YIY

Hybrid System Solutions

PV+Energy Storage+Diesel

May energy and ecology be more harmonious

ZHEJIANG YIYEN HOLDING GROUP

Zhejiang Yiyuan Holding Group Co., Ltd. is committed to the research and development and intelligent manufacturing of power electronics technology. With the aim of reducing electricity costs and improving electricity efficiency; A high-tech enterprise that provides core power equipment and system solutions for the energy Internet of Things. The company takes electrochemical energy storage and energy efficiency management as its core industries, providing energy-saving and consumption-reducing services for industries such as power, communication, finance, education, healthcare, and large industrial and mining enterprises.

The company has established R&D centers in Shenzhen, Nanjing and Hangzhou, and has set up joint laboratories with Hohai University, Tsinghua University, Nanjing University of Aeronautics and Astronautics and the Hong Kong Polytechnic University. With its strong technological strength, it was the first to pass international certifications such as CE, UL, TUV and CQC. Its products are sold in over 130 countries and regions, and it has gained an international market position. As a core industry, it provides energy-saving and consumption-reducing services for industries such as power, communication, finance, education, healthcare, and large industrial and mining enterprises.

300+
Staff

30000m²+
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. : 20222Q21193R0S

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/service:

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/Audit Address: No.77,Xiang Long Road,Lian Du Zone,Lishui City,Zhejiang Province, China.

Date of Issue: 26-09-2022

Date of Expiry: 25-09-2025

Date of Initial: 26-09-2022

Issued By

中国认可 国际互认 管理体系 MANAGEMENT SYSTEM CNAS C197-M

The audit of validity of the certificate, the certificate shall be at least once a year. The effectiveness of the Certificate is subject to QR Code in the lower left corner. Meanwhile, you can search the website of certification body: www.qpc.org.cn or search the CNCA website: www.cnca.gov.cn

ZHEJIANG QUANPIN CERTIFICATION CO.,LTD.

Room 603, Floor 6, Building 1, No.74, Puyan Road, Puyan Street, Binjiang District, Hangzhou City, Zhejiang Province, China 310053 WEB: Http://www.qpc.org.cn

ISO45001

OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM CERTIFICATE

Certificate No.：20222S20467R0S

We hereby certify that the organization:

LISHUI YIYEN TECHNOLOGY COMPANY LIMITED

Unified social credit code: 91331127MA2E079Y8T

is in conformity with Occupational Health Safety Management System Standard：

GB/T45001-2020 idt ISO45001:2018

The certificate is valid to the following products/service：

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/Audit Address: No.77,Xiang Long Road,Lian Du Zone,Lishui City,Zhejiang Province, China.

Date of Issue: 26-09-2022

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中国认可 国际互认 管理体系 MANAGEMENT SYSTEM CNAS C197-M

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ZHEJIANG QUANPIN CERTIFICATION CO.,LTD.

Room 603, Floor 6, Building 1, No.74, Puyan Road, Puyan Street, Binjiang District, Hangzhou City, Zhejiang Province, China 310053 WEB: Http://www.qpc.org.cn

ISO14001

ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATE

Certificate No.：20222E20495R0S

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/service：

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/Audit Address: No.77,Xiang Long Road,Lian Du Zone,Lishui City,Zhejiang Province, China.

Date of Issue: 26-09-2022

Date of Expiry: 25-09-2025

Date of Initial: 26-09-2022

Issued By

中国认可 国际互认 管理体系 MANAGEMENT SYSTEM CNAS C197-M

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ZHEJIANG QUANPIN CERTIFICATION CO.,LTD.

Room 603, Floor 6, Building 1, No.74, Puyan Road, Puyan Street, Binjiang District, Hangzhou City, Zhejiang Province, China 310053 WEB: Http://www.qpc.org.cn

IEC IECEE

Ref. Certif. No.
NL-108667

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

CB TEST CERTIFICATE

Product	Rechargeable Li-ion Battery Pack
Name and address of the applicant	LISHUI YIYEN TECHNOLOGY CO.,LTD No. 77 Xiangfong Road, Nanmingshan Street, Liandu District Lishui, Zhejiang 323000 China
Name and address of the manufacturer	LISHUI YIYEN TECHNOLOGY CO.,LTD No. 77 Xiangfong Road, Nanmingshan Street, Liandu District Lishui, Zhejiang 323000 China
Name and address of the factory	LISHUI YIYEN TECHNOLOGY CO.,LTD No. 77 Xiangfong Road, Nanmingshan Street, Liandu District Lishui, Zhejiang 323000 China
When more than one factory	☐ Additional information on page 2
Ratings and principal characteristics	**Product data** Ratings: 51.2V, 280Ah
Trademark / Brand (if any)	YIY YIY
Customer's Testing Facility (CTF) Stage used	
Model / Type Ref.	LFP-M 48280H
Additional information	☐ Additional information on page 2
A sample of the product was tested and found to be in conformity with As shown in the Test Report Ref. No. which forms part of this Certificate	IEC 62619:2022 6186331.50

This CB Test Certificate is issued by the National Certification Body

DEKRA Certification B.V.
Meander 1051
6825 MJ Arnhem
Netherlands

Date: 2024-07-03 Signature: May Liu

DEKRA

IEC IECEE

Ref. Certif. No.
NL-108794

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

CB TEST CERTIFICATE

Product	Rechargeable Li-ion Battery Cluster
Name and address of the applicant	LISHUI YIYEN TECHNOLOGY CO.,LTD No. 77 Xiangfong Road, Nanmingshan Street, Liandu District, 323000 Lishui Zhejiang, China
Name and address of the manufacturer	LISHUI YIYEN TECHNOLOGY CO.,LTD No. 77 Xiangfong Road, Nanmingshan Street, Liandu District, 323000 Lishui Zhejiang, China
Name and address of the factory	LISHUI YIYEN TECHNOLOGY CO.,LTD No. 77 Xiangfong Road, Nanmingshan Street, Liandu District, 323000 Lishui Zhejiang, China
When more than one factory	☐ Additional information on page 2
Ratings and principal characteristics	**Product data** Ratings: 768V, 280Ah
Trademark / Brand (if any)	YIY YIY
Customer's Testing Facility (CTF) Stage used	
Model / Type Ref.	LFP-S 768280
Additional information	☐ Additional information on page 2
A sample of the product was tested and found to be in conformity with As shown in the Test Report Ref. No. which forms part of this Certificate	IEC 62619:2022 6186329.50

This CB Test Certificate is issued by the National Certification Body

DEKRA Certification B.V.
Meander 1051
6825 MJ Arnhem
Netherlands

Date: 2024-07-04 Signature: MT Tonsi

DEKRA

IEC IECEE

Ref. Certif. No.
NL-106472/A1

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

CB TEST CERTIFICATE

Product	Rechargeable Li-ion Battery System
Name and address of the applicant	LISHUI YIYEN TECHNOLOGY CO.,LTD No. 77 Xiangfong Road, Nanmingshan Street, Liandu District Lishui, Zhejiang 323000 China
Name and address of the manufacturer	LISHUI YIYEN TECHNOLOGY CO.,LTD No. 77 Xiangfong Road, Nanmingshan Street, Liandu District Lishui, Zhejiang 323000 China
Name and address of the factory	LISHUI YIYEN TECHNOLOGY CO.,LTD No. 77 Xiangfong Road, Nanmingshan Street, Liandu District Lishui, Zhejiang 323000 China
When more than one factory	☐ Additional information on page 2
Ratings and principal characteristics	**Product data** Ratings: 768 Vdc, 105 Ah, 80 kWh
Trademark / Brand (if any)	YIY YIY
Customer's Testing Facility (CTF) Stage used	
Model / Type Ref.	BESS 60-80
Additional information	☐ Additional information on page 2
A sample of the product was tested and found to be in conformity with	IEC 62619:2022 Comments: This CB test certificate replaces CB test certificate NL-106472. Correction for typo in test report.
As shown in the Test Report Ref. No. which forms part of this Certificate	6174216.51

This CB Test Certificate is issued by the National Certification Body

DEKRA Certification B.V.
Meander 1051
6825 MJ Arnhem
Netherlands

Date: 2024-06-24 Signature: K. Lin

DEKRA

DEKRA

ATTESTATION OF CONFORMITY

Issued to:	LISHUI YIYEN TECHNOLOGY CO., LTD (Lijing National Industrial Park) No. 77 Xianglong Road, Nanmingshan Street, Liandu District, Lishui City, Zhejiang Province, P.R. China
For the product:	Energy Storage Battery
Trade name:	YIY
Type/Model:	LFP-M 48280H
Ratings:	See model list
Manufactured by:	LISHUI YIYEN TECHNOLOGY CO., LTD (Lijing National Industrial Park) No. 77 Xianglong Road, Nanmingshan Street, Liandu District, Lishui City, Zhejiang Province, P.R. China
Requirements:	EN IEC 61000-6-2:2019 EN IEC 61000-6-4:2019

This Attestation is granted on account of an examination by DEKRA, the results of which are laid down in a confidential file no. 6186330.50

This Attestation implies that the examined types are in accordance with the standards designated under the Electromagnetic compatibility directive 2014/30/EU.

The examination has been carried out on one single specimen or several specimens of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

The CE marking may be affixed on the product if all relevant and effective EC directives are complied with.

Arnhem, 24 April 2024 Number: 6186330.01AOC

DEKRA Testing and Certification (Shanghai) Ltd.

Kreny Lin
Certification Manager

CE

DEKRA Testing and Certification (Shanghai) Ltd.
3F #250 Jiangchangsan Road Shibei Hi-Tech Park, 200436 Jing'an District, Shanghai, China
T +86 21 6056 7666 F +86 21 6056 7555 www.dekra-product-safety.com

DEKRA

ATTESTATION OF CONFORMITY

Issued to:	LISHUI YIYEN TECHNOLOGY CO., LTD (Lijing National Industrial Park) No. 77 Xianglong Road, Nanmingshan Street, Liandu District, Lishui City, Zhejiang Province, P.R. China
For the product:	Rechargeable Li-ion Battery Cluster
Trade name:	YIY
Type/Model:	LFP-S 768280
Ratings:	See model list
Manufactured by:	LISHUI YIYEN TECHNOLOGY CO., LTD (Lijing National Industrial Park) No. 77 Xianglong Road, Nanmingshan Street, Liandu District, Lishui City, Zhejiang Province, P.R. China
Requirements:	EN IEC 61000-6-2:2019 EN IEC 61000-6-4:2019

This Attestation is granted on account of an examination by DEKRA, the results of which are laid down in a confidential file no. 6186327.50

This Attestation implies that the examined types are in accordance with the standards designated under the Electromagnetic compatibility directive 2014/30/EU.

