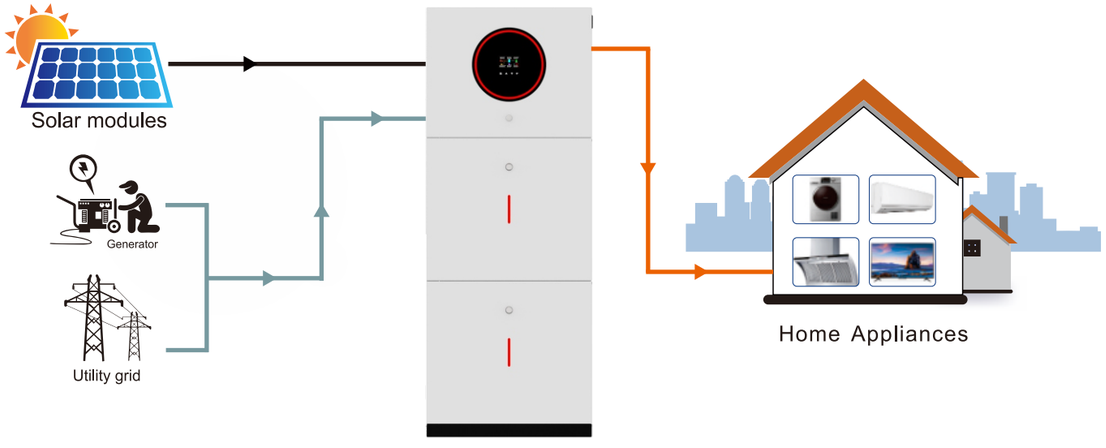
Touchable Screen | Customized Logo | Multiple Shell Colors | Customized Capacity

INVERTER		
MODEL	ESS-4.2KW	ESS-6.2KW
Phase	1-phase	
Maximum PV Input Power	6200W	6500W
Rated Output Power	4200W/4200VA	6200W/6200VA
Maximum Solar Charging Current	120A	
GRID-TIE OPERATION		
PV INPUT(DC)		
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
GRID OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195~253VAC	
Nominal Output Current	18.2A	27.0A
Power Factor	>0.99	
EFFICIENCY		
Maximum Conversion Efficiency(DC/AC)	98%	
TWO LOAD OUTPUT POWER		
Full Load	4200W	6200W
Maximum Main Load	4200W	6200W
Second Load Range	840W~2940W	1240W~4340W
Maximum Load Cut Off Voltage	26VDC	52VDC
Maximum Load Return Voltage	27VDC	54VDC
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90~280VAC or 170~280VAC	
Frequency Range	50±1Hz/60±1Hz	
Maximum AC input Current	24.7A	36.4A
PV INPUT(DC)		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
MPPT Voltage Range	60~450VDC	
Maximum Input Current	1/18A	1/22A
BATTERY MODE OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Wave Form	Pure sine wave	
Efficiency(DC toAC)	94%	
BATTERY&CHARGER		
Nominal DC Voltage	24VDC	51.2VDC
Maximum Solar Charging Current	120A	
MaximumAC Charging Current	100A	
Maximum Sotar+AC Charging Current	120A	
HYBRID OPERATION		
PV INPUT(DC)		
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
GRID OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195~253VAC	
Nominal Output Current	18.2A	27.0A
AC INPUT		
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 Charging Current	100A	
GENERAL		
PHYSICAL		
Dimension,H*W*D(mm)	400*510*175	
Carton Dimension,H*W*D(mm)	510*568*232	
Net Weight(kg)	16.5	18.9
Gross Weight(kg)	19.5	21.9
INTERACE		
Communication Port	RS232/RS485/WIFI/GPRS/LITHIUM BATTERY	
ENVIRONMENT		
Humidity	5%to 95%Relative Humidity(Non~condensing)	
Operating Temperature	-10℃~50℃	
STANDARD		
Compliance Safety	CE	

