

**YIY**

# **Commercial & Industrial Energy Storage Solutions**

*May energy and ecology be more harmonious*



# ZHEJIANG YIYEN HOLDING GROUP

Zhejiang YIYEN HOLDING GROUP is a high-tech company that focuses on researching and manufacturing power electronic technology, integrating design, research and development, manufacturing, sales and service. YIYEN is dedicated to reducing electricity costs, improving electricity efficiency, and providing core power equipment and system solutions for the energy Internet of Things. With electrochemical energy storage and energy efficiency management as its core industry, YIYEN provides energy-saving service for power system, communication system, financial system, education system, medical system, and large industrial and mining enterprises.

Energy storage and energy efficiency management are critical reducing carbon emissions and promoting sustainable development. YIYEN's mission is to help make energy and ecology more harmonious by providing advanced energy storage and power quality solutions which improve efficiency, reduce costs, and promote clean energy. YIYEN will always continue to devote ourselves to the research and development and manufacturing of power electronic technology, and be committed to delivering cutting-edge solutions helping customers meet their energy management goals while contributing to a more sustainable future for all.

**300+**  
Staff



**30000m<sup>2</sup>+**  
Plant Area



**15 years +**  
Years Experience



**3GWH+/year**  
Delivered Capacity



# ENTERPRISE ARCHITECTURE



Headquarters

## ZHEJIANG YIYEN HOLDING GROUP



Intelligent  
Manufacturing

Lishui Yiyen Technology  
CO.,LTD



Factory



Globalization  
Channel

Wenzhou Yiyen Supply Chain  
Management CO.,LTD



Marketing/Sales/Sourcing  
Total Solutions and Technical Services



Investment  
Operation

Wenzhou Yiyen Energy  
Development CO.,LTD



EPC Service Provider for New Energy and  
Energy Storage Plants  
Contract Energy Management  
(Domestic Only)



R&D

Nanjing Branch  
Shenzhen Branch  
Hangzhou Branch



R&D Center

**50+**

R&D Staff



**130+**

Export Countries



**100+**

Intellectual Properties



**BMS**

12V~1500V  
Voltage Class



# Qualification Certification

ISO9001



**QUALITY MANAGEMENT SYSTEM CERTIFICATE**  
Certificate No.: 2022001199R06

We hereby certify that the organization:  
**LISHUI YIYEN TECHNOLOGY COMPANY LIMITED**  
Unified social credit code: 91331127MA2E079Y8T

is in conformity with Quality Management System Standard:  
**GB/T19001-2016 idt ISO9001:2015**

The certificate is valid to the following products/services:  
**The assembling of Voltage Stabilizer, Inverter, Photovoltaic Equipment (MPPT Solar Charger, PCS), Uninterruptible Power Supply, Emergency Power Supply, Battery Pack Energy Storage System, Battery Management System (BMS)**

Registration Address/Full Address: No.77 Xiang Long Road Lian Du Zhen Lishui City Zhejiang Province China

Date of Issue: 18-09-2022  
Date of Expiry: 25-09-2025  
Date of Issue: 26-09-2022

Issued By: 





THE QUALITY MANAGEMENT SYSTEM  
CNAS CERTIFIED



The certificate holder is responsible for maintaining the certificate valid to its business type. The certificate holder is also responsible for the validity of the certificate. If the certificate holder is not in compliance with the requirements of the standard, the certificate holder should be notified immediately. The certificate holder should be notified immediately if the certificate holder is not in compliance with the requirements of the standard. The certificate holder should be notified immediately if the certificate holder is not in compliance with the requirements of the standard.

**ZHEJIANG QUANPIN CERTIFICATION CO.,LTD.**  
Address: Room 201, Building C, No. 10, Fuyuan Street, Hangzhou City, Zhejiang Province, China  
Tel: 86-571-87000000 Fax: 86-571-87000001

ISO45001



**OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM CERTIFICATE**  
Certificate No.: 2022003046R06

We hereby certify that the organization:  
**LISHUI YIYEN TECHNOLOGY COMPANY LIMITED**  
Unified social credit code: 91331127MA2E079Y8T

is in conformity with Occupational Health Safety Measurement System Standard:  
**GB/T45001-2020 idt ISO45001:2018**

The certificate is valid to the following products/services:  
**The assembly and related management activities of Voltage Stabilizer, Inverter, Photovoltaic Equipment (MPPT Solar Charger, PCS), Uninterruptible Power Supply, Emergency Power Supply, Battery Pack Energy Storage System, Battery Management System (BMS)**

Registration Address/Full Address: No.77 Xiang Long Road Lian Du Zhen Lishui City Zhejiang Province China

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Date of Issue: 26-09-2022

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ISO14001



**ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATE**  
Certificate No.: 2022003046R06

We hereby certify that the organization:  
**LISHUI YIYEN TECHNOLOGY COMPANY LIMITED**  
Unified social credit code: 91331127MA2E079Y8T

is in conformity with Environmental Management System Standard:  
**GB/T24001-2016 idt ISO14001:2015**

The certificate is valid to the following products/services:  
**The assembly and related management activities of Voltage Stabilizer, Inverter, Photovoltaic Equipment (MPPT Solar Charger, PCS), Uninterruptible Power Supply, Emergency Power Supply, Battery Pack Energy Storage System, Battery Management System (BMS)**

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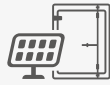
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## CONTENTS

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YIXI

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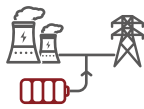
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# GENERATION-SIDE

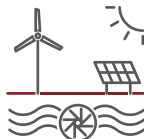


## • Overview

Energy storage plants play an important role on the generation side by providing a buffer between electricity generation and consumption. They allow excess energy to be stored when demand is low and released when demand is high, which can help improve the efficiency and reliability of power generation. It can also help mitigate the impact of intermittent renewable energy sources such as wind and solar. By storing excess energy generated during periods of high production, energy storage power plants can help ensure a consistent supply of electricity when these sources are not producing.



Load shifting

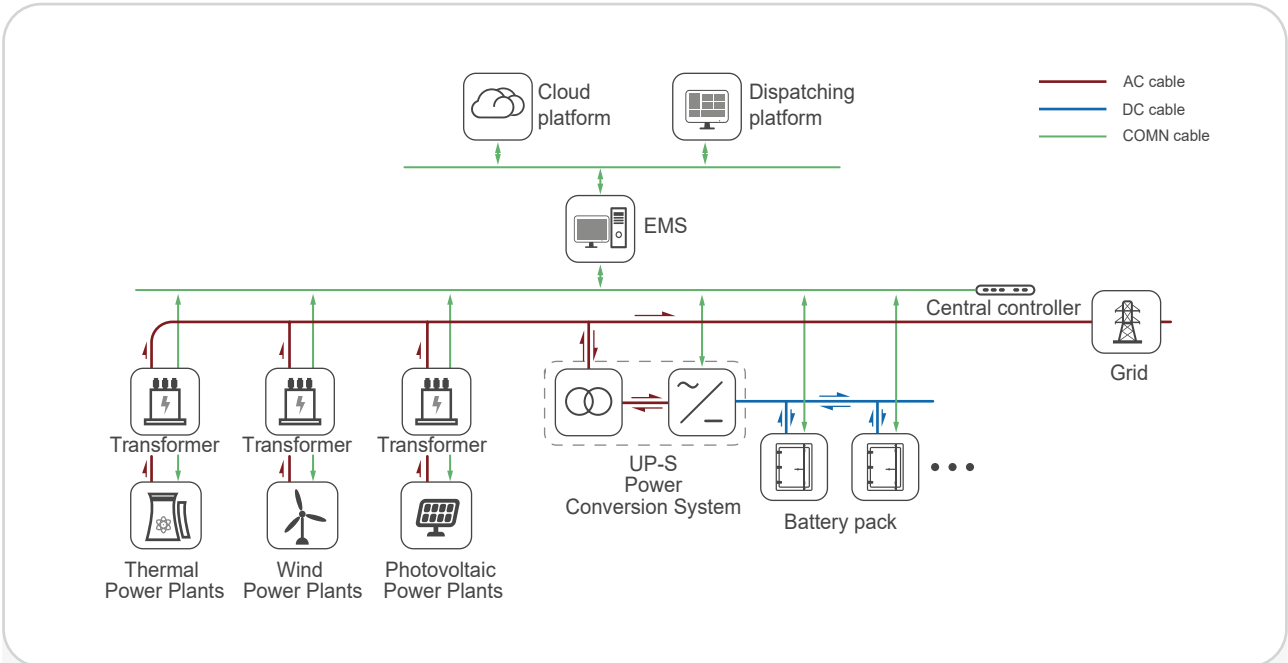


Renewable energy integration

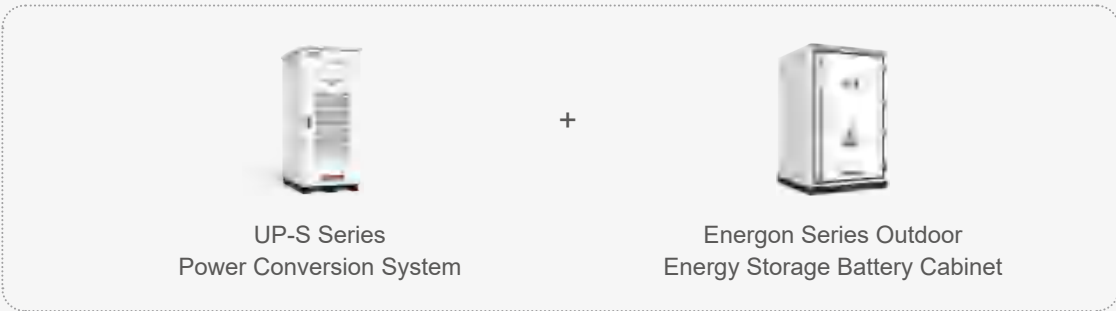


Capacity stability

• **Generation-Side Energy Storage**



**Applicable Equipment:**



• **Applications**

- Frequency regulation
- Smoothing renewable energy fluctuations
- Improving power quality
- Enhancing grid frequency response speed
- Boosting power system scalability

# TRANSMISSION & DISTRIBUTION END



## • Overview

A grid-scale energy storage plant plays a crucial role in improving the reliability and stability of the electricity grid. These power plants store excess energy during periods of low demand and release it during periods of high demand, helping to balance supply and demand on the grid. This can help reduce the need for expensive and less efficient peaking power plants, which are typically used only during periods of high demand.