The examination has been carried out on one single specimen or several specimens of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

The CE marking may be affixed on the product if all relevant and effective EC directives are complied with.

Arnhem, 20 June 2024 Number: 6186327.01AOC

DEKRA Testing and Certification (Shanghai) Ltd.

Kreny Lin
Certification Manager

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DEKRA Testing and Certification (Shanghai) Ltd.
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DEKRA

ATTESTATION OF CONFORMITY

Issued to:	LISHUI YIYEN TECHNOLOGY CO.,LTD (Lijing National Industrial Park) No. 77 Xianglong Road, Nanmingshan Street, Liandu District, Lishui City, Zhejiang Province, P.R. China
For the product:	Smart String ESS
Trade name:	YIY
Type/Model:	BESS-60-80
Ratings:	See model list
Manufactured by:	LISHUI YIYEN TECHNOLOGY CO.,LTD (Lijing National Industrial Park) No. 77 Xianglong Road, Nanmingshan Street, Liandu District, Lishui City, Zhejiang Province, P.R. China
Requirements:	EN IEC 61000-6-2:2019 EN IEC 61000-6-4:2019

This Attestation is granted on account of an examination by DEKRA, the results of which are laid down in a confidential file no. 6174214.50

This Attestation implies that the examined types are in accordance with the standards designated under the Electromagnetic compatibility directive 2014/30/EU.

The examination has been carried out on one single specimen or several specimens of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

The CE marking may be affixed on the product if all relevant and effective EC directives are complied with.

Arnhem, 1 March 2024 Number: 6174214.01AOC

DEKRA Testing and Certification (Shanghai) Ltd.

Kreny Lin
Certification Manager

CE

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DEKRA

ATTESTATION OF CONFORMITY

Issued to:	LISHUI YIYEN TECHNOLOGY CO.,LTD (Lijing National Industrial Park) No. 77 Xianglong Road, Nanmingshan Street, Liandu District, Lishui City, Zhejiang Province, P.R. China
For the product:	Power Conversion Module
Trade name:	YIY
Type/Model:	UP-M-62.5KW, UP-M-100KW
Ratings:	See model list
Manufactured by:	LISHUI YIYEN TECHNOLOGY CO.,LTD (Lijing National Industrial Park) No. 77 Xianglong Road, Nanmingshan Street, Liandu District, Lishui City, Zhejiang Province, P.R. China
Requirements:	EN IEC 61000-6-2:2019 EN IEC 61000-6-4:2019

This Attestation is granted on account of an examination by DEKRA, the results of which are laid down in a confidential file no. 6174214.51

This Attestation implies that the examined types are in accordance with the standards designated under the Electromagnetic compatibility directive 2014/30/EU.

The examination has been carried out on one single specimen or several specimens of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

The CE marking may be affixed on the product if all relevant and effective EC directives are complied with.

Arnhem, 1 March 2024 Number: 6174214.02AOC

DEKRA Testing and Certification (Shanghai) Ltd.

Kreny Lin
Certification Manager

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DEKRA

ATTESTATION OF CONFORMITY

Issued to:	LISHUI YIYEN TECHNOLOGY CO.,LTD No. 77 Xianglong Road, Nanmingshan Street, Liandu District, Lishui City, Zhejiang Province, P.R. China (Lijing National Industrial Park)
For the product:	Power Conversion System
Trade name:	YIY
Type/Model:	UP-M-62.5KW, UP-M-100KW
Ratings:	UP-M-62.5KW: DC: Voltage range: 650-950Vdc; Max Current: 100A, AC: Rated power: 62.5kW, rated voltage: 400Vac, Max. current: 100A, 50/60Hz, 3W+PE, power factor: -1(lagging)~ 1(leading) UP-M-100KW: DC: Voltage range: 650-950Vdc, Max Current: 170A, AC: Rated power: 100kW, rated voltage: 400Vac, Max. current: 167A, 50/60Hz, 3W+PE, power factor: -1(lagging)~ 1(leading) General: IP20, class I protection, 2000m altitude, -20-50°C
Manufactured by:	LISHUI YIYEN TECHNOLOGY CO.,LTD No. 77 Xianglong Road, Nanmingshan Street, Liandu District, Lishui City, Zhejiang Province, P.R. China (Lijing National Industrial Park)
Requirements:	EN 62477-1:2012+A1:2017

This Attestation is granted on account of an examination by DEKRA, the results of which are laid down in a confidential file no. 6174215.50.

This Attestation implies that the examined types are in accordance with the standards designated under the Low Voltage Directive (LVD) 2014/35/EU.

The examination has been carried out on one single specimen or several specimens of the product, submitted by the manufacturer. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

The CE marking may be affixed on the product if all relevant and effective EC directives are complied with.
Arnhem, 28 May 2024 Number: 6174215.01AOC

DEKRA Testing and Certification (Shanghai) Ltd.

Kreny Lin
Certification Manager

CE

DEKRA Testing and Certification (Shanghai) Ltd.
3F #250 Jiangchangsan Road Shibei Hi-Tech Park, 200436 Jing'an District, Shanghai, China
T +86 21 6056 7666 F +86 21 6056 7555 www.dekra-product-safety.com

DEKRA

CERTIFICATE OF CONFORMITY

Issued to:	LISHUI YIYEN TECHNOLOGY CO., LTD No. 77 Xianglong Road, Nanmingshan Street, Liandu District, Lishui City, Zhejiang Province, P.R. China (Lijing National Industrial Park)
For the product:	Power Conversion System
Trade name:	YIY
Type/Model:	UP-M-62.5KW, UP-M-100KW
Ratings:	Operating temperature range: - 20°C to + 50°C Protective class: I Ingress protection rating: IP20 Power factor range (adjustable): -1(lagging)~1(leading) UP-M-62.5KW: DC: Voltage range: 650-950Vdc, Max Current: 100A, AC: Rated power: 62.5kW, rated voltage: 400Vac, Max. current: 100A, 50/60Hz, 3W+PE UP-M-100KW: DC: Voltage range: 650-950Vdc, Max Current: 170A, AC: Rated power: 100kW, rated voltage: 400Vac, Max. current: 167A, 50/60Hz, 3W+PE
Manufactured by:	LISHUI YIYEN TECHNOLOGY CO., LTD No. 77 Xianglong Road, Nanmingshan Street, Liandu District, Lishui City, Zhejiang Province, P.R. China (Lijing National Industrial Park)
Requirements:	EN 50549-1:2019 (Requirements for type A Generating Units) COMMISSION REGULATION (EU) 2016/631 (NC RfG)

This Test Certificate is granted on account of an examination by DEKRA, the results of which are laid down in a confidential file no. 6174227.50.
The examination has been carried out on one single specimen of the product. The Attestation does not include an assessment of the manufacturer's production. Conformity of his production with the specimen tested by DEKRA is not the responsibility of DEKRA.

This Test Certificate expires at the latest on. 31 May 2029 or expires upon withdrawal of one of the above mentioned standards.

Shanghai, 31 May 2024 Number: 6174227.01COC

DEKRA Testing and Certification (Shanghai) Ltd.

Cliff Lin
Certification Manager

IAS ACCREDITED Management Systems PCA-141

DEKRA Testing and Certification (Shanghai) Ltd.
No.250, Jiangchangsan Road, Jing'an District, Shanghai, 200436 People's Republic of China
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ESA-CER-FQ21 v4.1

CONTENTS

Hybrid System Solution

CONTENTS

PV-ESS All-in-One System

* VPP * Self-consumption * Off-grid operation (black start)

• Overview

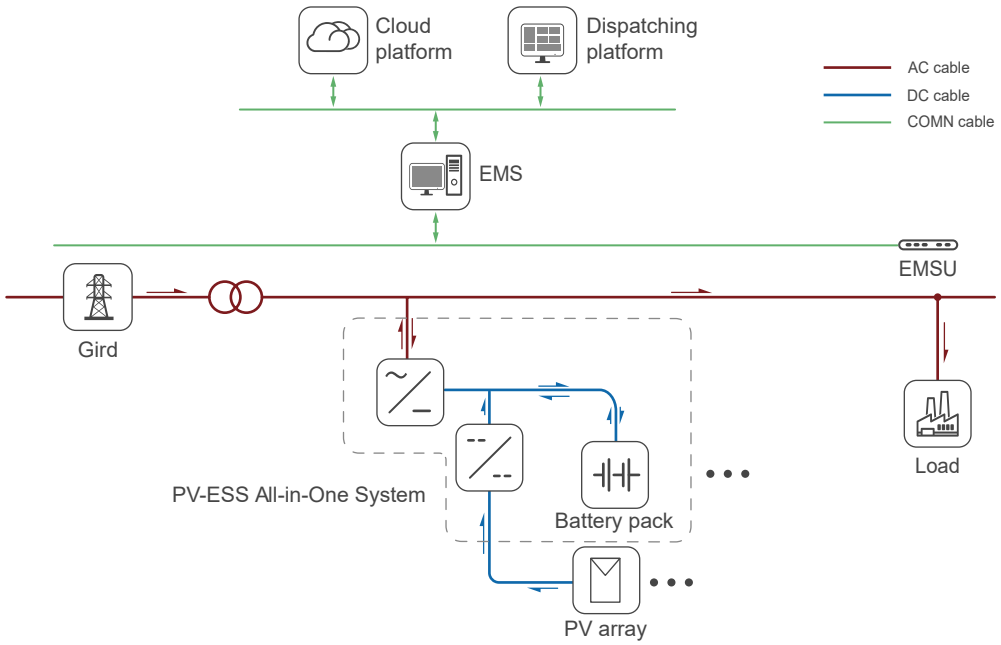
This system adopts a DC-coupling architecture and anti-backflow design, integrating energy management system (EMS), bidirectional inversion, MPPT PV control, and a high-precision Battery Management System (BMS). It is equipped with long-cycle LFP batteries to form an integrated energy storage unit.