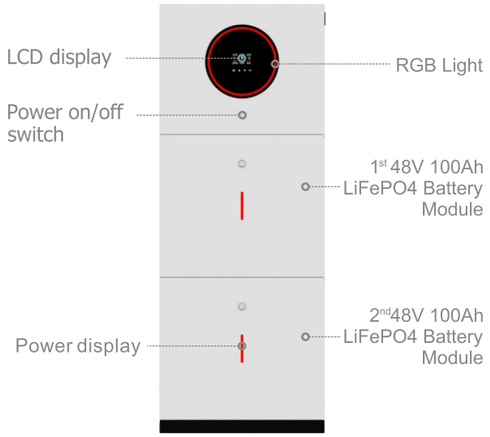
BATTERY

MODEL	25.6V 100AH	25.6V 200AH	51.2V 100AH	51.2V 200AH
Normal charging voltage	29.2V	29.2V	58.4V	58.4V
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 over voltage protection	3.8V	3.8V	3.8V	3.8V
Over voltage protection for the whole battery	29.2V	29.2V	58.4V	58.4V
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 over current protection	102~112A	102~112A	102~112A	102~112A
Discharge over current 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	-20℃~65℃			
Storage temperature	-10℃~50℃			
Dimension,H*W*D(mm)	480*510*175			
Carton Dimension,H*W*D(mm)	600*600*260			
Net Weight(kg)	25	46.8		46.8(2PCS)
Gross Weight(kg)	28.2	50		50(2PCS)