Peak shaving



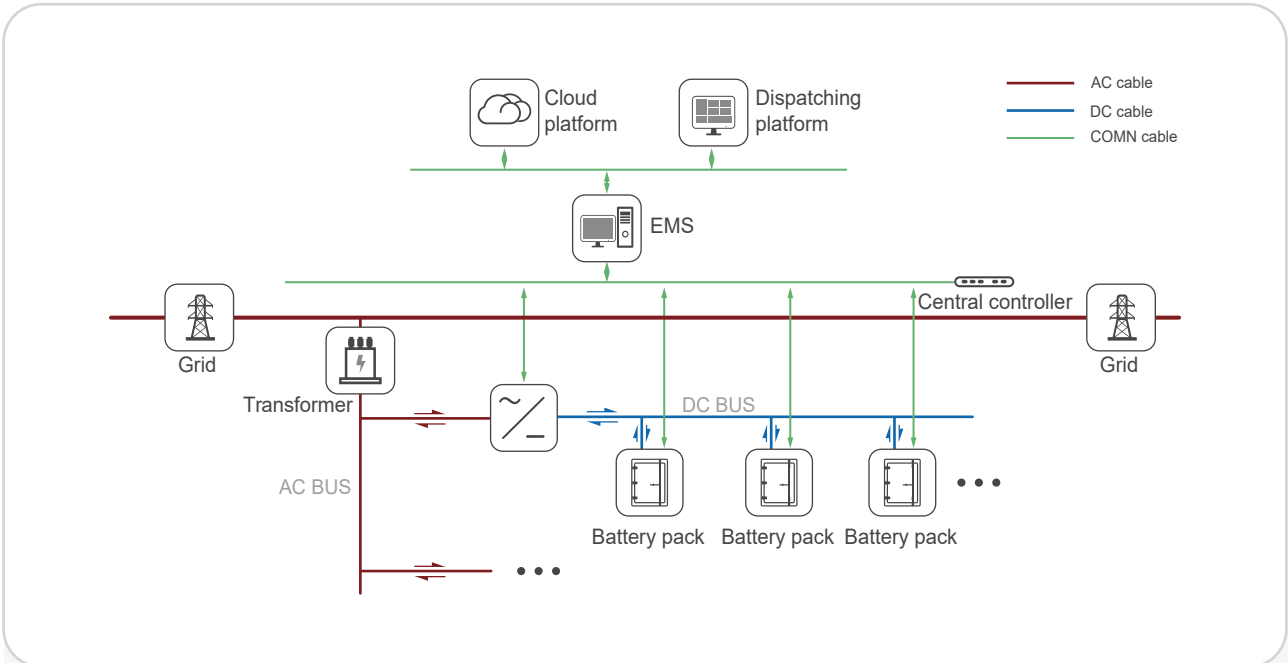
Black start capability



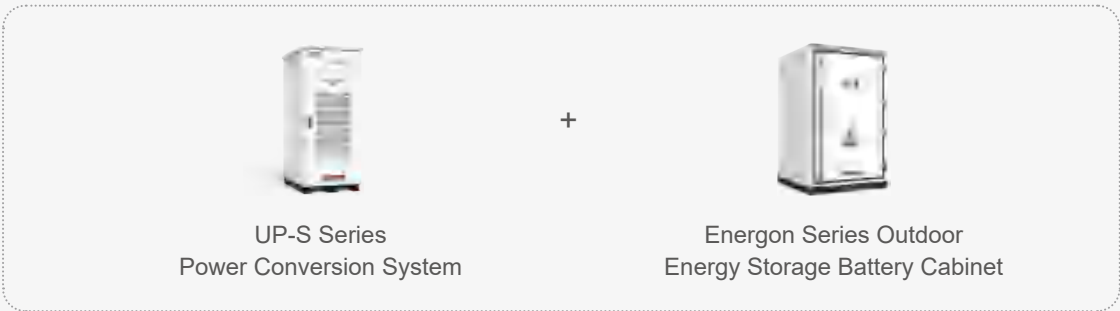
Ancillary services



• Power Station ESS Solutions



**Applicable Equipment:**



• Applications

- Improving grid stability
- Addressing peak demand periods
- Reducing transmission losses
- Participating in power scheduling
- Enhancing system resilience
- Extending the lifespan of grid equipment

# Grid-Side Energy Storage System

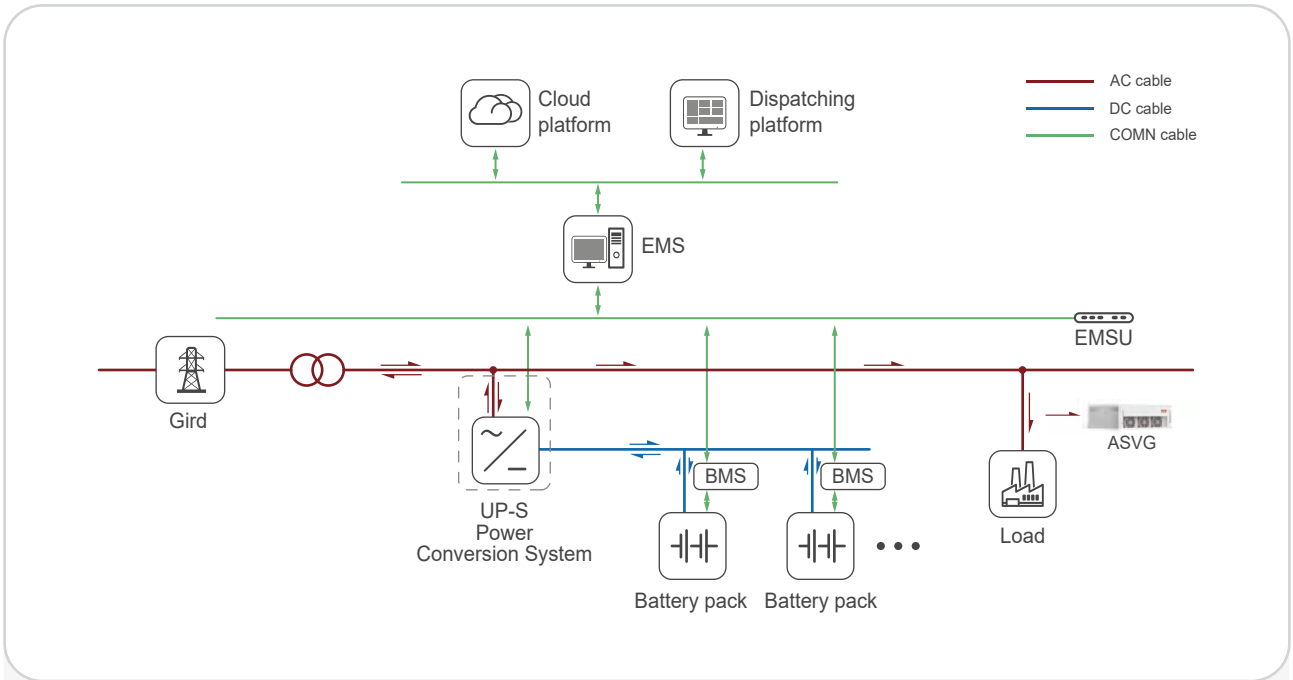
\* Grid-connection \* Islanding protection only \* No PV



## • Overview

Grid-Side Energy Storage System features bidirectional charging and discharging capabilities, enabling efficient energy release during peak demand periods (such as midday and evening peaks) and energy storage during off-peak times (like late night or early morning). This peak shaving and load leveling mechanism not only enhances grid stability but also reduces users' electricity costs. The system supports intelligent dispatch, allowing real-time response to grid commands and participation in energy market transactions, ensuring timely power delivery during peak demand and enhancing grid flexibility and reliability. With a discharge rate of up to 1C, the system can release its full rated capacity within one hour, maximizing revenue from energy trading. Additionally, the system supports AC coupling with renewable energy sources (such as solar and wind), effectively integrating distributed energy resources and improving overall system efficiency. Intelligent algorithms optimize charging and discharging strategies to adapt to different electricity prices and market demands, making the system suitable for various scenarios, including residential, commercial, and industrial applications, while supporting more efficient energy management and sustainable development goals.

• **System Topology**



**Applicable Equipment:**



UP-S Series  
Power Conversion System

+

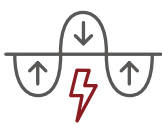


Energon Series Outdoor  
Energy Storage Battery Cabinet

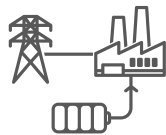


On-grid  
All-in-one Energy Storage System

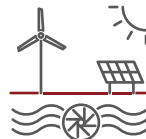
• **Applications**



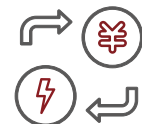
Peak shaving



Power scheduling



Renewable  
energy integration



Electricity trading

# On/Off-Grid PV Energy Storage System

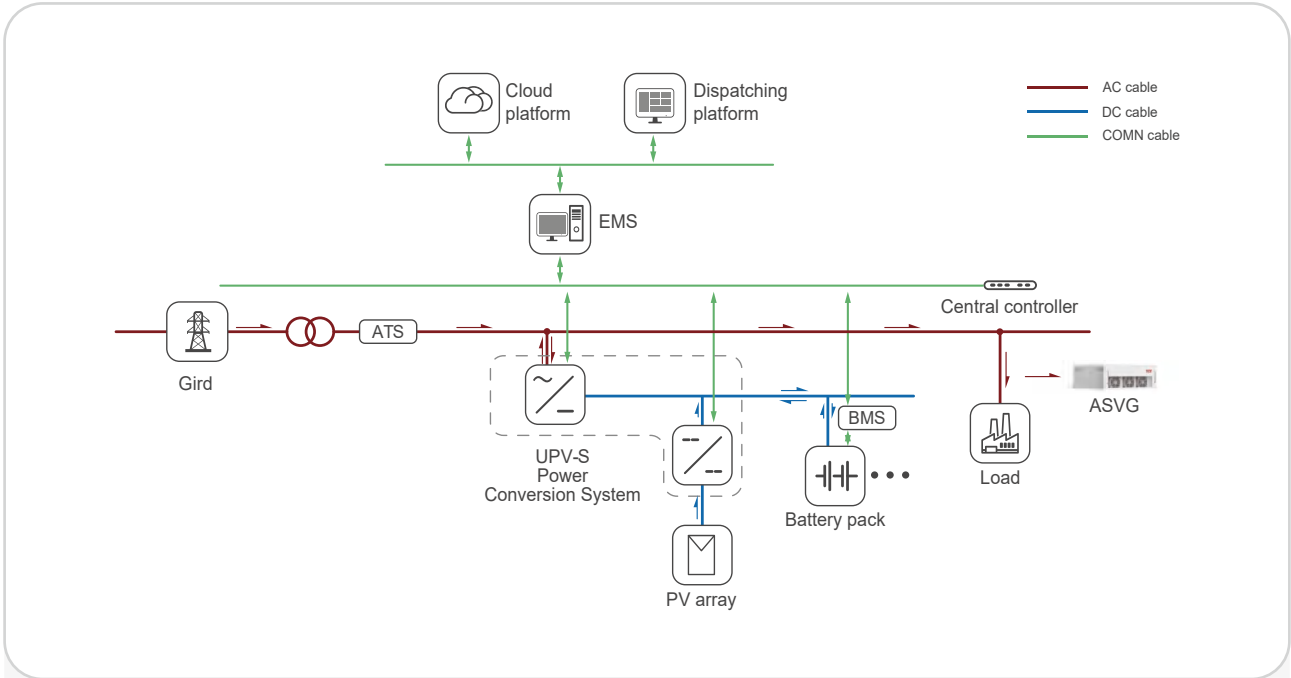
\* Grid-connected PV+energy storage \* Seamless switch \* Backflow prevention



## • Overview

On/Off-Grid Integrated Solar and Storage System integrates photovoltaic generation with energy storage, building on the functions of the grid-side energy storage system while adding an off-grid mode to ensure reliable backup power during grid outages. The system can seamlessly integrate with multiple energy sources (such as wind and diesel generators), achieving multi-energy complementarity and enhancing system flexibility and reliability. Through an intelligent Energy Management System (EMS), the system can monitor and optimize energy utilization in real-time, intelligently dispatching the charging and discharging strategies of the energy storage units based on power demand and renewable energy generation. The system also features high reliability and weather resistance, capable of operating efficiently in various environmental conditions (such as extreme temperatures, humidity, and wind speeds). This flexibility makes it highly suitable for diverse applications, including remote areas, emergency backup, and renewable energy integration.