The system executes the intelligent energy scheduling strategy on a 24-hour cycle: solar power is prioritized for on-site consumption, with surplus energy stored. During insufficient sunlight or high electricity prices, the battery discharges to support the load, achieving "self-generation and self-consumption, surplus storage."

Additionally, the system features virtual power plant (VPP) node functionality, enabling remote response to grid dispatch and participation in services such as peak shaving demand response. In the event of grid anomalies, it can switch to off-grid mode to ensure local power supply.

Through the coordinated operation of generation, storage, consumption, and grid interaction, the system ultimately delivers 3 core values: improved energy economics, enhanced power reliability, and support for grid stability—providing users with an efficient, flexible, and resilient green energy solution.

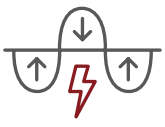
• System Topology



Applicable Equipment:

PV-ESS All-in-One System

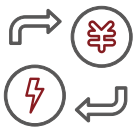
• Applications



Peak shaving

Black start capability

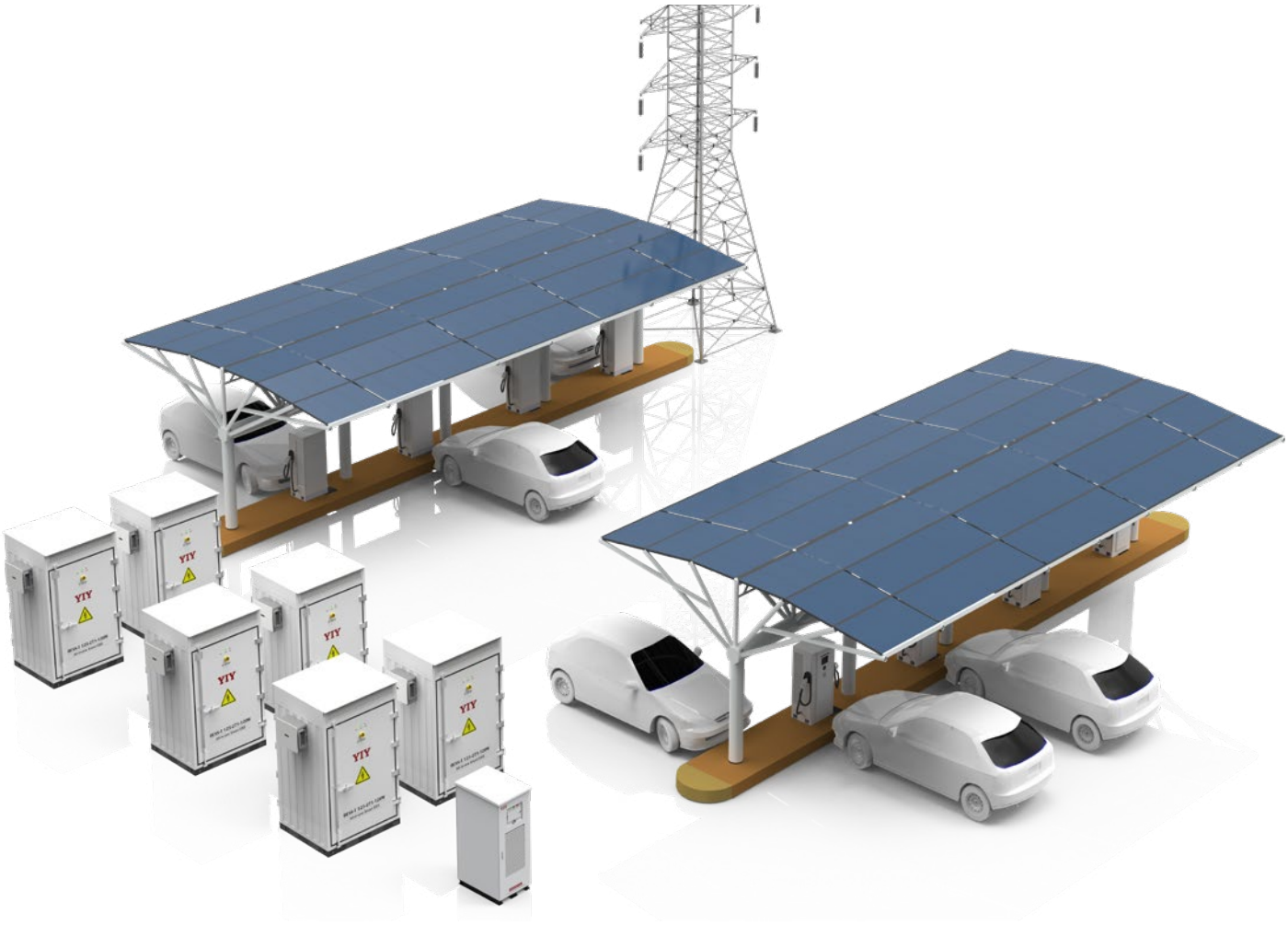
Emergency power supply



Electricity trading

PV-ESS-Charging All-in-One System

* VPP * Modular Integration * Renewable energy consumption

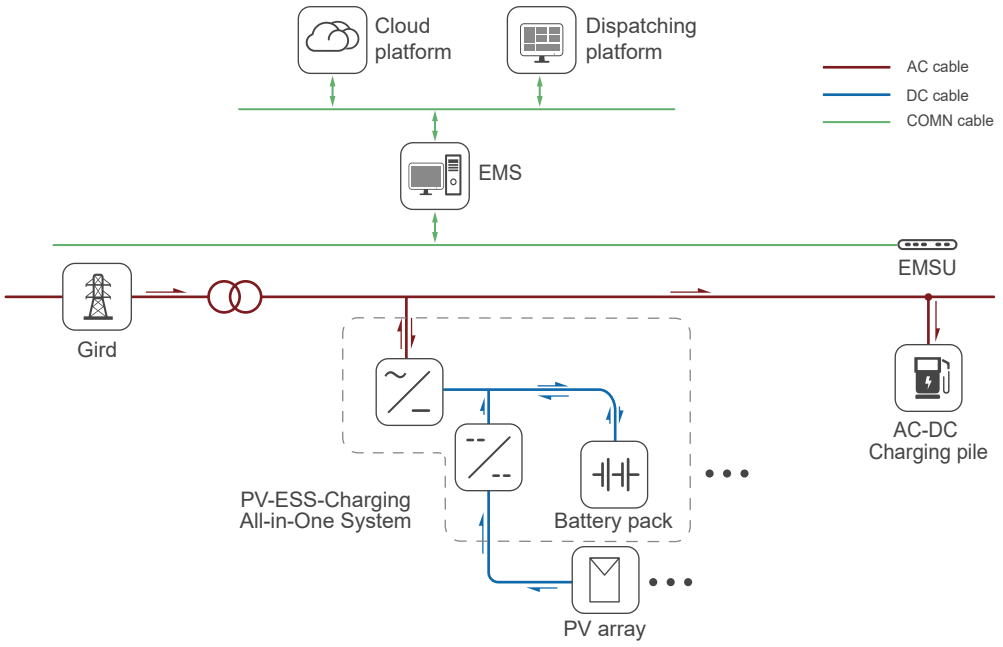


• Overview

This system is an integrated " PV-ESS-Charging " smart energy station that deeply integrates PVpower generation, energy storage, and intelligent charging. Its core lies in the dynamic coordination and optimized dispatch of these 3 components through a smart Energy Management System (EMS). It utilizes PV generation for local consumption of green electricity, relies on the energy storage system for "peak shaving" as well as grid interaction, effectively mitigates charging load fluctuations, and enhances grid regulation capabilities and energy utilization efficiency.

The system not only reduces charging costs and carbon emissions but also functions as a grid-friendly node with the potential to participate in demand response and Virtual Power Plant (VPP) operations. It serves as a key infrastructure solution supporting the large-scale development of electric vehicles in scenarios with a high penetration of renewable energy.

• System Topology

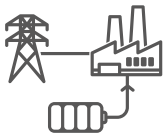


Applicable Equipment:

PV-ESS-Charging All-in-One System

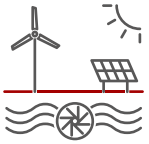
• Applications

Capacity stability



Time-of-use optimisation

Ancillary services



Self-Generation and Self-Consumption

BESS-T

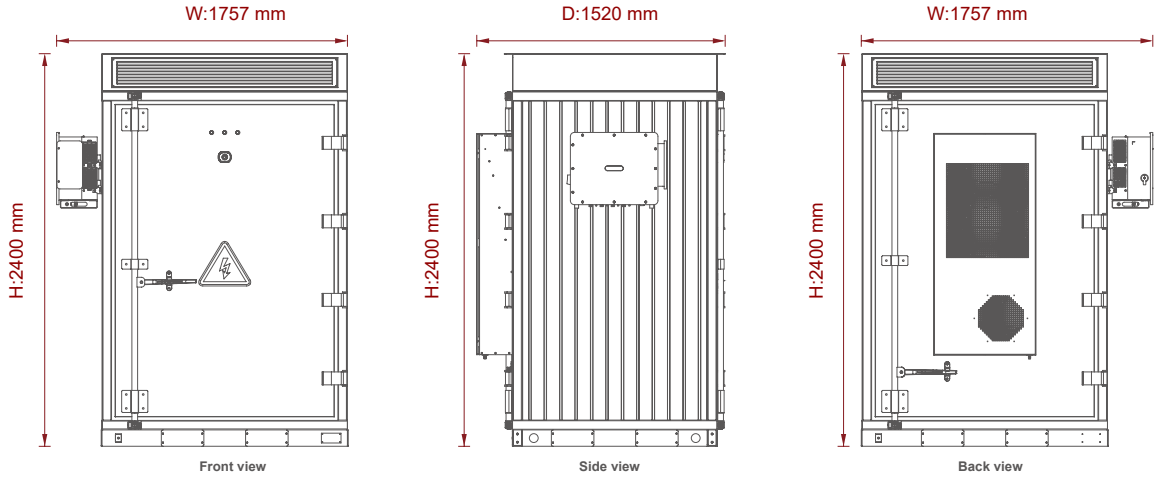
PV-ESS All-in-One System

BESS-T 125-271-120W

• Features

- Two level BMS built-in.
- Intelligent thermal management system
- IP55 fire and explosion proof cabinet.
- Fire proof devices in each modular and in the cabinet.
- Easy for on site installation.
- Supports multi-level priority control to ensure reliable power supply from the grid and photovoltaic sources.