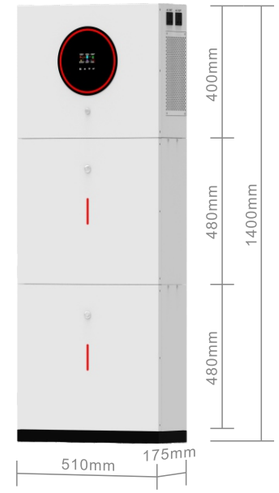
SYSTEM DIAGRAM



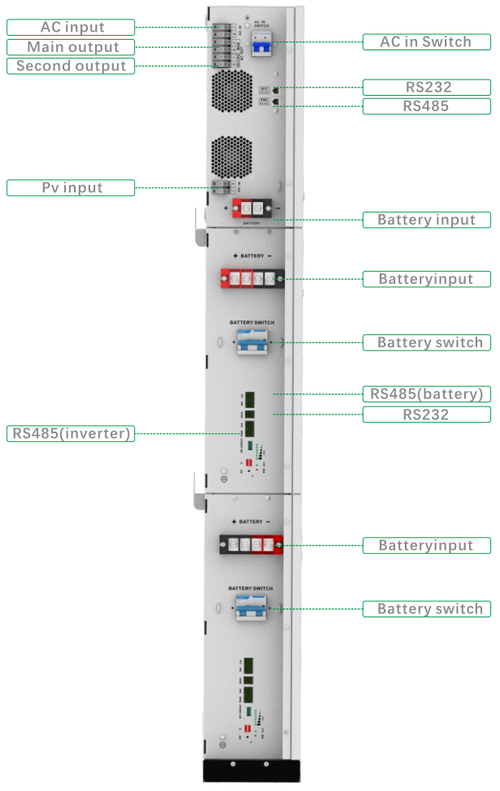
FUNCTION

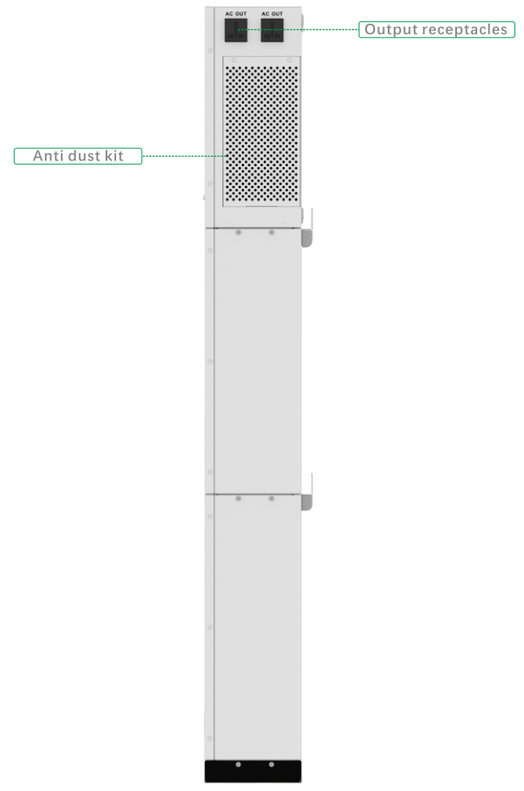


DIMENSION



BACK PANEL DESCRIPTION





Energy Storage System

ESS SERIES

- RGB light
- Dual communication ports for Battery communication and Wifi communication
- Output power factor 1.0
- Built-in 160A MPPT solar charger (for 8.2kw,10.2kw)
- High PV input voltage range(90~500VDC)
- WIF1&GPRS available for IOS and Android
- Inverter can run without battery
- Dual Pv input
- Dual output
- Pure sine wave solar inverter(on/off Grid)
- Built-in Lithium battery automatic activation
- Built-in anti-dust kit for harsh environment
- One-key restoration to factory Settings
- Smart battery charge design to optimize battery life

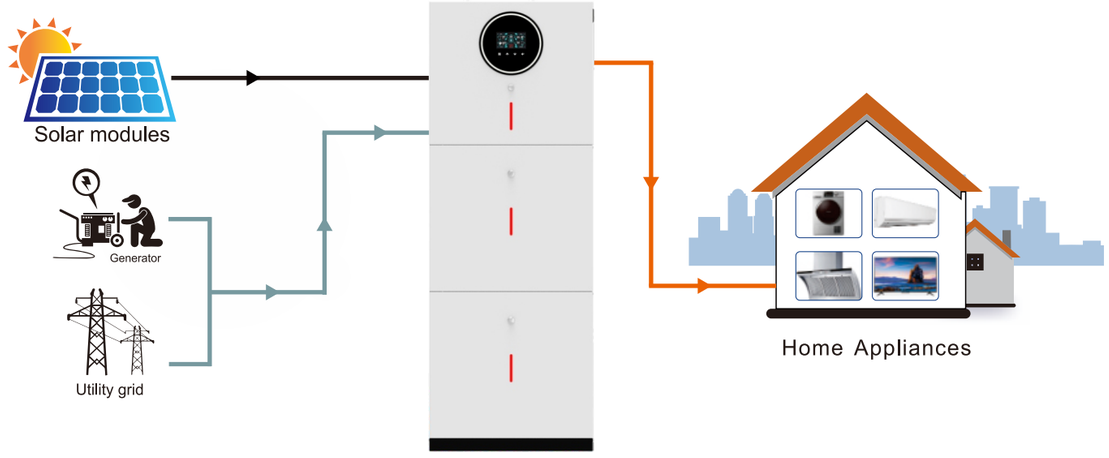
Touchable Screen | Customized Logo | Multiple Shell Colors | Customized Capacity