• System Topology



Applicable Equipment:

UPV-S Series Solar+Storage Hybrid Inverters + Energon Series Outdoor Energy Storage Battery Cabinet

Hybrid All-in-one Energy Storage System

• Applications

Self-consumption

Micro-grid

Back Up

# Microgrid Energy Storage System

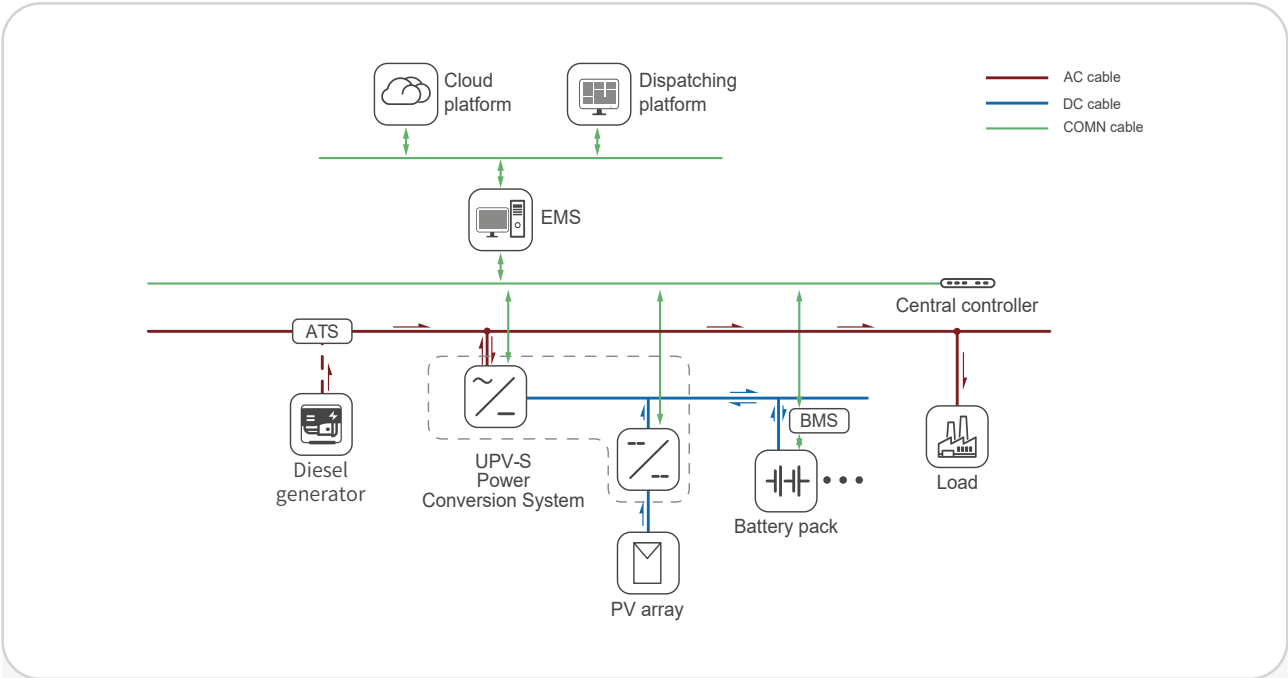
\* On&off-grid \* Off-grid independent operation



## • Overview

A microgrid typically comprises a photovoltaic (PV) system (or wind power and other renewable energy generation devices), an energy storage system (such as lithium or lead-acid batteries), an Energy Management System (EMS), load management equipment, and necessary distribution infrastructure. A diesel generator can also be included as an auxiliary power source to ensure electricity supply during extreme weather or emergencies. The microgrid operates by having the EMS monitor real-time generation and load demand, intelligently dispatching power distribution. If generation exceeds demand, the excess electricity is stored in the energy storage system for later use; conversely, when generation is insufficient, the energy storage system releases power to meet demand. This flexible dispatch capability enables the microgrid to efficiently utilize renewable energy, reducing reliance on traditional fossil fuels. Microgrids are commonly used in remote areas, islands, campuses, hospitals, and industrial parks, where traditional grid infrastructure is costly or unreliable. Microgrids provide a flexible and reliable solution, enhancing energy security, reducing operational costs, and promoting sustainable development through self-sufficient power supply.

• System Topology



Applicable Equipment:

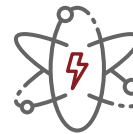
UPV-S Series Solar+Storage Hybrid Inverters + Energon Series Outdoor Energy Storage Battery Cabinet

Hybrid All-in-one Energy Storage System

• Applications



Back Up



Micro-grid

# PV-ESS Line-Interactive UPS

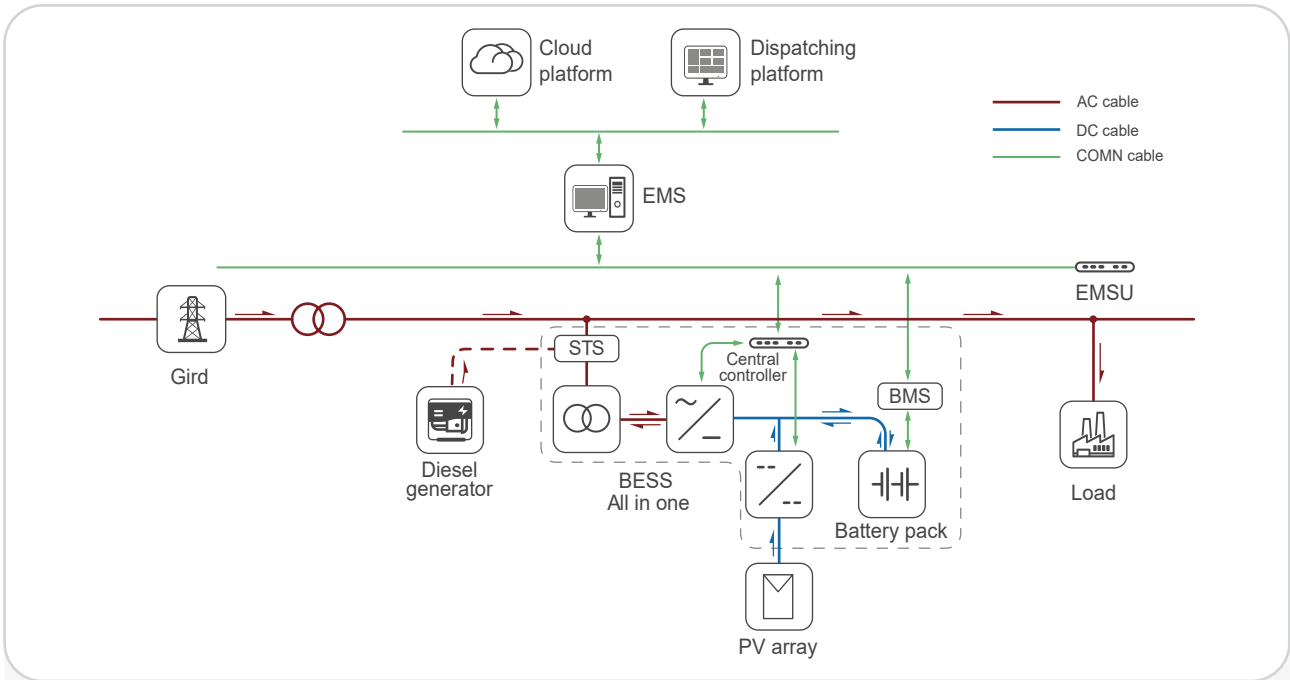
\* Self-consumption \* Backup UPS \* STS switch



## • Overview

The PV-ESS Line-Interactive UPS is an uninterruptible power supply solution that integrates photovoltaic power generation, energy storage, and intelligent power distribution. Specifically designed for industrial and commercial power storage scenarios, this system enables intelligent interaction and seamless switching among multiple energy sources, including the grid, photovoltaics, energy storage, and diesel generators. This ensures continuous power supply to critical loads, and also power quality improvement and energy efficiency management at the same time.

• System Topology



Applicable Equipment:



UPV-S Series  
Solar+Storage Hybrid Inverters

+

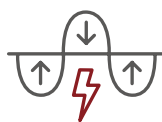


Energon Series Outdoor  
Energy Storage Battery Cabinet



Hybrid All-in-one  
Energy Storage System

• Applications



Peak shaving



Backup UPS power supply



Emergency power supply

# BESS

CE IEC UN38.3

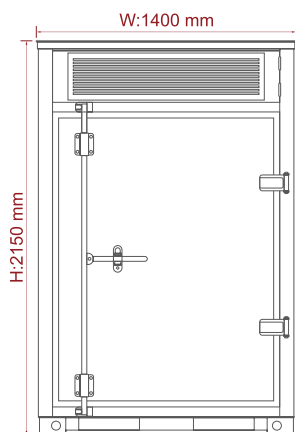
## Hybrid All-in-one Energy Storage System BESS 60-80-75



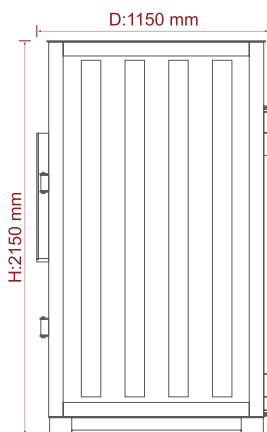
### • Features

- All-in-one design with a high degree of integration.
- Modular design with optional modules of different sizes.
- Support for grid-connected and off-grid operation.
- IP54 class fire and explosion-proof housing.
- Patented air duct design, intelligent air cooling, 3-5°C temperature difference of the battery core.

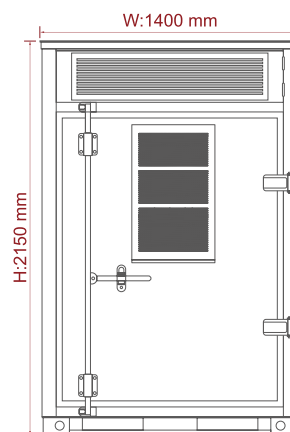
### • Product Dimensions



Front view



Side view



Back view

**• Technical Parameter**

<b>BESS 60-80-75</b>	
<b>PCS Parameters</b>	
AC rated power	60kW
PCS rated current	140A
AC rated voltage	400V±15%
Rated frequency	50Hz(±2.5Hz) / 60Hz(±2.5Hz)
AC rated current	87A
AC overload capacity	x1.1 (longterm) ; x1.2 (100s) ; x1.5 (100ms)
Grid structure	3-phase 4-wire+PE
Output THDi	≤3%
AC PF	-1~1
<b>Battery Parameters</b>	
DC voltage range	672~864V
Rated capacity	105Ah
Rated energy	80KWh
Max discharge current	140A
Cell	3.2Vdc 105Ah LiFePO4
Battery module	51.2Vdc 105Ah 5.37KWh Air cooling
<b>PV Parameters</b>	
Max power	38.4KW+38.4KW
highest PV voltage	850V
PV start voltage	250V
MPPT voltage range	200V~800V
Max PV current	64A+64A
<b>System Parameters</b>	
On and off grid switch	<10ms
Cooling	Intelligent constant temperature system
Noise level	≤75dB
Temperature range	-20°C ~ 50°C (> 45°C capacity reduction)
Protection level	IP54
Highest altitude	3000m (> 2000m capacity reduction)
Humidity range	0~95%(No condensing)
Size (W*D*H)	1400*1150*2150 mm
Weight	1.9T
Installation mode	Vertical mounting
Maximum efficiency	97.5%
Protection function	AC over/under voltage, over temperature, abnormal frequency, AC phase error, over current, communication failure, fan failure, insulation impedance detection
Display	Touch screen
Communication interface	RS485 / CAN / LAN