• Product Dimensions



• Technical Parameter

BESS-T 125-271-120W		
Battery Parameters		
Battery Module	Voltage	57.6V
	Capacity	314 Ah
	Energy	18 kWh
	Cooling method	Dry Self-Cooling
Battery Cluster	Rated voltage	864V
	Grouping method	1P 270 S
	Rated capacity	314 Ah
	Output voltage range	756V~950V
	Rated energy	271kWh
	Max continuous charging current	157 A
	Max continuous discharge current	157 A
AC Side		
PCS Parameter	Rated current	181A
	PCS overload capacity	x1.1 continuous;x1.25(30ms)
	PCS output power	125kW
	Maximum continuous output power	137.5kW
	Total THDi	≤3%
	Maximum efficiency	≥98.5%
	AC-side voltage of PCS	3P3W+PE/3P4W+PE, 400 V
	Frequency	50Hz/60Hz
	Power factor	-1~1
	Battery side voltage	600V-950 VA
MPPT Parameter	**PV side**	
	Maximum photovoltaic array voltage	No more than 900V and no higher than the maximum tolerance voltage of the rear battery.
	MPPT voltage range	200V-900V
	Rated MPPT voltage range	560V-900V
	Maximum branch current	20A
	PV input strings number	12
	High voltage side	
	Voltage range	600-950V
	Rated voltage	Default 716.8V, adjustable
	Rated output current	168A
	Rated output power	120kW
	Maximum output current	240A
	System Parameter	
	IP grade	IP65
	Cooling concept	Air cooling
	Dimensions (W*D*H)	610*480*257 mm
	Weight	30kg
	Working temperature	-30 ~ 55 °C
System Parameter		
System Parameter	Dimension(W*D*H)	1757*1520*2400mm
	Weight(kg)	/
	Display	7-inch Resistive Touch Screen
	Fire protection systems	Aerosol Fire Module
	Degree of protection	IP55
	Certification	CE;IEC62619;UN38.3
	Working temperaturerange	-30~60°C(> 45°C derating)
	Cooling	Dry Self-Cooling
	Relative humidity	5~95%(No Condensing)
	Storage temperature(<6month)	0~35°C
	Short-term storage temperature(<1month)	-20~55°C
	Highest altitude	4000m(>2000m derating)

MPPT

PV MPPT Controller

MPPT-12

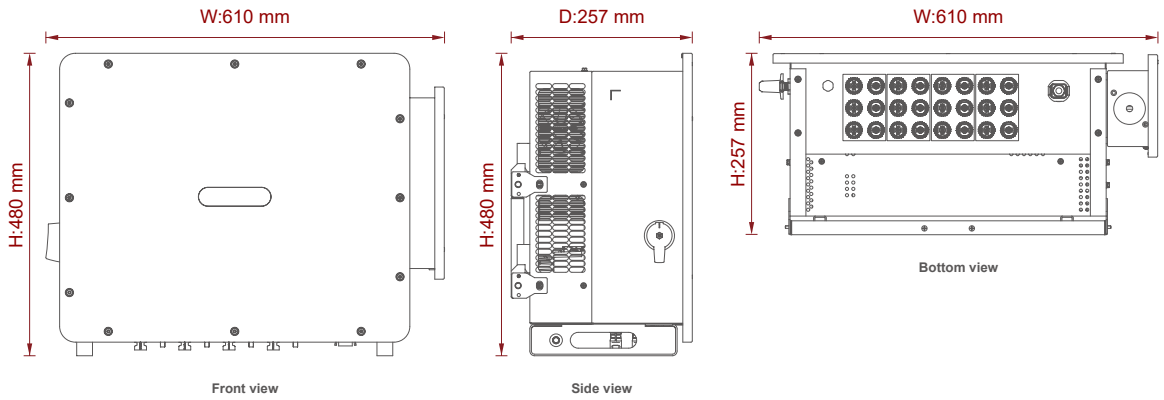
• Features

- Multiple MPPT for flexible PV installation angles.
- Insulation resistance monitoring with optional PID.
- Comprehensive protection: short circuit, reverse polarity & over-temperature.
- Compact design, small size, easy installation.
- Smart fan control for low noise and high efficiency.
- Built-in secondary surge protection for hanced safety.
- IP66 & C5 anti-corrosion, ideal for coastal high-salt environments.

• Product Introduction

The **MPPT controller** is used to build a DC-coupled system that tracks the maximum power point in the solar panel in real time to maximize the performance of the solar panel. The higher the voltage, the more electricity can be output through maximum power tracking, thereby improving the charging efficiency.

• Product Dimensions



• Technical Parameter

MPPT-12	
Input	
Maximum photovoltaic array voltage	No more than 900V and no higher than the maximum tolerance voltage of the rear battery.
MPPT voltage range	200V-900V
Rated MPPT voltage range	560V-900V
Maximum branch current	20A
PV input strings number	12
Number of MPPT	4
Current per MPPT	55A
Output	
Voltage range	600-950V
Rated voltage	Default 716.8V, adjustable
Rated output current	168A
Rated output power	120kW
Maximum output current	240A
System	
EU efficiency	0.994
IP grade	IP65
Cooling concept	Dry Self-Cooling
Dimensions (W*D*H)	610*480*257 mm
Weight	30kg
Working temperature	-30 ~ 55 °C
Power supply modes	Self-powered (without power consumptionat night)
Communication interface	RS485

PCS

Industrial & Commercial Energy Storage Converter

Sic PCS

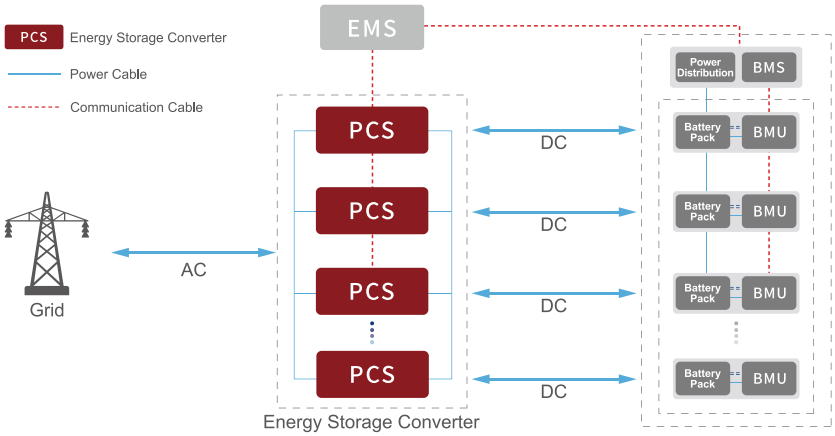
• Features

- High-efficiency bidirectional AC/DC conversion (up to 99.1%) with full potting and strong reliability.
- 100% three-phase unbalanced load capability and excellent grid adaptability.
- Compact 3U design with low standby loss and easy installation.
- Supports AC parallel expansion, hot-swap maintenance, and 3P3W/3P4W operation.
- Wide voltage range compatible with 280Ah–300+Ah battery cells.

• Product Introduction

The PCS energy storage converter is a bidirectional power module for AC-DC power conversion that supportsboth grid-connected mode and off-grid mode. It can control the battery charging and discharging according toEMS instructions, perform intelligent mode switching, and adapt to large capacity cells such as 280Ah, 314Ah.and 320Ah. PCS has the functions such as overvoltage protection, overcurrent protection, overload protection,short circuit protection, over temperature protection, high/low voltage crossing, and island protection. Whencombined with STS, it can achieve seamless switching between grid connection and off-grid, which is suitablefor peak shaving and valley filling in commercial and industrial parks, responding to demand, and buildingmicrogrids with wind and photovoltaic power generation equipment and diesel generators.

• System Topology



• Technical Parameter

PCS Energy Storage Converter		
Model	PCS950-125KCBMG	PCS950-105KCBMG
DC Parameters		
Rated Power	125KVA	105KVA
Voltage Range	600~950VDC(625~950VDCfull-load operation)	
Stabilized Voltage Predision	±1%±	
Stabilized Current Precision	±1%	
Maximum Current	210A	175A
AC Grid Connection		
Rated Power	125KVA	105KVA
Maximum Power	137.5KVA(continuous)	115.5KVA(continuous)
Wiring Mode	3P3W+PE/3P4W+PE	
Rated Voltage	400VAC	
Voltage Range	340~460VAC,340~400VAC linear derating	
Maximum Current	198.5A	167A
Voltage Frequency	50/60±5Hz	
Power Factor	[-1 , 1]	
THDi	≤3%	
Maximum Efficiency	≥99.1%	
AC Off-Grid Parameters		
Rated Power	125KVA	105KVA
Maximum Power	137.5KVA(continuous)	115.5KVA(continuous)
Rated Voltage	400VAC	
Wiring Mode	3P3W+PE/3P4W+PE	
Rated Output Frequency	50/60Hz	
THDu	≤3%	
System Parameters		
Overload Capability	110% (long-term)	
Dimensions(W*D*H)	440mm*130mm*600mm (without hanging ears)	
Weight(kg)	≤40kg	
Level Of Protection	IP20	
Noise	≤75dB	
Working Temperature Range	-30°C~+65°C (>50°C derating)	
Storage Temperature Range	-40°C~+70°C	
Humidity Range	0~98% (no condensation)	
Heat-dissipating Method	Dry Self-Cooling	
Altitude	4000m (>2000m derating)	
Safety Regulations & Standards	CE (IEC 62477-1)	
EMC Standards	CE (IEC 61000-6-2/4)	
Grid Connection Standards	European EN50549-1/-10;Germany VDE4105;UK G99	
Parameter Communication		
PC Terminal	Ethernet (Modbus-TCP);RS485(Modbus-RTU);CAN 2.0	
BMS	RS485;CAN 2.0B	