INVERTER		
MODEL	ESS-8.2KW	ESS-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		
PV INPUT(DC)		
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	
GRID OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195~253VAC	
Nominal Output Current	35.6A	44.3A
Power Factor	>0.99	
EFFICIENCY		
Maximum Conversion Efficiency(DC/AC)	98%	
TWO LOAD OUTPUT POWER		
Full Load	8200W	10200W
Maximum Main Load	8200W	10200W
Second Load Range	1640W~5740W	2040W~7140W
Maximum Load Cut Off Voltage	52VDC	
Maximum Load Return Voltage	54VDC	
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90~280VAC or 170~280VAC	
Frequency Range	50±1Hz/60±1Hz	
Maximum AC input Current	48.2A	60A
PV INPUT(DC)		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
MPPT Voltage Range	90~450VDC	
Maximum Input Current	2/18A	
BATTERY MODE OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Wave Form	Pure sine wave	
Efficiency(DC to AC)	94%	
BATTERY&CHARGER		
Nominal DC Voltage	48VDC	
Maximum Solar Charging Current	160A	
MaximumAC Charging Current	140A	
Maximum Sotar+AC Charging Current	160A	
HYBRID OPERATION		
PV INPUT(DC)		
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	
GRID OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195~253VAC	
Nominal Output Current	35.6A	44.3A
AC INPUT		
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 Charging Current	140A	
GENERAL		
PHYSICAL		
Dimension,H*W*D(mm)	450*510*175	
Carton Dimension,H*W*D(mm)	520*580*250	
Net Weight(kg)	25.8	26
Gross Weight(kg)	28.8	29
INTERACE		
Communication Port	RS232/RS485/WIFI/GPRS/LITHIUMBATTERY	
ENVIRONMENT		
Humidity	5%to 95%Relative Humidity(Non~condensing)	
Operating Temperature	-10℃~50℃	
STANDARD		
Compliance Safety	CE	

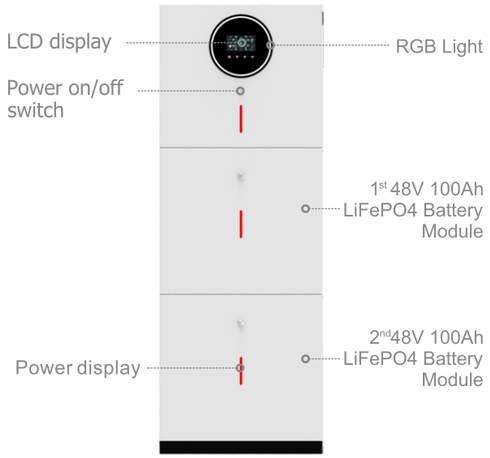
BATTERY

MODEL	51.2V 100AH	51.2V 200AH	51.2V 300AH
Normal charging voltage	58.4V	58.4V	58.4V
Maximum charging current	100A	100A	100A
Discharge termination voltage	40.5V	40.5V	40.5V
Recommended discharge termination voltage	42V	42V	42V
Maximum discharge current	100A	100A	100A
Single cellcharging over voltage protection	3.8V	3.8V	3.8V
Over voltage protection for the whole battery	58.4V	58.4V	58.4V
Low voltage protection for single cell discharge	2.7V	2.7V	2.7V
Low voltage protection for whole group discharge	40.5V	40.5V	40.5V
Charge over current protection	102~112A	102~112A	102~112A
Discharge over current protection	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	-20℃~65℃		
Storage temperature	-10℃~50℃		
Dimension,H*W*D(mm)	510*450*175		
Carton Dimension,H*W*D(mm)	600*600*260		
Net Weight(kg)	46.8	46.8(2PCS)	46.8(3PCS)
Gross Weight(kg)	50	50(2PCS)	50(3PCS)

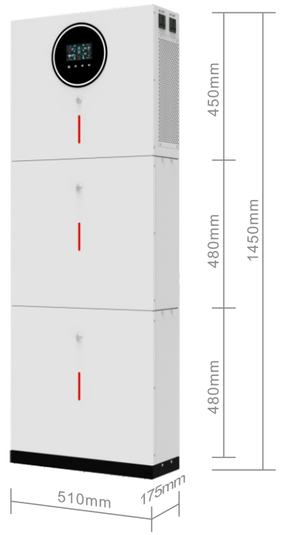
SYSTEM DIAGRAM



FUNCTION



DIMENSION



BACK PANEL DESCRIPTION

Energy Storage System

ESS PLUS SERIES

- Dual communication ports for Battery communication and Wifi communication
- Dual output
- Output power factor 1.0
- Pure sine wave solar inverter(on/off Grid)
- Built-in120A MPPT Solar charge:max 6200W(for 4.2Kw),max6500W(for 6.2KW)
- Built-in Lithium battery automatic activation
- High PV input voltage range(90~500VDC)
- Built-in anti-dust kit for harsh environment
- WIF1&GPRS available for IOS and Android
- One-key restoration to factory Settings
- Inverter can run without battery
- Smart battery charge design to optimize battery life