# BESS

## Hybrid All-in-one Energy Storage System

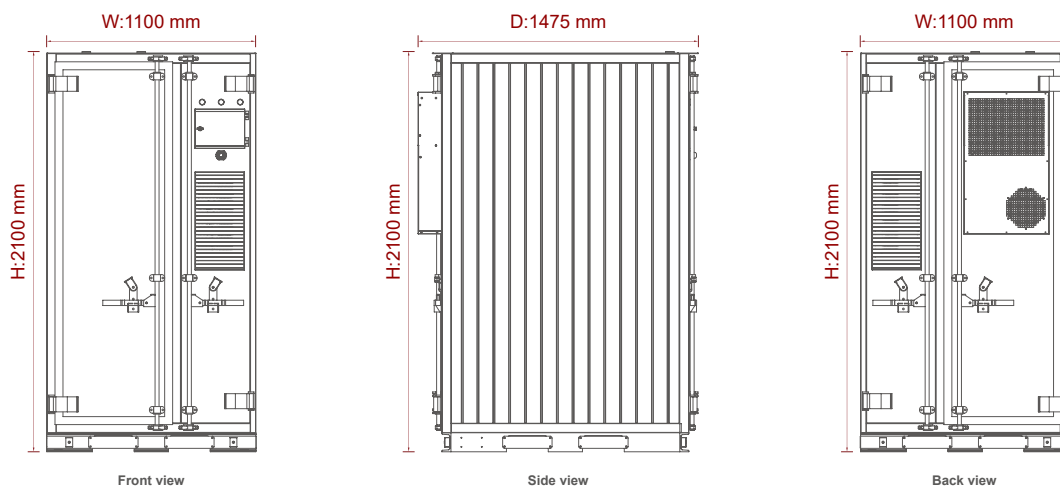
### BESS 50-112-75



#### • Features

- Status Indication: Shows system status, including load, storage capacity, and power.
- Multimodal Operation: Supports multi-level priority control for reliable power from grid, PV, and loads.
- Battery Management: Integrated BMS for battery monitoring and protection.
- Remote Monitoring: Multi-end remote access via self-service platform and device-side protocols.
- Easy Installation: IP54 cabinet with flexible installation options.

#### • Product Dimensions



**• Technical Parameter**

<b>BESS 50-112-75</b>		
<b>Battery Parameters</b>		
<b>Battery Module</b>	Voltage	51.2V
	Capacity	314Ah
	Energy	16.07kWh
	Cooling method	Intelligent constant temperature system
<b>Battery Cluster</b>	Rated voltage	358.4V
	Grouping method	1P112S
	Rated capacity	314Ah
	Output voltage range	313.6V~392V
	Rated energy	112.53kWh
	Maximum continuous charging current	157A
	Maximum continuous discharge current	157A
	Charge cut-off voltage	392V
<b>Work Environment</b>	Discharge cut-off voltage	313.6V
	Charging temperature	0~45°C
	Discharge temperature	-20~50°C
<b>Storage Environment</b>	Operating humidity	RH≤80%
	Storage temperature(<6month)	0~35°C
	Short term storage(<1months)	-20~55°C
Storage humidity	RH≤80%	
<b>PCS Parameters</b>		
<b>PCS</b>	Rated current	73A
	overload capacity	x 1.25 (100S)
	output power	50kW
	AC port voltage	3P/N/PE, 230 V / 400 V
	frequency	50Hz
	Power factor	-1~1
<b>PV</b>	Battery side voltage	350V-850V
	Maximum power	38.4kW+38.4kW
	Number of branch inputs	2
	PV Max voltage	850V
	PV start voltage	250V
	MPPT voltage range	200V-800V
Maximum PV current	64A+64A	
<b>System Parameters</b>		
<b>General Date</b>	Dimension(W*D*H)	1100*1475*2100mm
	Weight(kg)	1620KGS
	Degree of protection	IP54
	Working temperature range	-30~60°C > 45 (derating)
	Cooling	Air Cooling
	Relative humidity	5~95%(no condensation)
	Highest altitude	4000m(>2000m derating)

# BESS

## Hybrid All-in-one Energy Storage System

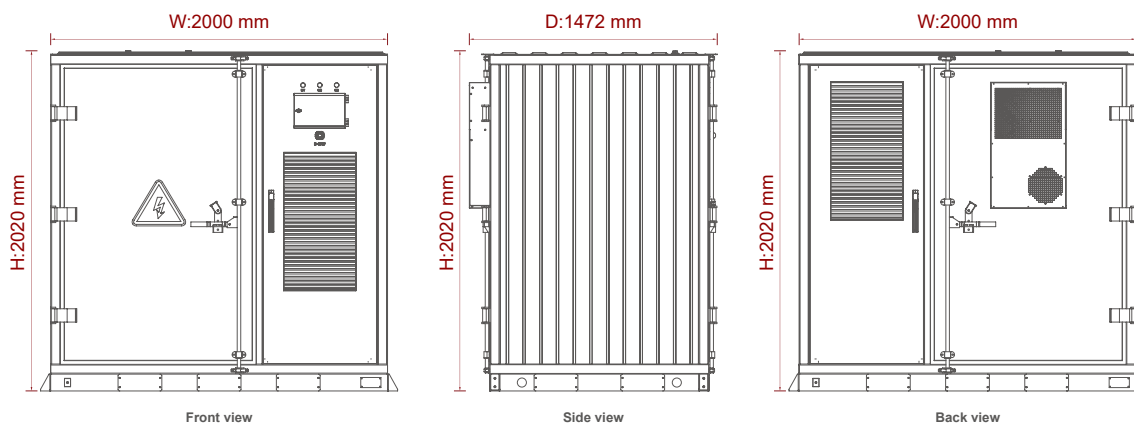
### BESS 60-192-75



#### • Features

- All-in-one design with a high degree of integration.
- Modular design with optional modules of different sizes.
- Support for grid-connected and off-grid operation.
- MPPT Solar controller available as an option.
- IP54 class fire and explosion-proof housing.
- Patented air duct design, intelligent air cooling, 3-5°C temperature difference of the battery cell.

#### • Product Dimensions



**• Technical Parameter**

<b>BESS 60-192-75</b>		
<b>Battery Parameters</b>		
<b>Battery Module</b>	Voltage	51.2V
	Capacity	314 Ah
	Energy	16.07 kWh
	Cooling method	Intelligent constant temperature system
<b>Battery Cluster</b>	Rated voltage	614.4V
	Grouping method	1P 192 S
	Rated capacity	314 Ah
	Output voltage range	537.6V~691.2V
	Rated energy	192.92kWh
	Max continuous charging current	157 A
	Max continuous discharge current	157 A
	Charge cut-off voltage	672V
<b>Work Environment</b>	Discharge cut-off voltage	556.8V
	Charging operation temperature range	0~45°C
	Discharging operation temperature range	-20~50°C
<b>Storage Environment</b>	Working humidity	RH≤80%
	Storage temperature(<6month)	0~35°C
	Short-term storage temperature(<1month)	-20~55°C
<b>Cabinet</b>	Storage humidity	RH≤80%
	Protection level	IP54
<b>PCS Parameters</b>		
<b>PCS Parameter</b>	Rated current	87A
	PCS overload capacity	x 1.25(100S)
	PCS output power	60kW
	AC-side voltage of PCS	3P/N/PE, 230 V / 400 V
	Frequency	50Hz/47Hz~52Hz(60Hz/57Hz~62Hz)
	Power factor	-1~1
	Battery side voltage	420V-850 V
<b>PV Parameter</b>	Max power	38.4kW+38.4kW
	Number of branch inputs	2
	PV Max voltage	850V
	PV startup voltage	250V
	MPPT voltage range	200V-800V
	PV Max current	64A+64A
<b>System Parameters</b>		
<b>System Parameters</b>	Dimension(W*D*H)	2000*1472*2020mm
	Weight(kg)	< 2900
	Display	7-inch Resistive Touch Screen
	Fire protection systems	Aerosol Fire Module
	Degree of protection	IP54
	Certification	CE;IEC62619;UN38.3
	Working temperaturerange	-30~60°C(> 45°C derating)
	Cooling	Air Cooling
	Relative humidity	5~95%(No Condensing)
	Highest altitude	4000m(>2000m derating)

# BESS

## Hybrid All-in-one Energy Storage System

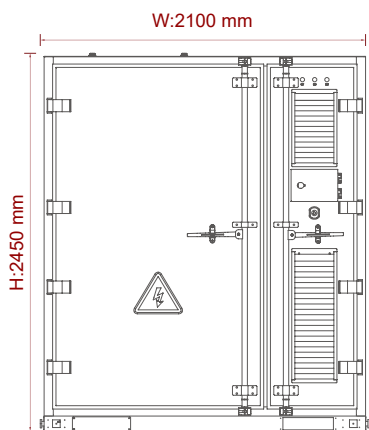
### BESS 125-273-120



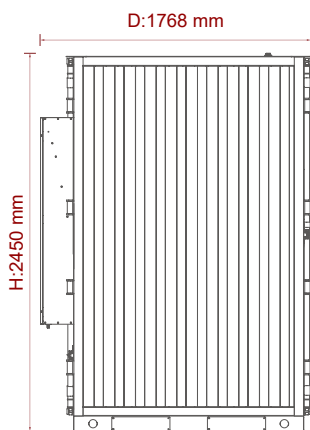
#### • Features

- Status Indication: Shows system status, including load, storage capacity, and power.
- Multimodal Operation: Supports multi-level priority control for reliable power from grid, PV, and loads.
- Battery Management: Integrated BMS for battery monitoring and protection.
- Remote Monitoring: Multi-end remote access via self-service platform and device-side protocols.
- Easy Installation: IP54 cabinet with flexible installation options.