PV-ESS-Diesel On/Off-Grid All-in-One System

* Triple-layer protection * Intelligent dispatching * Black start * Off-grid independent Operation (STS)

• Overview

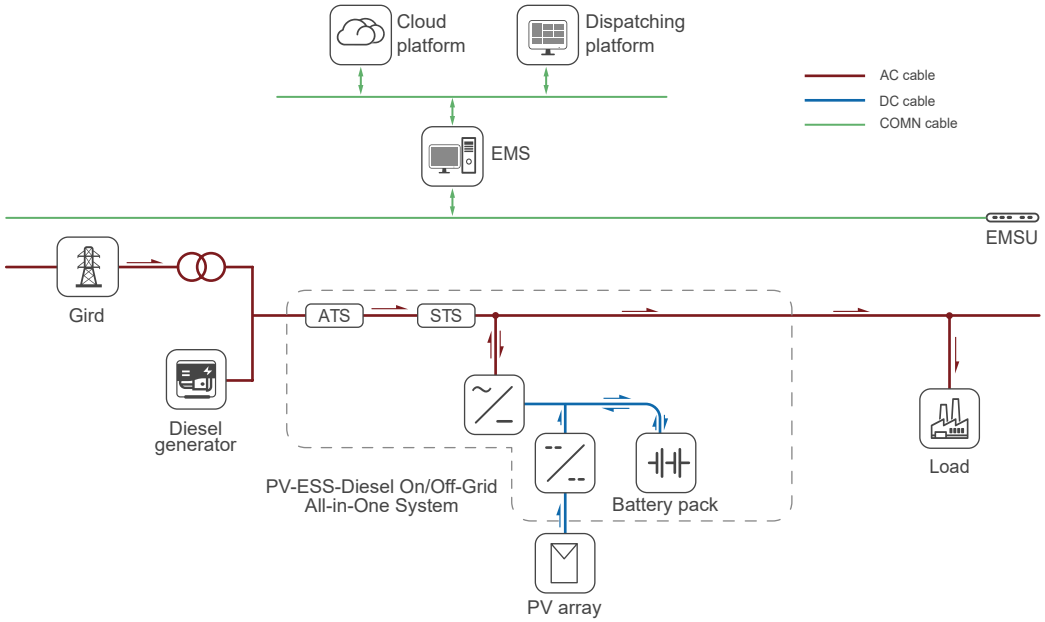
The PV-ESS-Diesel All-in-One System is a highly integrated smart energy solution that deeply combines PV power, energy storage, diesel generator backup, and smart grid interaction capabilities. Through the integration of hardware (including energy storage batteries, PCS, MPPT, and STS) and intelligent energy management software, the system enables dual operational modes: "on-grid for energy savings and off-grid for backup power."

It establishes a 3-tier power supply structure prioritizing solar energy, buffered by storage, and backed up by diesel generation. In the event of grid anomalies, the system achieves seamless transition to off-grid microgrid operation within 10 milliseconds, ensuring zero-interruption power supply for critical loads, making it especially suitable for scenarios with extremely high requirements for power continuity.

When connected to the grid, the system prioritizes solar power, uses stored energy to shave peak loads, and keeps the diesel generator as a last-resort backup, enhancing efficiency and cutting costs. When operating independently off-grid, it intelligently coordinates solar generation, battery storage, and the diesel generator to optimally distribute energy, significantly saving fuel and reducing operational expenses.

The system supports 3 modes: on-grid, off-grid, and seamless switching, enabling participation in grid interactions or operation as an independent microgrid. This significantly enhances energy autonomy and disaster resilience. Its integrated design greatly simplifies installation and commissioning, reduces coordination costs and operational complexity, making it suitable for various scenarios such as remote areas, base stations, factories, and islands.

• System Topology



Applicable Equipment:

BESS
50-126-75

BESS
60-217-75

BESS
125-271-240

• Applications

Back Up

Emergency power supply

Self-Generation and Self-Consumption

Micro-grid

BESS

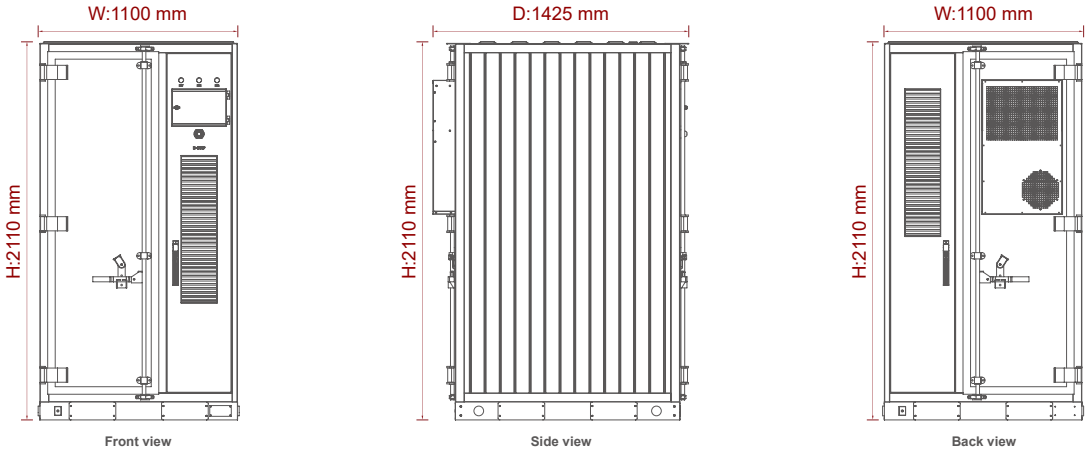
PV-ESS-Diesel On/Off-Grid All-in-One System

BESS 50-126-75

• Features

- Status Indication: Shows system status, including load, storage capacity, and power.
- Multi-Mode 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

BESS 50-126-75		
Battery Parameters		
Battery Module	Voltage	57.6V
	Capacity	314Ah
	Energy	18 kWh
	Cooling method	Dry Self-Cooling
Battery Cluster	Rated voltage	403V
	Grouping method	1P126S
	Rated capacity	314Ah
	Output voltage range	352.8V~447.3V
	Rated energy	126.6kWh
	Maximum continuous charging current	157A
	Maximum continuous discharge current	157A
Work Environment	Charging temperature	0~45℃
	Discharge temperature	-20~50℃
	Operating humidity	RH≤80%
Storage Environment	Short term storage(<1months)	-20~55℃
	Storage humidity	RH≤80%
PCS Parameters		
PCS	Rated current	73A
	overload capacity	x 1.25 (100S)
	output power	50kW
	AC port voltage	3P3W+PE/3P4W+PE, 400 V
	frequency	50Hz
	Power factor	-1~1
	Battery side voltage	350V-850V
Parallel	Parallel	Max 5 PCS
STS	Switching time	<10 ms
PV	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
System Parameters		
System Parameters	Dimension(W*D*H)	1100*1425*2110mm
	Weight(kg)	1620KGS
	Degree of protection	IP54
	Working temperature range	-30~60°C > 45 (derating)
	Cooling	Dry Self-Cooling
	Relative humidity	5~95%(no condensation)
	Highest altitude	4000m(>2000m derating)

BESS

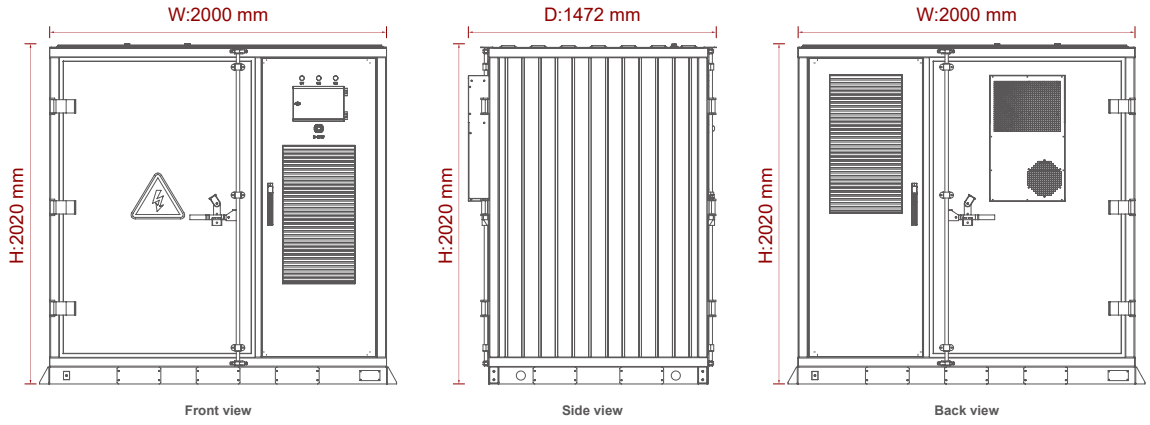
PV-ESS-Diesel On/Off-Grid All-in-One System

BESS 60-217-75

• 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, Dry Self-Cooling, 3-5°C temperature difference of the battery cell.