Independent Module | Customized Logo | Multiple Shell Colors | Customized Capacity

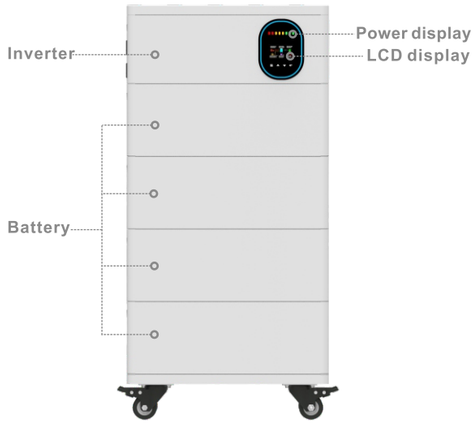
INVERTER		
MODEL	ESS PLUS-4.2KW	ESS PLUS-6.2KW
Phase	1-phase	
Maximum PV Input Power	6200W	6500W
Rated Output Power	4200W/4200VA	6200W/6200VA
Maximum Solar Charging Current	120A	
GRID-TIE OPERATION		
PV INPUT(DC)		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
Start-up Voltage/Initial Feeding Voltage	60VDC/90VDC	
MPPT Voltage Range	60~450VDC	
Maximum Input Current	1/18A	1/22A
GRID OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195~253VAC	
Nominal Output Current	18.2A	27.0A
Power Factor	>0.99	
EFFICIENCY		
Maximum Conversion Efficiency(DC/AC)	98%	
TWO LOAD OUTPUT POWER		
Full Load	4200W	6200W
Maximum Main Load	4200W	6200W
Second Load Range	840W~2940W	1240W~4340W
Maximum Load Cut Off Voltage	26VDC	52VDC
Maximum Load Return Voltage	27VDC	54VDC
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120-140VAC/180VAC	
Acceptable Input Voltage Range	90~280VAC or 170~280VAC	
Frequency Range	50±1Hz/60±1Hz	
MaximumAC input Current	24.7A	36.4A
PVINPUT(DC)		
Nominal DC Voltage/Maximum DC Voltage	360/500VDC	
MPPT Voltage Range	60~450VDC	
Maximum Input Current	1/18A	1/22A
BATTERY MODE OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Wave Form	Pure sine wave	
Efficiency(DC to AC)	94%	
BATTERY&CHARGER		
Nominal DC Voltage	24VDC	48VDC
Maximum Solar Charging Current	120A	120A
MaximumAC Charging Current	100A	100A
Maximum Sotar+AC Charging Current	120A	120A
HYBRID OPERATION		
PV INPUT(DC)		
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
GRID OUTPUT(AC)		
Nominal Output Voltage	220/230/240VAC	
Output Voltage Range	195~253VAC	
Nominal Output Current	18.2A	27.0A
AC INPUT		
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 Charging Current	100A	
GENERAL		
PHYSICAL		
Dimension,H*W*D(mm)	205*530*400	
Carton Dimension,H*W*D(mm)	280*600*470	
Net Weight(kg)	16	16.9
Gross Weight(kg)	17.5	18.4
INTERACE		
Communication Port	RS232/RS485/WIFI/GPRS/LITHIUM BATTERY	
ENVIRONMENT		
Humidity	5%to 95%Relative Humidity(Non-condensing)	
Operating Temperature	-10℃~50℃	
STANDARD		
Compliance Safety	CE	