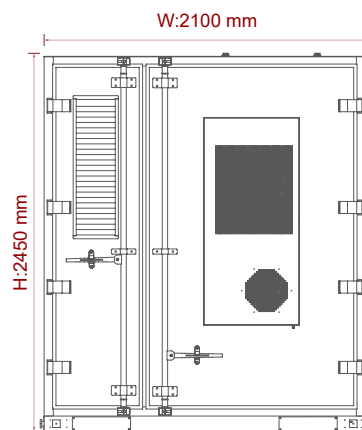
#### • Product Dimensions



Front view



Side view



Back view

**• Technical Parameter**

<b>BESS 125-273-120</b>		
<b>Battery Parameters</b>		
<b>Battery Module</b>	Voltage	51.2V
	Capacity	314 Ah
	Energy	16.07 kWh
	Cooling method	Intelligent constant temperature system
<b>Battery Cluster</b>	Rated voltage	870.4V
	Grouping method	1P 272 S
	Rated capacity	314 Ah
	Output voltage range	761.6V~979.2V
	Rated energy	273.3kWh
	Max continuous charging current	157 A
	Max continuous discharge current	157 A
	Charge cut-off voltage	952V
	Discharge cut-off voltage	788.8V
<b>Work Environment</b>	Charging operation temperature range	0~45°C
	Discharging operation temperature range	-20~50°C
	Working humidity	RH≤80%
<b>Storage Environment</b>	Storage temperature(<6month)	0~35°C
	Short-term storage temperature(<1month)	-20~55°C
	Storage humidity	RH≤80%
<b>Cabinet</b>	Protection level	IP54
<b>PCS Parameters</b>		
<b>PCS Parameter</b>	Rated current	181A
	PCS overload capacity	x1.1 continuous;x1.25(30ms)
	PCS output power	125kW
	AC-side voltage of PCS	3P/N/PE, 230 V / 400 V
	Frequency	50Hz/60Hz
	Power factor	-1~1
	Battery side voltage	680V-900 V
<b>STS</b>	Rated power	170KVA
	AC voltage	400V/230V(-20%~15%)
	Frequency	50Hz/60Hz(±5Hz)
	Max AC current	250A
<b>MPPT</b>	PV side	
	Max power	120kW
	MPPT voltage range	200V-850V
	Rated voltage	850V
	Startup voltage	250V
	PV input string	200V-800V
	PV Max current	64A+64A
	High voltage side	
	Voltage range	500V-950V
	Rated voltage	680V
	Max current	180A
<b>Parallel</b>	Parallel No.	Max 5 pcs
<b>System Parameters</b>		
<b>System Parameters</b>	Dimension(W*D*H)	2100*1768*2450mm
	Weight(kg)	/
	Display	7-inch Resistive Touch Screen
	Fire protection systems	Aerosol Fire Module
	Degree of protection	IP54
	Certification	CE;IEC62619;UN38.3
	Working temperaturerange	-30~60°C(> 45°C derating)
	Cooling	Intelligent Thermal Management System
	Relative humidity	5~95%(No Condensing)
	Highest altitude	4000m(>2000m derating)

# BESS

CE IEC UN38.3

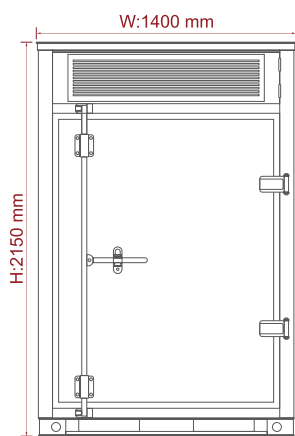
## On-grid All-in-one Energy Storage System BESS 60-80



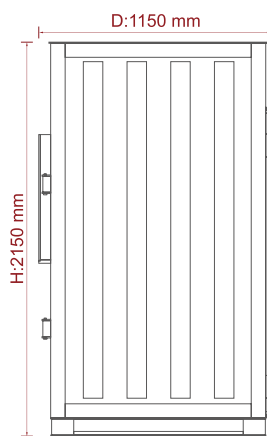
### • Features

- All-in-one design with a high degree of integration.
- Modular design with optional modules of different sizes.
- Support for grid-connected and off-grid operation.
- IP54 class fire and explosion-proof housing.
- Patented air duct design, intelligent air cooling, 3-5°C temperature difference of the battery core.

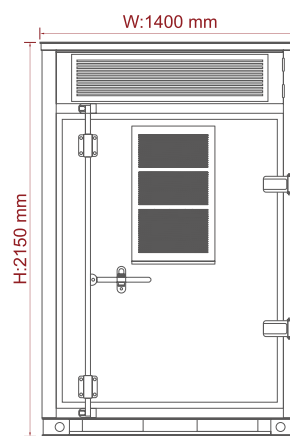
### • Product Dimensions



Front view



Side view



Back view

**• Technical Parameter**

<b>BESS 60-80</b>	
<b>PCS Parameters</b>	
AC rated power	60kW
PCS rated current	140A
AC rated voltage	400V±15%
Rated frequency	50Hz(±2.5Hz) / 60Hz(±2.5Hz)
AC rated current	87A
AC overload capacity	x1.1 (10min) ; x1.2 (60S)
Grid structure	3-phase 4-wire+PE
Output THDi	≤3%
AC PF	-1~1
<b>Battery Parameters</b>	
DC voltage range	672~864V
Rated capacity	105Ah
Rated energy	80KWh
Max discharge current	140A
Cell	3.2Vdc 105Ah LiFePO4
Battery module	51.2Vdc 105Ah 5.37KWh Air cooling
<b>System Parameters</b>	
Cooling	Intelligent constant temperature system
Noise Level	≤75dB
Temperature Range	-20°C ~ 50°C (> 45°C capacity reduction)
Protection Level	IP54
Highest altitude	3000m (> 2000m capacity reduction)
Humidity Range	0~95%(No condensing)
Size (W*D*H)	1400*1150*2150 mm
Weight	1.9T
Installation mode	Vertical mounting
Maximum efficiency	97.5%
Protection function	AC over/under voltage, over temperature, abnormal frequency, AC phase error, over current, communication failure, fan failure, insulation impedance detection
Display	Touch screen
Communication interface	RS485 / CAN / LAN
Certification	CE-EMC(EN 61000-6-2/-4) ; CE-LVD(IEC 62477-1;IEC 62040-1) ; IEC 62619 ; UN38.3

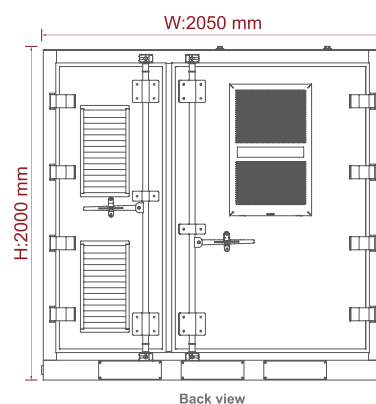
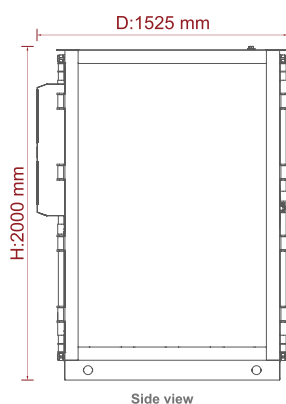
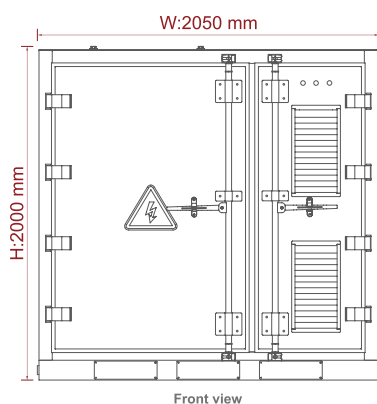
## On-grid All-in-one Energy Storage System BESS 60-160

### • Features

- All-in-one design with a high degree of integration.
- Modular design with optional modules of different sizes.
- Support for grid-connected and off-grid operation.
- MPPT Solar controller available as an option.
- IP54 class fire and explosion-proof housing.
- Patented air duct design, intelligent air cooling, 3-5°C temperature difference of the battery cell.



### • Product Dimensions



**• Technical Parameter**

<b>BESS 60-160</b>	
<b>PCS Parameters</b>	
AC rated power	60kW
PCS rated current	120A
PCS Port voltage	290VAC
AC rated voltage	400V ± 15%
Rated frequency	50Hz ± 2.5Hz
AC rated current	87A
AC overload capacity	x1.1 (10min) ; x1.2 (60S)
Grid structure	3-phase 4-wire+PE
Output THDi	≤3%
AC PF	-1~1
<b>Battery Parameters</b>	
DC rated voltage	563V
DC voltage range	493V~633V
Rated capacity	280Ah
Rated energy	157.7KWh
Max discharge current	120A
Cell	3.2Vdc 280Ah LiFePO4
Battery module	51.2Vdc 280Ah 14.33KWh Air cooling
<b>Transformer specification</b>	
Specification	60KVA three-phase isolation/vertical
Overload capacity	x1.1
Insulation class	CLASS H 180°C
Transformation ratio	290V : 400V
Design temperature	Temperature rise≤90K
Protection Level	IP54
<b>System Parameters</b>	
Cooling	Intelligent constant temperature system
Noise Level	≤75dB
Temperature Range	-20°C ~ 50°C (> 45°C capacity reduction)
Protection Level	IP54
Highest altitude	3000m (> 2000m capacity reduction)
Humidity Range	0~95%(No condensing)
Size (W*D*H)	2050*1525*2000 mm
Weight	2860kg (Includes MPPT module)
Installation mode	Vertical mounting
Maximum efficiency	95.5%
Isolation mode	Built-in isolation transformer
Protection function	Ac over/under voltage, over temperature, abnormal frequency, AC phase error, over current, communication failure, fan failure, insulation impedance detection, anti-island
Display	Touch screen
Communication interface	RS485 / CAN / LAN
Certification	CE-EMC(EN 61000-6-2/-4) ; CE-LVD(IEC 62109-1/-2) ; UN38.3

# BESS

## On-grid All-in-one Energy Storage System

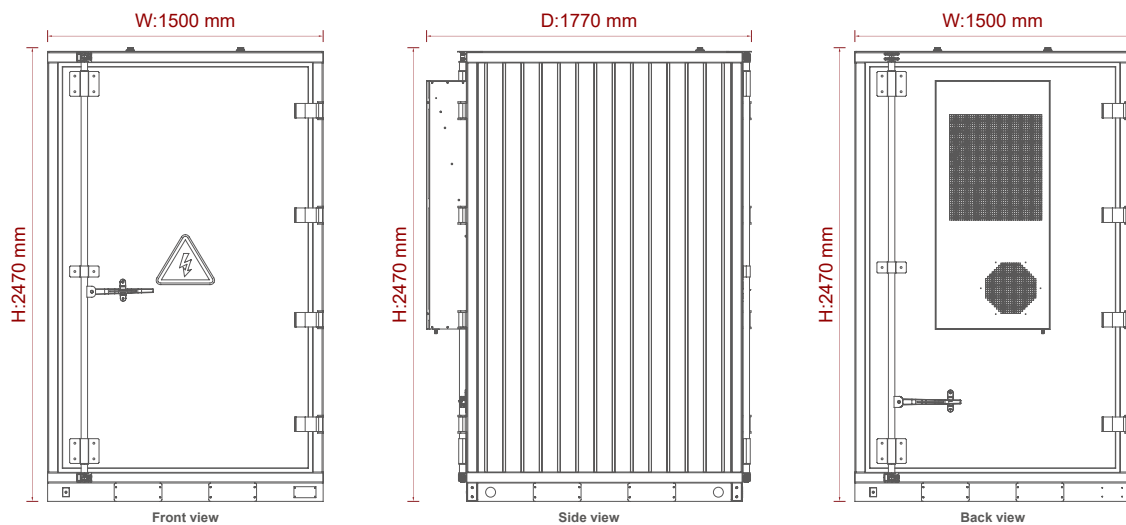
### BESS 125-273



#### • Features

- Multi level BMS built-in.
- IP55 fire and explosion proof cabinet.
- Scalable in power and capacity.
- Easy for on site installation.
- Fire proof devices in each modular and in the cabinet.