• Product Dimensions



• Technical Parameter

BESS 60-217-75		
Battery Parameters		
Battery Module	Voltage	57.6V
	Capacity	314 Ah
	Energy	18 kWh
	Cooling method	Dry Self-Cooling
Battery Cluster	Rated voltage	691.2V
	Grouping method	1P 216 S
	Rated capacity	314 Ah
	Output voltage range	604.8V~766.8V
	Rated energy	217.03kWh
	Max continuous charging current	157 A
	Max continuous discharge current	157 A
Work Environment	Charging operation temperature range	0~45℃
	Discharging operation temperature range	-20~50℃
	Working humidity	RH≤80%
Storage Environment	Short-term storage temperature(<1month)	-20~55℃
	Storage humidity	RH≤80%
Cabinet	Protection level	IP54
PCS Parameters		
PCS	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
Parallel	Parallel	Max 5 PCS
STS	Switching time	<10 ms
PV	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
System Parameters		
System Parameters	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	Dry Self-Cooling
	Relative humidity	5~95%(No Condensing)
	Highest altitude	4000m(>2000m derating)

BESS

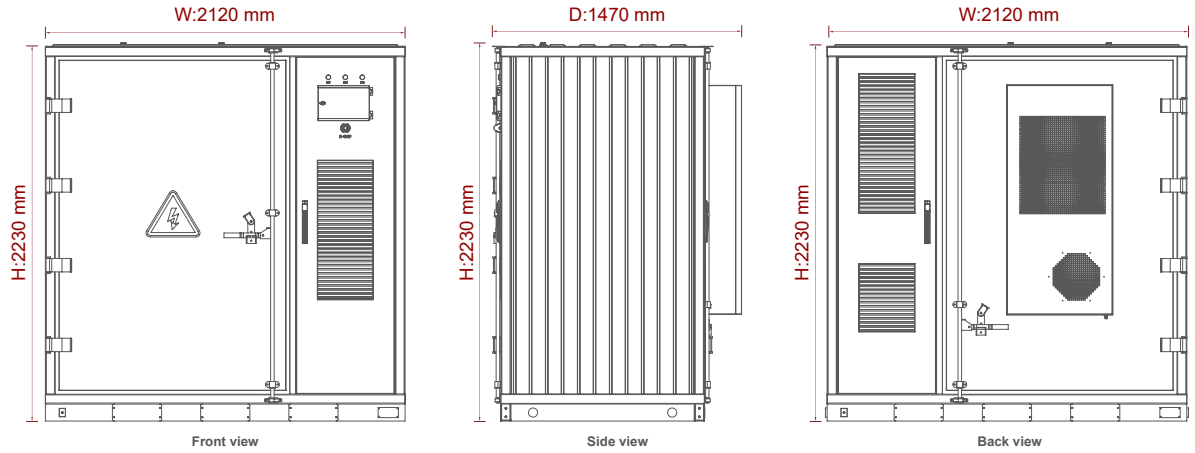
PV-ESS-Diesel On/Off-Grid All-in-One System

BESS 125-271-240（120）

• Features

- Status Indication: Shows system status, including load, storage capacity, and power.
- Multi-Mode 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

BESS 125-271-240（120）		
Battery Parameters		
Battery Module	Voltage	57.6V
	Capacity	314 Ah
	Energy	18 kWh
	Cooling method	Dry Self-Cooling
Battery Cluster	Rated voltage	864V
	Grouping method	1P 270 S
	Rated capacity	314 Ah
	Output voltage range	756V~950V
	Rated energy	271kWh
	Max continuous charging current	157 A
	Max continuous discharge current	157 A
Work Environment	Charging operation temperature range	0~45°C
	Working humidity	RH≤80%
	Storage humidity	RH≤80%
PCS Parameters		
PCS Parameter	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-950 V
Parallel	Parallel	Max 5 PCS
STS	Rated power	170KVA
	AC voltage	400V/230V(-20%~15%)
	Frequency	50Hz/60Hz(±5Hz)
	Max AC current	250A
	Switching time	<10 ms
MPPT	PV side	
	Max power	120kW*2（120kW）
	MPPT voltage range	200V-950V
	Rated voltage	600V
	Startup voltage	250V
	PV input string	4
	PV Max current	50A+50A+50A+50A
	Short-Circuit Current	60A+60A+60A+60A
	High voltage side	
	Voltage range	500V-950V
	Rated voltage	680V
	Max current	180A
Parallel	Parallel No.	Max 5 pcs
System Parameters		
System Parameters	Dimension(W*D*H)	2120*1470*2230mm
	Weight(kg)	3210kgs
	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	Dry Self-Cooling
	Relative humidity	5~95%(No Condensing)
	Highest altitude	4000m(>2000m derating)

PV-ESS-Diesel On/Off-Grid System

* PV + ESS + DG hybrid system * Off-grid independent Operation (STS) * Black start

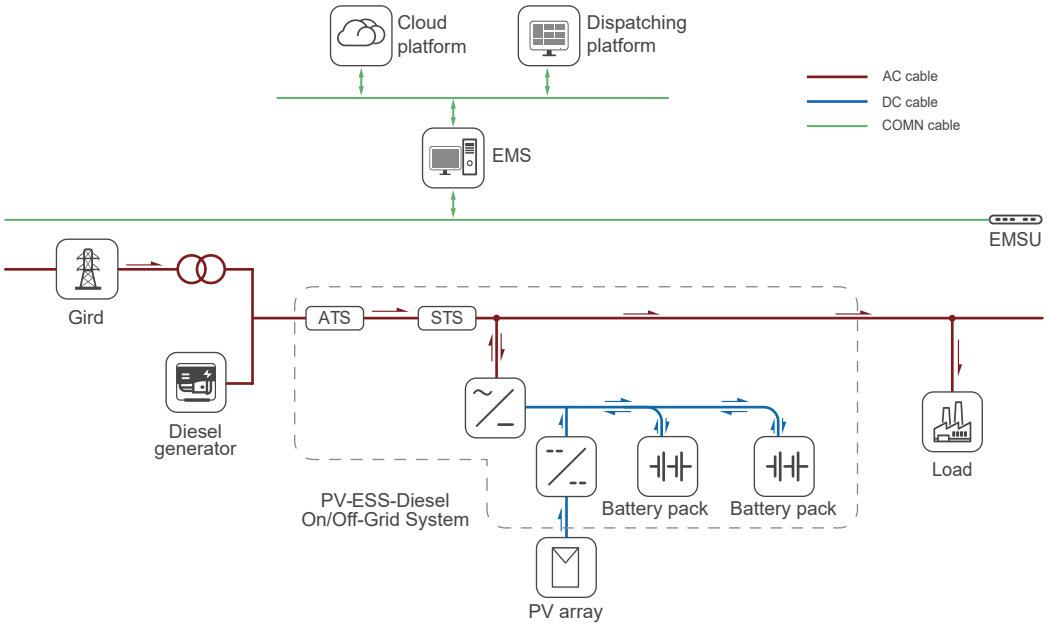
• Overview

The Large-Scale PV-ESS-Diesel On/Off-Grid System is specifically designed for industrial facilities, parks, and major off-grid applications. By integrating high-capacity Power Conversion Systems (PCS), battery energy storage systems, and automated diesel generator sets, it establishes a comprehensive energy base equipped with grid-level regulation capabilities and highly reliable island operation.

The system features millisecond-level on/off-grid switching, capable of independently forming a large-scale, stable microgrid to ensure zero interruption to critical production loads. Through intelligent dispatch, it achieves coordinated optimization of solar, storage, and diesel generation. When connected to the grid, it participates in demand management and peak-valley arbitrage; when off-grid, it minimizes diesel generator runtime, significantly reducing the total lifecycle energy cost. It can function both as a Virtual Power Plant (VPP) unit to support grid frequency and peak regulation, and achieve long-term energy self-sufficiency during grid outages or in remote areas, thereby enhancing users' strategic energy supply security.

This system represents an advanced form of medium-to-large-scale distributed energy systems, offering high-energy-consumption users under the "Dual Carbon" goals a reliable pathway that combines decarbonization, supply security, and cost reduction.

• System Topology



Applicable Equipment:

UPV-S
Three Phase Solar+Storage Hybrid Inverters

Energon Series Outdoor
Energy Storage Battery Cabinet

• Applications

Back Up

Emergency power supply

Self-Generation and Self-Consumption

Micro-grid

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

UPV-S 1200kW Three Phase Solar+Storage Hybrid Inverters	
PCS Parameters	
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
STS Parameters	
System	
Rated power	600kVA*3
AC voltage	400V/230V (-20%~15%)
Frequency range	50Hz/60Hz (±5Hz)
Max AC current	870A*3
Switching time	<10ms
PV Parameters	
PV Side (Module)	
Rated power	120kW*6
MPPT voltage range	200V-850V
Rated voltage	600V
PV startup voltage	250V
Number of branch inputs	4*6
PV Max current	240A*6
High Voltage Side (Module)	
Voltage range	500V-950V
Rated voltage	680V
Max current	180A*6
System Parameters	
Dimension(W*D*H)	3000*1267*2400mm
Weight(kg)	2660
Degree of Protection	IP54
Working Temperature Range	-30~60°C(> 45°C derating)
Cooling	Dry Self-Cooling
Relative Humidity	5~95%(no condensation)
Highest Altitude	4000m(>2000m derating)

Energon

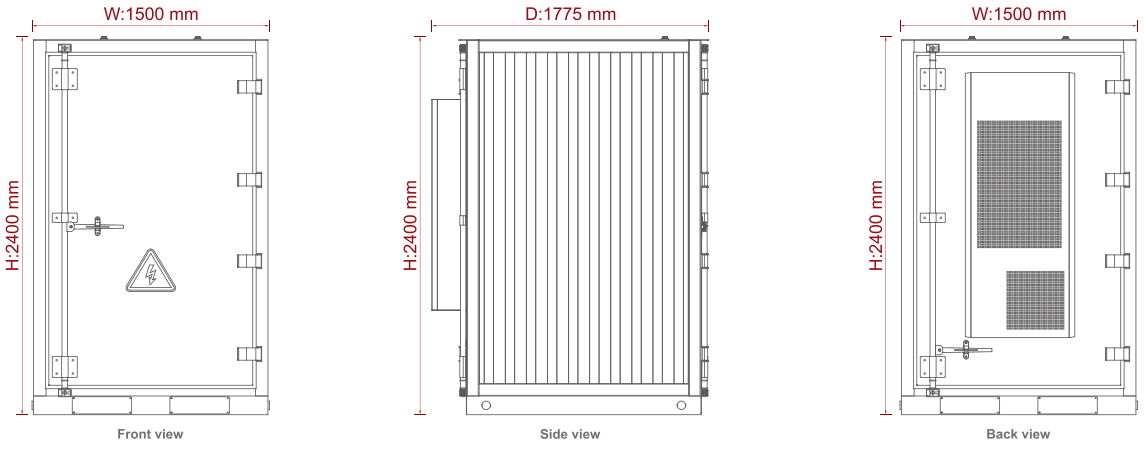
Outdoor Energy Storage Battery Cabinet

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

Energon 215KWh/271KWh		
Battery parameters		
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
Electrical parameters		
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	
Protection		
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	
System Parameters		
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	Dry Self-Cooling	
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	