BATTERY

MODEL	ESS PLUS 4.2KW			ESS PLUS 6.2KW			
System schematic							
Nominal voltage	25.6V			51.2V			
Number of module	1	2	3	1	2	3	4
Nominal capacity	200AH	400AH	600AH	100AH	200AH	300AH	400AH
Normal charging voltage	29.2V	29.2V	29.2V	58.4V	58.4V	58.4V	58.4V
Maximum charging current	100A	100A	100A	100A	100A	100A	100A
Discharge termination voltage	21.6V	21.6V	21.6V	40.5V	40.5V	40.5V	40.5V
Recommended discharge termination voltage	22.4V	22.4V	22.4V	42V	42V	42V	42V
Maximum discharge current	100A	100A	100A	100A	100A	100A	100A
Single cell charging over voltage protection	3.8V	3.8V	3.8V	3.8V	3.8V	3.8V	3.8V
Over voltage protection for the whole battery	29.2V	29.2V	29.2V	58.4V	58.4V	58.4V	58.4V
Low voltage protection for single celli discharge	2.7V	2.7V	2.7V	2.7V	2.7V	2.7V	2.7V
Low voltage protection for whole group discharge	21.6V	21.6V	21.6V	40.5V	40.5V	40.5V	40.5V
Charge over current protection	102~112A	102~112A	102~112A	102~112A	102~112A	102~112A	102~112A
Discharge over current protection	102~122A	102~122A	102~122A	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 Paralel connect function						
Working temperature	-20℃~65℃						
Storage temperature	-10℃~50℃						
Dimension,H*W*D(mm)	190*530*400						
Carton Dimension,H*W*D(mm)	265*600*470						
Net Weight(kg)	46.8	46.8(2PCS)	46.8(3PCS)	46.8	46.8(2PCS)	46.8(3PCS)	46.8(4PCS)
Gross Weight(kg)	50	50(2PCS)	50(3PCS)	50	50(2PCS)	50(3PCS)	50(4PCS)