#### • Product Dimensions



**• Technical Parameter**

<b>BESS 125-273</b>		
<b>Battery Parameters</b>		
<b>Battery Module</b>	Voltage	51.2V
	Capacity	314 Ah
	Energy	16.07 kWh
	Cooling method	Intelligent constant temperature system
<b>Battery Cluster</b>	Rated voltage	870.4V
	Grouping method	1P 272 S
	Rated capacity	314 Ah
	Output voltage range	761.6V~979.2V
	Rated energy	273.3kWh
	Max continuous charging current	157 A
	Max continuous discharge current	157 A
	Charge cut-off voltage	952V
	Discharge cut-off voltage	788.8V
<b>Work Environment</b>	Charging operation temperature range	0~45°C
	Discharging operation temperature range	-20~50°C
	Working humidity	RH≤80%
<b>Storage Environment</b>	Storage temperature(<6month)	0~35°C
	Short-term storage temperature(<1month)	-20~55°C
	Storage humidity	RH≤80%
<b>Cabinet</b>	Protection level	IP54
<b>PCS Parameters</b>		
<b>PCS Parameter</b>	Rated current	181A
	PCS overload capacity	x1.1 continuous;x1.25(30ms)
	PCS output power	125kW
	AC-side voltage of PCS	3P/N/PE, 230 V / 400 V
	Frequency	50Hz/60Hz
	Power factor	-1~1
	Battery side voltage	680V-900 V
<b>Parallel</b>	Parallel No.	Max 5 pcs
<b>System Parameters</b>		
<b>System Parameters</b>	Dimension(W*D*H)	1500*1770*2470mm
	Weight(kg)	/
	Display	7-inch Resistive Touch Screen
	Fire protection systems	Aerosol Fire Module
	Degree of protection	IP54
	Certification	CE;IEC62619;UN38.3
	Working temperaturerange	-30~60°C(> 45°C derating)
	Cooling	Intelligent Thermal Management System
	Relative humidity	5~95%(No Condensing)
	Highest altitude	4000m(>2000m derating)

# Energon

CE IEC UN38.3

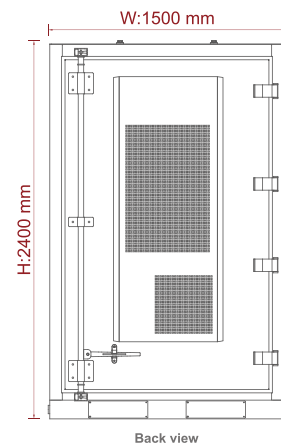
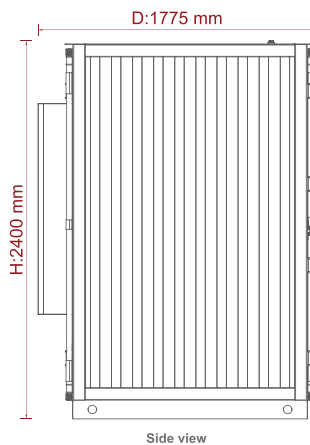
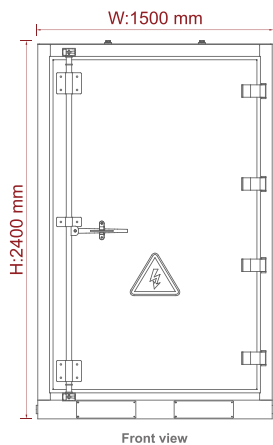
## Outdoor Energy Storage Battery Cabinet 215KWh/271KWh



### • Features

- Multi level BMS built-in.
- IP55 fire and explosion proof cabinet.
- Scalable in power and capacity.
- Easy for on site installation.
- Fire proof devices in each modular and in the cabinet.

### • Product Dimensions



**• Technical Parameter**

<b>Energon 215KWh/271KWh</b>		
<b>Battery parameters</b>		
Cell	3.2V 280AH	3.2V 314AH
Battery type	LFP(LiFePO4)	
Battery module	51.2V 280AH	57.6V 314AH
Battery module Qty.	15	
Battery cluster	768V 280AH	864V 314AH
Battery cluster configuration	1P16S*15	1P18S*15
<b>Electrical parameters</b>		
Nominal energy	215Kwh	271Kwh
Nominal voltage	768Vdc	864Vdc
System voltage range	672-852VDC	756-958.5VDC
System charge/discharge rate	0.6P	0.5P
Depth of charge and discharge	100%~10%	
No. of cycles	8000cycles(70%SOH)	
Compensation methods	Dynamic real-time compensation	
Recommended AC side power	125KW	
<b>Protection</b>		
DC input/output	Disconnect switches+fuses	
Electrical isolation	Inter - module controlled protection breakout	
Fire protection systems	Two-stage aerosol fire module + Smoke sensors + Enclosure explosion - proof pressure relief device	
<b>System Parameters</b>		
Communication	RS485/CAN/LAN/4G	
Communication protocols	ModBusTCP/CAN	
Working temperature range	0~40°C charge/-20~50°C Discharge	
Relative humidity	0~95%(No condensing)	
Cooling	Intelligent constant temperature system	
Noise	≤65db	
Highest altitude	4000m(>2000m derating)	
Degree of protection	IP55	
Dimension(W*D*H)	1500*1775*2400mm	
Weight	3.2T	3.3T
Installation method	Cabinet floor mounting	
Certification	CE-EMC(EN 61000-6-2/-4) ; CE-LVD(IEC 62477-1) ; IEC 62619 ; UN38.3	

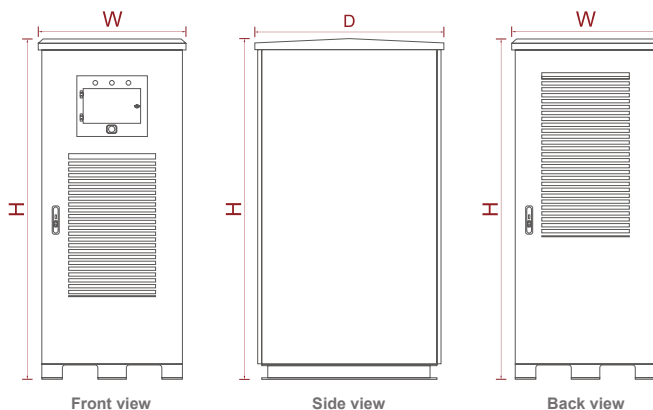
## Three Phase Power Conversion System



### • Features

- Maximum efficiency can reach 97.5%.
- Modular design ,easy for installation and depolyment.
- Bidirectional power conversion system with full fourquadrant operation.
- 100kW to 500kW by 1 to 5 power modules.
- Multi-string technology for better battery safety and performance.
- Multiple battery strings working in parallel or independently to allow easy power and energy expansion.
- Grid-support function built-in.

### • Product Dimensions



Model	Size(W*D*H)
UP-S-100KW	890*1240*2100mm
UP-S-125KW	
UP-S-200KW	
UP-S-250KW	
UP-S-300KW	
UP-S-400KW	890*1240*2300mm
UP-S-500KW	

**• Technical Parameter**

UP-S Series Three Phase Power Conversion System							
Model	UP-S-100KW	UP-S-125KW	UP-S-200KW	UP-S-250KW	UP-S-300KW	UP-S-400KW	UP-S-500KW
<b>DC parametric</b>							
Battery voltage	630-850VDC						
Max. Battery voltage	900VDC						
Battery packs	1/215Kwh	1/215Kwh	2/215Kwh	2/215Kwh	3/215Kwh	4/215Kwh	5/215Kwh
DC max current	140A	180A	280A	360A	420A	560A	700A
<b>Utility-interactive Mode</b>							
AC max power	110KW	137.5KW	220KW	275KW	330KW	440KW	550KW
PCS module Qty.	100KW*1	62.5KW*2	100KW*2	62.5KW*4	100KW*3	100KW*4	100KW*5
AC frequency	50/60±2.5Hz						
Rated Voltage	380VAC						
AC Voltage Range	340VAC-440VAC						
THDi	≤3% (Rated output)						
Overload Capability	110%(Long-term)						
AC PF/ Adjustment Range	>0.99 (Rated output)/1 (lead) ~ 1 (lag)						
<b>Stand-alone Mode</b>							
Rated output voltage	380VAC						
Output voltage accuracy	±1%						
Max Output Current	140A	180A	280A	360A	420A	560A	700A
Output THDu	<3% (Linear load)						
Rated output frequency	50/60Hz						
Overload Capability	110%(Long-term)						
Crest factor	>3:1						
<b>System Parameters</b>							
Peak efficiency	97.5%						
Enclosure	IP54						
Operating temp	-25~55°C						
Humidity	0~95% (No condensing)						
Cooling	Intelligent air cooling						
Noise	<65dB						
Highest altitude	2000m(>2000m derating)						
Display	Touch screen(External)						
BMS Communication	RS485, CAN						
Communication	RS232/RS485(Standard),Ethernet						
Dimension(W*D*H)(mm)	890*1240*2100						890*1240*2300
Protection	OTP、AC OVP/UVP、OFF/UFP、AC Phase Reverse、OLP、Anti-islanding						
AC connection	3P4W+PE						
Certification	CE-EMC(EN 61000-6-2/-4) ; CE-LVD(IEC 62477-1 ; EN 50549-1 ; VDE-4105						

# UPV-S

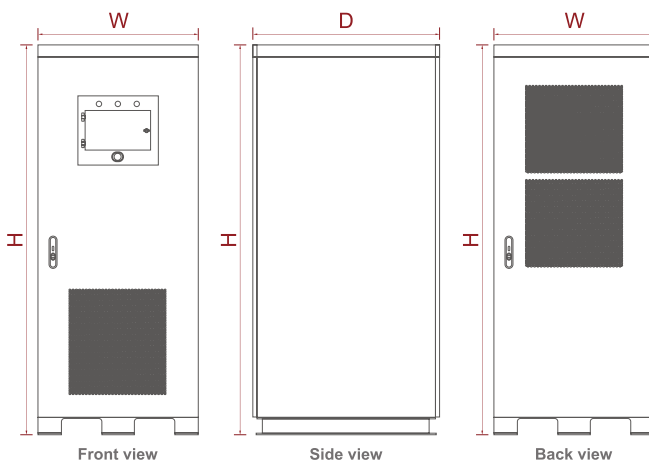
## Three Phase Solar+Storage Hybrid Inverters



### • Features

- High stability, modular design support N+1.
- Bi-directional Power Conversion System.
- Support self-generation, micro-grid application.
- Supports on/off grid.
- Photovoltaic can be connected to a maximum of twice the capacity of the device.
- Dual-stage topology, wide battery voltage input range.
- With MPPT function to enhance system power generation.
- Self-contained solar storage operation strategy.
- Support communication with BMS, EMS system.

### • Product Dimensions



Model	Size(W*D*H)
0.4-100KW	800*1050*2200mm
0.4-125KW	
0.4-200KW	1350*1050*2200mm
0.4-250KW	

**• Technical Parameter**

UPV-S Series Three Phase Solar+Storage Hybrid Inverters				
Model	0.4-100KW	0.4-125KW	0.4-200KW	0.4-250KW
<b>PCS Parameters</b>				
Rated Current	152A	181A	152A*2	181A*2
Overload Capacity	x1.1Normal/1.25(30ms)			
Output Power	100kW	125kW	100kW*2	125kW*2
AC-side Voltage of PCS	3P/N/PE, 230 V / 400 V			
Frequency	50Hz/60Hz			
Power Factor	-1~1			
Battery side Voltage	680-900 V/Max 950V			
Max Battery Current	180A	200A	180A*2	200A*2
<b>STS Parameters</b>				
Rated Power	170kVA		330kVA	
AC Voltage	400V/230V(-20%~15%)			
Frequency Range	50Hz/60Hz(±5Hz)			
Max AC Current	250A		500A	
Switching time	<10ms			
<b>PV Parameters</b>				
Rated Power	120kW		120kW*2	
MPPT Voltage Range	200V-850V		200V-850V	
Rated Voltage	600V		600V	
PV Startup Voltage	250V		250V	
Number of Branch Inputs	1		1*2	
PV Max Current	200A		200A*2	
High Voltage Side (Module)				
Voltage Range	500V-950V			
Rated Voltage	680V			
Max Current	180A		180A*2	

# UPV-S

## Three Phase Solar+Storage Hybrid Inverters



### • Features

- **Operating Status Indication:** Integrated energy storage system working status, transformer-area load, energy storage capacity, power metrics.
- **Multi-Modal Operation:** Enables multi-priority management for grid, PV and load power supply, ensuring reliability across all modes.
- **Battery Pack Management:** Incorporates a BMS for comprehensive monitoring of cell and protection.
- **Remote Monitoring & Control:** Supports self-service platform monitoring and protocol integration for multi-terminal remote access.
- **Easy Installation:** IP54-rated cabinet for dust/water resistance; flexible deployment in diverse environments.