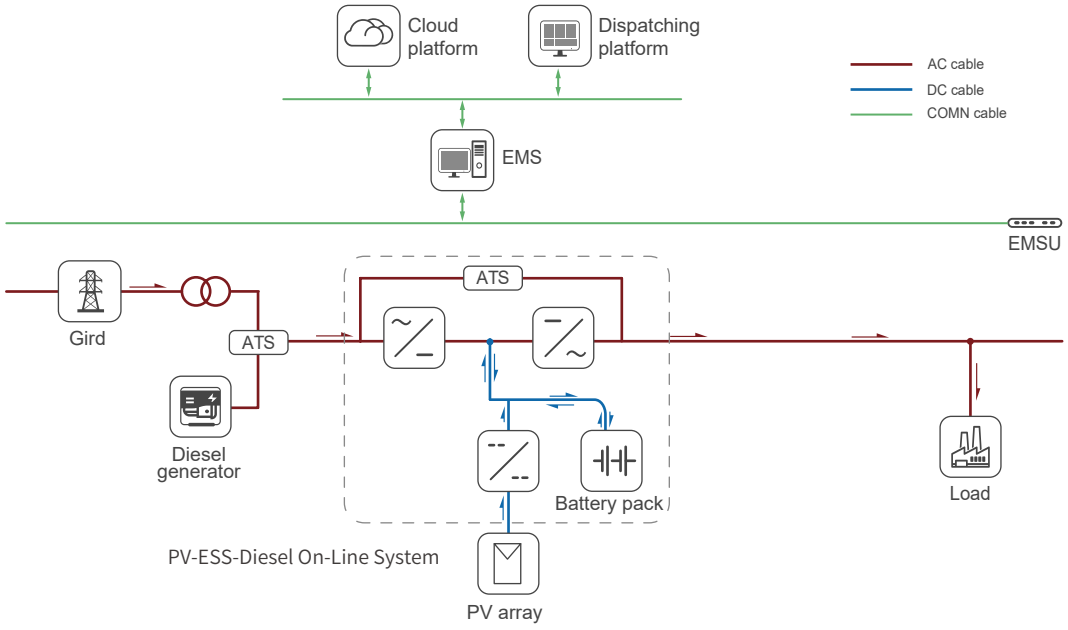
PV-ESS-Diesel On-Line System

* Online UPS * 0 ms transfer time * Green energy priority

• Overview

The PV-ESS-Diesel On-Line System solution is a zero-interruption smart energy system designed for scenarios with extremely high demands on power supply continuity (such as precision manufacturing, critical medical departments, and core communication center). Its core innovation lies in its "online" structure, where PV and energy storage systems operate continuously as the primary power source, while the grid and diesel generators serve as backup power. Through real-time control of the power electronic conversion system, it achieves true zero-uninterrupted switching during grid fluctuations, momentary outages, or failures, completely eliminating the risk of power interruptions. The "online" design physically eliminates switching time; regardless of any disturbances in the external power grid, the voltage and frequency on the load side remain stable, providing the highest level of protection for critical equipment, like a "power safe box". The system prioritizes solar and energy storage as the primary power sources, maximizing the utilization of green electricity and achieving peak shaving and valley filling. The diesel generator is used only as a backup, significantly reducing its operating time and fuel consumption, thus ensuring reliability while substantially lowering energy costs and carbon emissions. The pv-ess-diesel on-line system redefines the power supply standards for critical loads, upgrading the traditional "backup power" concept to an active energy assurance system that is "permanently online and always stable." It is a high-end energy option that perfectly combines high reliability, high economic efficiency, and high sustainability.

• System Topology



Applicable Equipment:

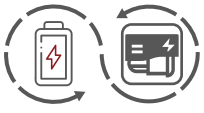
Distribution Cabinet

+

PV-ESS-Diesel On-Line System

• Applications

Back Up



Diesel-Electric Hybrid System

Emergency Power Supply

High-Power Portable Power Station

BESS-L

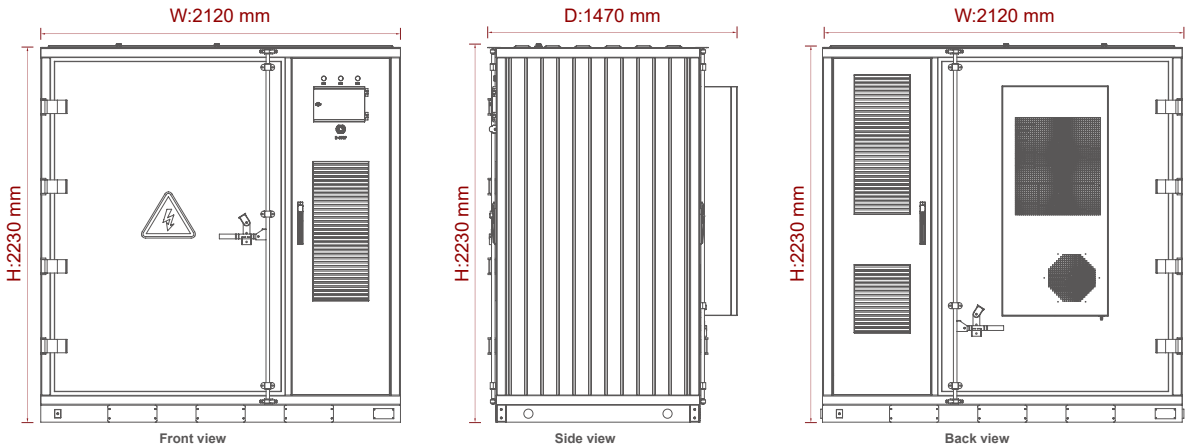
PV-ESS-Diesel On-Line System

BESS-L 125D-271-120

• Features

- Status Indication: Shows system status, including load, storage capacity, and power.
- Multi-Mode Operation: Supports multi-level priority control for reliable power from PV,energy storage,grid,diesel generators 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

BESS-L 125D-271-120		
Battery Parameters		
Battery Module	Voltage	57.6V
	Capacity	314 Ah
	Energy	18 kWh
	Cooling method	Dry Self-Cooling
Battery Cluster	Rated voltage	864V
	Grouping method	1P 270 S
	Rated capacity	314 Ah
	Output voltage range	756V~950V
	Rated energy	271kWh
	Max continuous charging current	157 A
	Max continuous discharge current	157 A
Work Environment	Charging operation temperature range	0~45°C
	Working humidity	RH≤80%
	Storage humidity	RH≤80%
AC side		
PCS Parameter	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-950 V
Parallel	Parallel	Max 8 PCS
System Parameters		
System Parameters	Dimension(W*D*H)	2120*1470*2230mm
	Weight(kg)	3210kgs
	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	Dry Self-Cooling
	Relative humidity	5~95%(No Condensing)
	Highest altitude	4000m(>2000m derating)

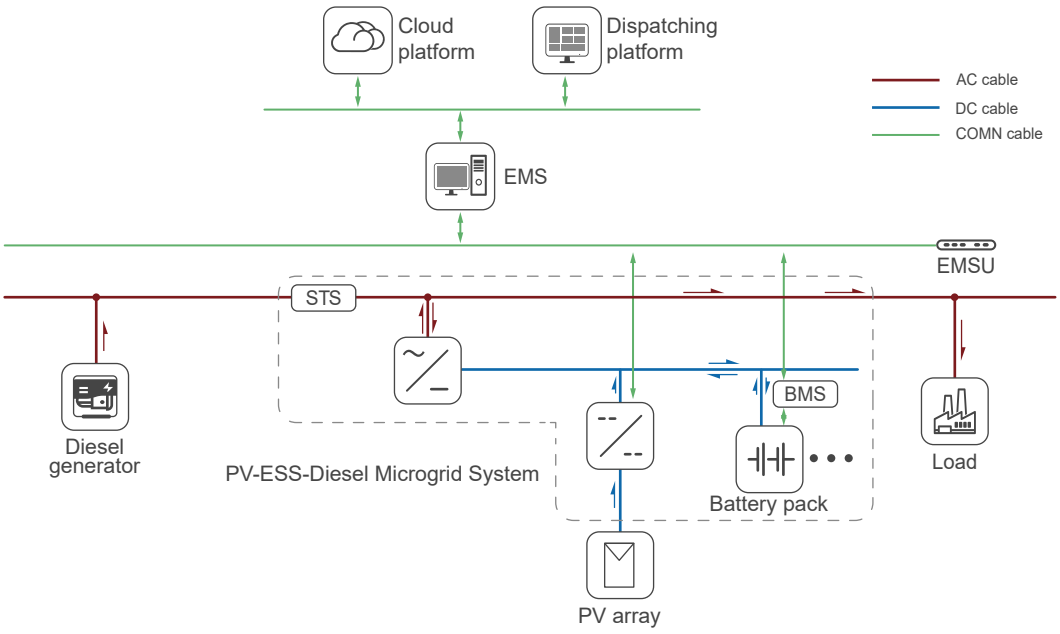
PV-ESS-Diesel Microgrid System

* Self-consumption * Off-grid independent operation

• Overview

In off-grid scenarios without a city power, the PV-ESS-Diesel microgrid System plays a core role as an "autonomous, reliable, and efficient lifeline energy system." Solar power is prioritized for supply, energy storage provides real-time frequency and voltage regulation and power smoothing, and the diesel generator acts as a stable backup, forming a tiered "solar + battery + diesel generator" guarantee system to ensure the long-term stable operation of the microgrid. Through an intelligent energy management system (EMS), solar power generation is prioritized, energy storage implements "daytime storage and nighttime release," minimizing diesel generator startup time, reducing fuel dependence, and lowering transportation and maintenance costs. The energy storage system can handle short-term load fluctuations, allowing the diesel generator to operate in an efficient and stable range for extended periods, improving fuel efficiency, extending equipment lifespan, and reducing maintenance frequency. The energy storage system can instantly balance load fluctuations, suppressing frequency and voltage oscillations caused by equipment startup and shutdown and renewable energy fluctuations, providing grid-like stable power quality. Through multi-energy complementarity and intelligent control, the system can cope with challenges such as extreme weather and sudden load changes, ensuring uninterrupted operation of critical loads. It upgrades the traditional single-diesel power generation model to a "smart, collaborative, and multi-energy complementary" microgrid system, achieving breakthroughs in reliability, economics, and environmental protection. It is the ultimate solution for achieving modern and reliable power supply in off-grid areas, and a key energy infrastructure for promoting development, improving livelihoods, and protecting the ecological environment in remote areas.