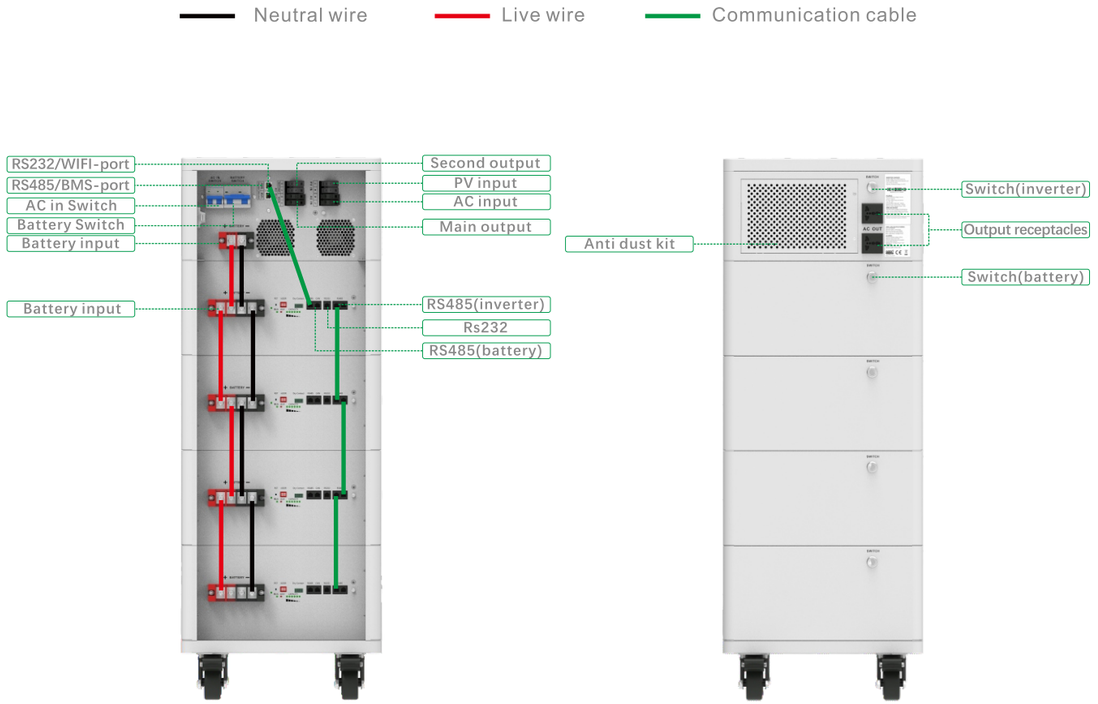
SYSTEM DIAGRAM

FUNCTION



DIMENSION

BACK PANEL DESCRIPTION



Portable Power Station

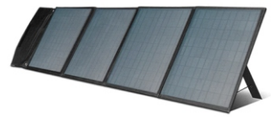
ESP-250W-1KWH SERIES

- Support fast charging technology
- Environmentally friendly and clean energy
- Long battery life: Equipped with a built-in 314Ah high-capacity battery, providinglong-term power supply, suitable for long-term outdoor activities or travel.
- The portable power supply supports continuous discharge at minus 20 degrees Celsiusand can be used normallyin cold regions.
- Safe and reliable: It has multiple protection functions such as overcharging, overdischargingshort circuit,and overheating to ensure safe use.
- No noise: Compared with fuel generators, portable power sources have very low noisedurina operation and are suitable for use in aulet environments
- Supports simultaneous charging of photovoltaic input and discharge of load, and supportsAC pypass output.
- Portable design: small size, light weight, easy to carry, suitable for outdoor activitiestravel, and mobile office.

MODEL	ESP-250W-1KWH
Rated output power	1000w
Cell Type	Lithium Iron Phosphate LiFePo4
Battery capacity	314Ah
Rated Energy	1000Wh
Rated input voltage	220/230Vac
AC Input charging voltage	150-264Vac
AC Input frequency range	45~65HZ
AC Maximum Input Power	500W(Charging+bypass)
PV Maximum Input Power	200W
PV Charging input voltage	12-36V
PV Maximum input current	11A
Ambient Temperature	0-45℃
Working altitude	<3000m
Humidity	95%
protection grade	IP 20
Product weight	8.5KG ±0.5KG
Product size	L*W*H=210*130*285mm

PRODUCT OPTIONAL ACCESSORIES

AC input line



Solar panels

Solar charging cable

Car charging cable

Expansion socket

Portable Power Station

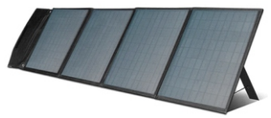
ESP-500W-2KWH/ESP-1000W-2KWH SERIES

- Support fast charging technology
- Long battery life: Equipped with a built-in 314Ah high-capacity battery, providinglong-term power supply, suitable for long-term outdoor activities or travel.
- Safe and reliable: It has multiple protection functions such as overcharging, overdischargingshort circuit,and overheating to ensure safe use.
- Supports simultaneous charging of photovoltaic input and discharge of load, and supportsAC pypass output.
- Environmentally friendly and clean energy
- The portable power supply supports continuous discharge at minus 20 degrees Celsiusand can be used normallyin cold regions.
- No noise: Compared with fuel generators, portable power sources have very low noisedurina operation and are suitable for use in aulet environments
- Portable design: small size, light weight, easy to carry, suitable for outdoor activitiestravel, and mobile office.

MODEL	ESP-500W-2KWH	ESP-1000W-2KWH	
Rated output power	500W	1000w	1000W
Cell Type	Lithium Iron Phosphate LiFePo4		
Battery capacity	314Ah*2		
Rated Energy	2009.6Wh		
Rated input voltage	220/230Vac		120Vac
AC Input charging voltage	150-264Vac		90-140Vac
AC Input frequency range	45~65HZ		
AC Maximum Input Power	550W	1400W	
PV Maximum Input Power	450W		
PV Charging input voltage	12-50V		
PV Maximum input current	21A	20A	
Ambient Temperature	0-45℃		
PV Maximum input current	20A		
Working altitude	<3000m		
Humidity	95%		
protection grade	IP 20		
Product weight	15.5KG±0.5KG	16.0KG±0.5KG	
Product size	L*W*H=280*210*300mm		

PRODUCT OPTIONAL ACCESSORIES

AC input line



Solar panels

Solar charging cable

Car charging cable

Expansion socket