**• Technical Parameter**

<b>UPV-S 1200kW Three Phase Solar+Storage Hybrid Inverters</b>	
<b>PCS Parameters</b>	
Module	
Rated current	145A*12
Overload capacity	x1.1Normal/1.25 (30ms)
Output power	100kW*12
AC-side voltage of PCS	3P/N/PE, 230 V / 400 V
Frequency	50Hz/60Hz
Power factor	-1~1
Battery side voltage	680-900 V/Max 950V
Max battery current	200A*12
<b>STS Parameters</b>	
System	
System power	1200kW
Rated power	600kVA*3
AC voltage	400V/230V (-20%~15%)
Frequency range	50Hz/60Hz (±5Hz)
Max AC current	870A*3
Switching time	<10ms
<b>PV Parameters</b>	
PV Side (Module)	
Rated power	120kW*6
MPPT voltage range	200V-850V
Rated voltage	600V
PV startup voltage	250V
Number of branch inputs	1*6
PV Max current	200A*6
High Voltage Side (Module)	
Voltage range	500V-950V
Rated voltage	680V
Max current	180A*6
<b>System Parameters</b>	
Dimension(W*D*H)	3000*1267*2400mm
Weight(kg)	2660
Degree of Protection	IP54
Working Temperature Range	-30~60°C(> 45°C derating)
Cooling	Air Cooling
Relative Humidity	5~95%(no condensation)
Highest Altitude	4000m(>2000m derating)

# LFP-M 14.33KWH/16KWH

CE IEC UN38.3

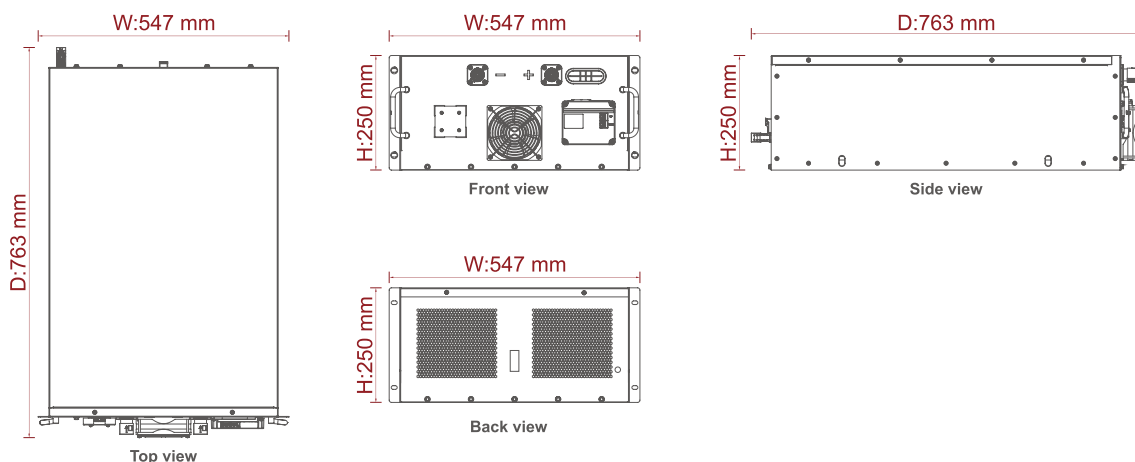
## LiFePO4 Battery Module



### • Features

- 16PCS 280AH/314AH LiFePO4 cells.
- 51.2Vdc 14.33KWH/16.07KWH rated capacity.
- Long cycle life 6000 times.
- Unique automatic calibration active balancing technology BMS system.
- Modular, can be compatible with a variety of housing.
- Standard CAN & RS485 communication port, can meet the requirement of several packages to connect in parallel, Master & Slave relationship, Monitor and other functions. Compatible with other brand inverters' communication protocols.

### • Product Dimensions



**• Technical Parameter**

<b>LFP-M 14.33kWH/16.07kWH LiFePO4 Battery Module</b>		
<b>Specification</b>		
Model	LFP-M 48280H	LFP-M 48314H
Rated Voltage	51.2V	
Rated Capacity	280Ah	314Ah
Rated Energy	14.33KWH	16.07KWH
Cell Configuration	16S1P	
Battery Cell	3.2V280AH 16PCS (EVE LF280K)	3.2V314AH 16PCS (EVE MB31)
Life cycles (70%SOH,25°C )	8000 Cycles	
Certification	CE-EMC(EN 61000-6-2/-4) ;IEC 62619 ; UN38.3	
<b>Standard Charge</b>		
Operation temperature range @charging	0~60°C	
Rated charge voltage	56.8V	
Max. charge voltage	57.6V	
Overcharge protection	58.4V	
Allowed MAX charge current	140A	157A
Peak charge current	150A	165A
Rated charge current	140A	157A
Recommend charge current	≤140A	≤157A
<b>Standard Discharge</b>		
Operation temperature range @discharging	-30~60°C	
Output Voltage Range	44.8~57.6Vdc	
Recommend Working Range	46.4~56.8Vdc	
Discharge Cut-off voltage	44.8V	
Allowed MAX discharge current	280A	314A
Peak discharge current	280A	314A
Rated discharge current	140A	157A
Recommend discharge current	≤140A	≤157A
<b>Mechanical Characteristics</b>		
Dimension W*D*H	547*763*250 mm	
Weight (N.W.)	103±3Kg	
Weight(G.W.)	103±3Kg	
<b>Storage and Transportation Requirements</b>		
Storage Temperature	Less than 1month	-20~45°C
	Less than 6month	-10~30°C
Storage Humidity	45~75%RH	
SOC	Storage	60~75% SOC
	Transport	45~55% SOC

# 560W-600W Solar Panel

## Bifacial Monocrystalline Module



### • Features

- Higher Power Output
- Multi Busbar Technology
- PID Resistance
- Low-light Performance
- Durability Against Extreme Environmental Conditions
- EL Full Inspection



### • Technical Parameter

#### Specifications(BNPI)

Rated Power in Watts-Pmax(Wp)	619.1	624.9	629.9	635.3	641.1	647.0	652.5	658.8	665.2
Open Circuit Voltage-Voc(V)	52.65	52.81	52.97	53.13	53.29	53.45	53.61	53.77	53.93
Short Circuit Current-Isc(A)	14.81	14.91	14.98	15.05	15.13	15.21	15.28	15.34	15.41
Max. Power Voltage-Vmpp(V)	44.32	44.46	44.59	44.81	45.04	45.26	45.48	45.70	45.92
Max. Power Current-Impp(A)	13.97	14.06	14.13	14.18	14.24	14.30	14.35	14.42	14.49
Power Tolerance	0~+3%								
Operating Temperature	-40°C~85°C								

\*BNPI: Irradiance: front 1000W/m<sup>2</sup>, rear 135W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

#### Electrical Characteristics (STC\*)

Rated Power in Watts-Pmax(Wp)	560	560	570	575	580	585	590	595	600
Open Circuit Voltage-Voc(V)	52.45	52.45	52.77	52.93	53.09	53.26	53.41	53.57	53.73
Short Circuit Current-Isc(A)	13.47	13.47	13.62	13.69	13.76	13.83	13.89	13.95	14.01
Max. Power Voltage-Vmpp(V)	44.12	44.12	44.39	44.61	44.84	45.06	45.28	45.50	45.72
Max. Power Current-Impp(A)	12.71	12.71	12.85	12.90	12.95	13.00	13.06	13.12	13.18
Module Efficiency(%)	21.67	21.67	22.06	22.25	22.44	22.6	22.8	23.02	23.22
Maximum System Voltage	1500V DC								
Fuse Rating(A)	30								
Temperature Coefficient Pmax	-0.29%/°C								
Temperature Coefficient Isc	0.045%/°C								
Temperature Coefficient Voc	-0.25%/°C								
Refer. Bifacial Factor	ΦIsc=80%±10%, ΦVoc=100%±3%, ΦPmax=80%±10%								

\*STC: Irradiance 1000W/m<sup>2</sup>, module temperature 25°C, AM=1.5

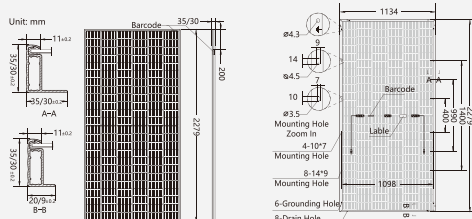
#### Mechanical Characteristics

Number of Cells	144pcs
Type of Cell	N-TOPCon Mono
Thickness of Glass(mm)	2.0
Type of Frame	Anodized Aluminum Alloy
Size of Module(mm)	2279×1134×30
Weight(kg)	32
Junction Box	IP68, 1500V DC, 3 Diodes
Cables/Connectors	4.0mm <sup>2</sup> , MC4 compatible
Length of Cable	+300mm/-200mm Length can be customized(connector included)

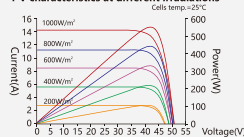
#### Packaging Configuration

Height of Modules (mm)	35	30
Number of Modules Per Pallet	31	36
Packaging Box Dimensions (L×W×H) (mm)	2300×1120×1260	2300×1120×1260
Box Gross Weight (kg)	1020	1180
Number of Modules Per 40ft (HQ) Container	620	720
Number of Pallets Per 40ft (HQ) Container	20	20

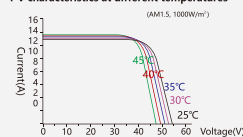
#### Dimensions of PV Module



#### I-V characteristics at different irradiances

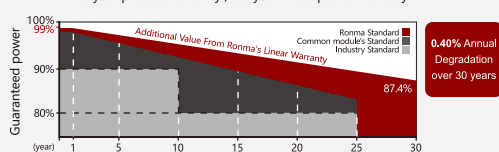


#### I-V characteristics at different temperatures



#### Linear Performance Warranty

15-year product warranty / 30-year linear power warranty



# 600W-630W Solar Panel

## Bifacial Monocrystalline Module



### • Features

- Higher Power Output
- Multi Busbar Technology
- PID Resistance
- Low-light Performance
- Durability Against Extreme Environmental Conditions
- EL Full Inspection



### • Technical Parameter

#### Electrical Characteristics (STC\*)

Rated Power In Watts-Pmax(Wp)	600	605	610	615	620	625	630
Open Circuit Voltage-Voc(V)	48.40	48.70	49.00	49.30	49.60	49.80	50.30
Short Circuit Current-Isc(A)	15.80	15.83	15.86	15.89	15.91	15.93	15.94
Max. Power Voltage-Vmpp(V)	40.30	40.50	40.80	41.10	41.40	41.60	42.00
Max. Power Current-Imp(A)	14.91	14.94	14.96	14.98	14.99	15.00	15.01
Module Efficiency(%)	22.20	22.40	22.60	22.80	23.00	23.10	23.32
Maximum System Voltage	1500V DC						
Fuse Rating(A)	30						
Temperature Coefficient Pmax	-0.30%/°C						
Temperature Coefficient Isc	0.046%/°C						
Temperature Coefficient Voc	-0.25%/°C						
Refer. Bifacial Factor	80±5%						

\*STC: Irradiance 1000W/m<sup>2</sup>, module temperature 25°C, AM=1.5

#### Working Characteristics (NOCT\*)

Rated Power In Watts-Pmax(Wp)	457	461	465	469	473
Open Circuit Voltage-Voc(V)	37.75	37.92	38.09	38.26	38.44
Short Circuit Current-Isc(A)	12.11	12.16	12.21	12.26	12.31
Max. Power Voltage-Vmpp(V)	46.03	46.22	46.41	46.60	46.70
Max. Power Current-Imp(A)	12.86	12.92	12.98	13.04	13.10
Power Tolerance	0~+3%				
NOCT	45°C ±2°C				
Operating Temperature	-40°C ~85°C				

\*NOCT: Irradiance 800W/m<sup>2</sup>, ambient temperature 20°C, wind speed 1m/s

#### Electrical characteristics with different rear side power gain

	Pmax/W	Voc/V	Isc/A	Vmpp/V	Imp/A
5%	661	50.30	16.74	42.00	15.76
10%	693	50.30	17.53	42.00	16.51

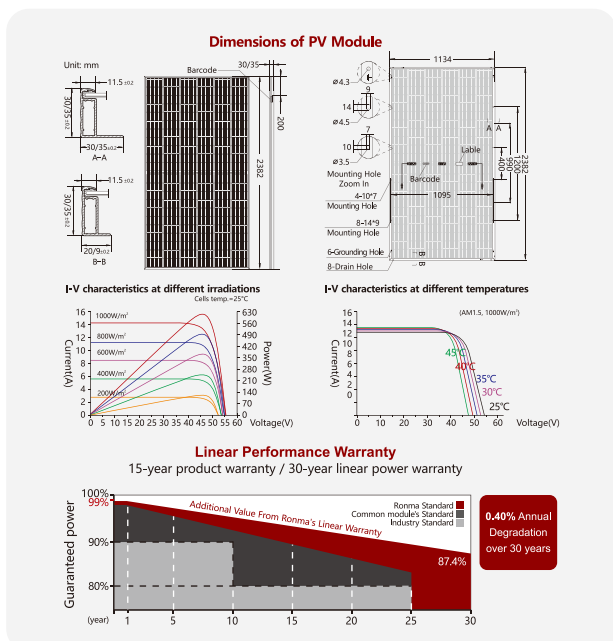
The additional gain from the rear side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

#### Mechanical Characteristics

Number of Cells	132pcs
Type of Cell	N-TOPCon Mono
Thickness of Glass(mm)	2.0
Type of Frame	Anodized Aluminum Alloy
Size of Module(mm)	2382×1134×35/30
Weight(kg)	33
Junction Box	IP68, 1500V DC 3 Diodes; Cables/connectors; 4.0mm <sup>2</sup> , MC4 compatible
Length of Cable	+300mm/-200mm Length can be customized(connector included)

#### Packaging Configuration

Height of Modules (mm)	35	30
Number of Modules Per Pallet	31	36
Packaging Box Dimensions (l×w×h) (mm)	2485×1120×1260	1260×1120×2595
Box Gross Weight (kg)	955	1225
Number of Modules Per 40ft (HQ) Container	496	720
Number of Pallets Per 40ft (HQ) Container	20	20



# 685W-730W Solar Panel

## Bifacial Monocrystalline Module



### • Features

- Higher Power Output
- Multi Busbar Technology
- PID Resistance
- Low-light Performance
- Durability Against Extreme Environmental Conditions
- EL Full Inspection



### • Technical Parameter

#### Specifications(BNPI)

Rated Power in Watts-Pmax(Wp)	758.9	764.7	769.3	774.8	780.6	785.7	791.6	797.1	802.6	808.6
Open Circuit Voltage-Voc(V)	47.90	48.10	48.50	48.80	49.00	49.20	49.40	49.60	49.80	50.00
Short Circuit Current-Isc(A)	20.06	20.11	20.15	20.19	20.24	20.28	20.33	20.37	20.41	20.46
Max. Power Voltage-Vmpp(V)	40.10	40.30	40.50	40.70	40.90	41.10	41.30	41.50	41.70	41.90
Max. Power Current-Impp(A)	18.93	18.98	19.00	19.04	19.09	19.12	19.17	19.21	19.25	19.30
Power Tolerance	0~+3%									
Operating Temperature	-40°C~85°C									

\*BNPI: Irradiance: front 1000W/m<sup>2</sup>, rear 135W/m<sup>2</sup>, Cell Temperature 25°C, AM=1.5

#### Electrical Characteristics (STC\*)

Rated Power in Watts-Pmax(Wp)	685	690	695	700	705	710	715	720	725	730
Open Circuit Voltage-Voc(V)	47.70	47.90	48.30	48.60	48.80	49.00	49.20	49.40	49.60	49.80
Short Circuit Current-Isc(A)	18.21	18.25	18.28	18.32	18.36	18.40	18.44	18.48	18.52	18.56
Max. Power Voltage-Vmpp(V)	39.90	40.10	40.30	40.50	40.70	40.90	41.10	41.30	41.50	41.70
Max. Power Current-Impp(A)	17.19	17.23	17.25	17.29	17.33	17.36	17.40	17.44	17.48	17.52
Module Efficiency(%)	22.05	22.21	22.37	22.53	22.70	22.86	23.02	23.18	23.34	23.50
Maximum System Voltage	1500V DC									
Fuse Rating(A)	30									
Temperature Coefficient Pmax	-0.30%/°C									
Temperature Coefficient Isc	0.046%/°C									
Temperature Coefficient Voc	-0.25%/°C									
Refer. Bifacial Factor	ΦIsc=80%±10%, ΦVoc=100%±3%, ΦPmax=80%±10%									

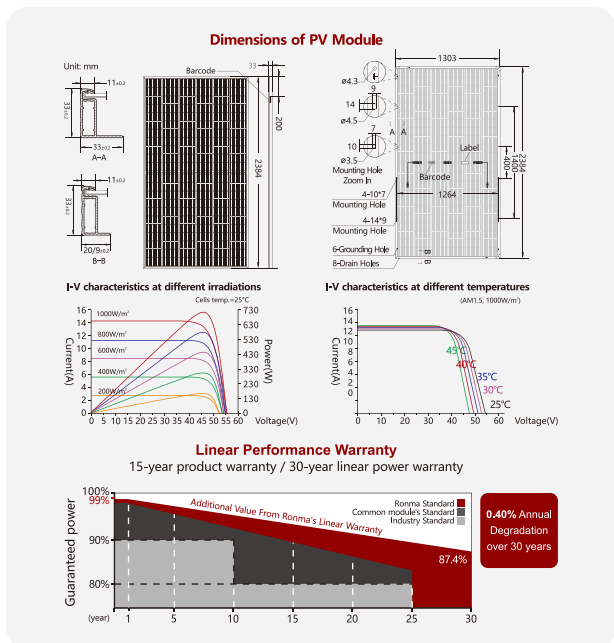
\*STC: Irradiance 1000W/m<sup>2</sup>, module temperature 25°C, AM=1.5

#### Mechanical Characteristics

Number of Cells	132pcs
Type of Cell	N-TOPCon Mono
Thickness of Glass(mm)	2.0
Type of Frame	Anodized Aluminum Alloy
Size of Module(mm)	2384×1303×33
Weight(kg)	37.5
Junction Box	IP68, 1500V DC, 3 Diodes
Cables/Connectors	4.0mm <sup>2</sup> , MC4 compatible
Length of Cable	+350mm/-250mm Length can be customized(connector included)

#### Packaging Configuration

Height of Modules (mm)	33
Number of Modules Per Pallet	33
Packaging Box Dimensions (L×W×H) (mm)	1326×1140×2515
Box Gross Weight (kg)	1280
Number of Modules Per 40ft (HQ) Container	594
Number of Pallets Per 40ft (HQ) Container	18



# Demonstrations

- Photovoltaic Storage Integrated System

Load shifting    Capacity Stability    Self-Consumption

**400KW 430KWH PV250KWp**



- Energy Storage Power Station

Peak shaving    Backup power

**400KW 430KWH**



- Photovoltaic Storage Integrated System

Load shifting    Capacity Stability    Self-Consumption

**150KW 215KWH PV150KWp**

# Demonstrations

- **Generation-Side Energy Storage**

Load shifting    Capacity Stability  
Frequency regulation

**500KW 1075KWH**



- **Energy Storage Power Station**

Peak shaving    Load balancing  
Backup power

**120KW 320KWH**



- **Solar Energy BESS Charging Station**

Reducing peak demand

**200KW 430KWH PV580KWp**

- **Energy Storage Power Station**

Peak shaving    Backup power

**2800KW 6.02MWH**

- **Energy Storage Power Station**

Backup power    Load shifting

**880KW 1.5MWH**



# Demonstrations

- Photovoltaic Storage Integrated System

Load shifting Capacity Stability Self-Consumption

**250KW 430KWH PV250KWp**



- Energy Storage Power Station

Peak shaving Backup power

**60KW 80KWH**



- Photovoltaic Storage Integrated System

Load shifting Capacity Stability Self-Consumption

**60KW 80KWH + PV1000KWp**



- Energy Storage Power Station

Load shifting Backup power

**60KW 160KWH**

- Energy Storage Power Station

Peak shaving Load balancing

Backup power

**250KW 430KWH**



# Global Branches & Agents

## **KINMO PW CORPORATION**

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Mobile No.: +63977-840-7799

Email: kinmopw.ph@gmail.com

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BGC Office:Unit 3C-1 Seibu Tower, 6th Ave., 24th St., BGC Taguig City

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## **SMone Energy sp. z o.o.**

**Main product : Power Quality**

Ul.Sikorskiego 72 43-100 Tychy, Poland

Contact person: Szymon Lubecki

Telephone:+48 538 328 899office@smone.pl

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## **Electro Zimbabwe**

**Main product : Power Quality**

Website: www.electro.co.zw

Email: cecil@electro.co.zw

Cellphone: +263 774 325 839

Telephone:+263 8677007530/(+263 24)2481120/952

Add: 20 Harrow Road, Msasa, Harare, Zimbabwe

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## **KIARA GREENENERGY SDN BHD**

**Malaysia Agent**

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Email: daniel@yiyen.com

Telephone:+60102091616

Add: No.1 Jalan Usahawan 2/1, Elmina Bu Siness Park, 47000 Sungai Buloh, Selangor

---

## **FRA.TE.L.S.R.L(Italy)**

**Main product : C&I Energy Storage Solutions**

Add: CIS TORRE ISOLA4 IP INT 410 SNC CAP, 80035 Nola NA, Italy

Contact person: Francesco Casillo

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**To Be Continued**



**Energy Storage System  
&  
Power Quality System Provider**

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Add: Rm.1301.Building 3.Headquarters Economic Park .No.6688  
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