• System Topology



Applicable Equipment:

UPV-S Three Phase
Solar+Storage Hybrid Inverters

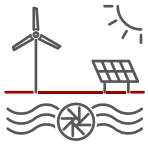
+

Energon Series Outdoor
Energy Storage Battery Cabinet

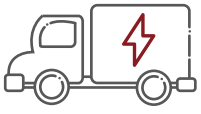
PV-ESS-Diesel Microgrid System

• 应用场景

Micro-grid



Self-consumption



High-Power
Portable Power Station

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

UPV-S 1200kW Three Phase Solar+Storage Hybrid Inverters	
PCS Parameters	
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
STS Parameters	
System	
Rated power	600kVA*3
AC voltage	400V/230V (-20%~15%)
Frequency range	50Hz/60Hz (±5Hz)
Max AC current	870A*3
Switching time	<10ms
PV Parameters	
PV Side (Module)	
Rated power	120kW*6
MPPT voltage range	200V-850V
Rated voltage	600V
PV startup voltage	250V
Number of branch inputs	4*6
PV Max current	240A*6
High Voltage Side (Module)	
Voltage range	500V-950V
Rated voltage	680V
Max current	180A*6
System Parameters	
Dimension(W*D*H)	3000*1267*2400mm
Weight(kg)	2660
Degree of Protection	IP54
Working Temperature Range	-30~60°C(> 45°C derating)
Cooling	Dry Self-Cooling
Relative Humidity	5~95%(no condensation)
Highest Altitude	4000m(>2000m derating)

Energon

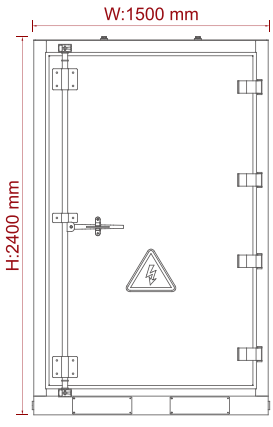
Outdoor Energy Storage Battery Cabinet

215KWh/271KWh

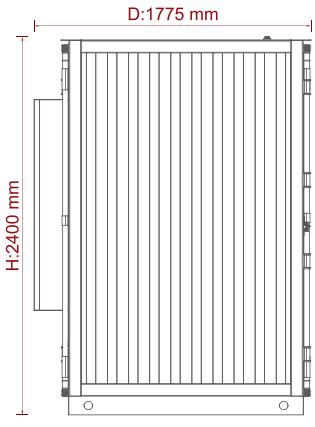
• Features

- 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.

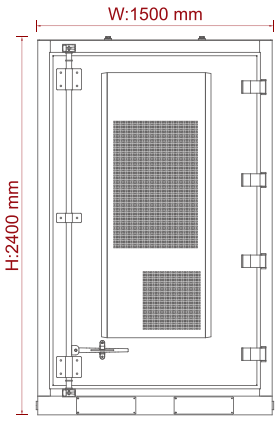
• Product Dimensions



Front view



Side view



Back view

• Technical Parameter

Energon 215KWh/271KWh		
Battery parameters		
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
Electrical parameters		
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	
Protection		
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	
System Parameters		
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	Dry Self-Cooling	
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	

BESS-M

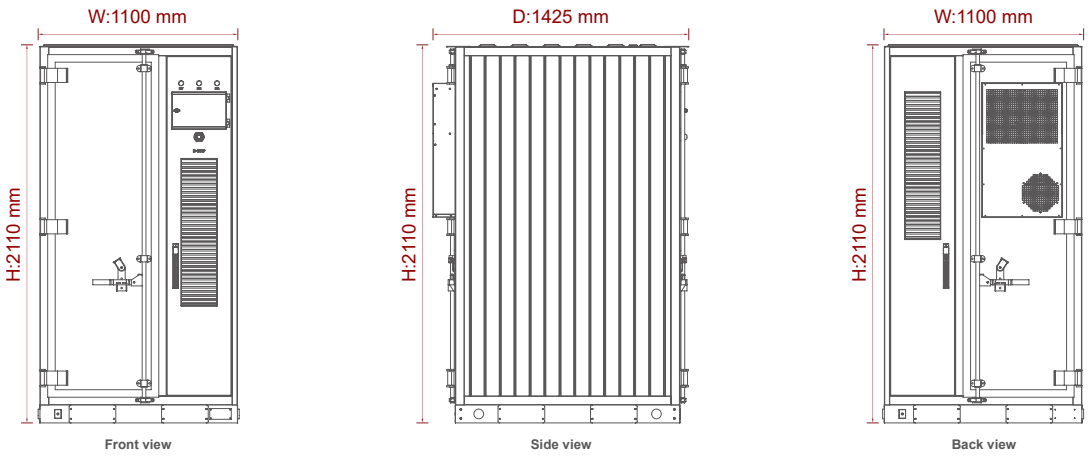
PV-ESS-Diesel Microgrid System

BESS-M 50-126-75

• Features

- Status Indication: Shows system status, including load, storage capacity, and power.
- Multi-Mode 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

BESS-M 50-126-75		
Battery Parameters		
Battery Module	Voltage	57.6V
	Capacity	314Ah
	Energy	18 kWh
	Cooling method	Dry Self-Cooling
Battery Cluster	Rated voltage	403V
	Grouping method	1P126S
	Rated capacity	314Ah
	Output voltage range	352.8V~447.3V
	Rated energy	126.6kWh
	Maximum continuous charging current	157A
	Maximum continuous discharge current	157A
Work Environment	Charging temperature	0~45℃
	Discharge temperature	-20~50℃
	Operating humidity	RH≤80%
Storage Environment	Short term storage(<1months)	-20~55℃
	Storage humidity	RH≤80%
PCS Parameters		
PCS	Rated current	73A
	overload capacity	x 1.25 (100S)
	output power	50kW
	AC port voltage	3P3W+PE/3P4W+PE, 400 V
	frequency	50Hz
	Power factor	-1~1
	Battery side voltage	350V-850V
Parallel	Parallel	Max 5 PCS
STS	Switching time	<10 ms
PV	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
System Parameters		
System Parameters	Dimension(W*D*H)	1100*1425*2110mm
	Weight(kg)	1620KGS
	Degree of protection	IP54
	Working temperature range	-30~60℃ > 45 (derating)
	Cooling	Dry Self-Cooling
	Relative humidity	5~95%(no condensation)
	Highest altitude	4000m(>2000m derating)

BESS-M

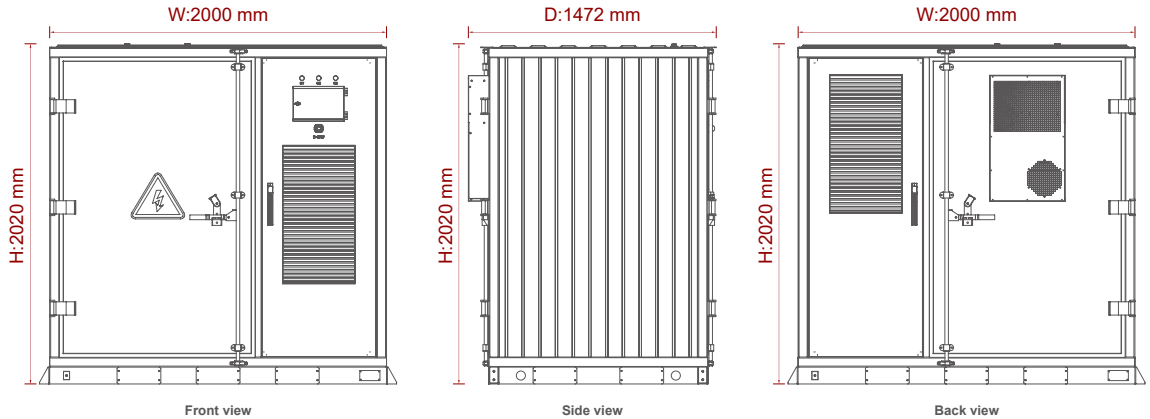
PV-ESS-Diesel Microgrid System

BESS-M 60-217-75

• 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, Dry Self-Cooling, 3-5°C temperature difference of the battery cell.

• Product Dimensions



• Technical Parameter

BESS-M 60-217-75		
Battery Parameters		
Battery Module	Voltage	57.6V
	Capacity	314 Ah
	Energy	18 kWh
	Cooling method	Dry Self-Cooling
Battery Cluster	Rated voltage	691.2V
	Grouping method	1P 216 S
	Rated capacity	314 Ah
	Output voltage range	604.8V~766.8V
	Rated energy	217.03kWh
	Max continuous charging current	157 A
	Max continuous discharge current	157 A
Work Environment	Charging operation temperature range	0~45℃
	Discharging operation temperature range	-20~50℃
	Working humidity	RH≤80%
Storage Environment	Short-term storage temperature(<1month)	-20~55℃
	Storage humidity	RH≤80%
PCS Parameters		
PCS	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
Parallel	Parallel	Max 5 PCS
STS	Switching time	<10 ms
PV	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
System Parameters		
System Parameters	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	Dry Self-Cooling
	Relative humidity	5~95%(No Condensing)
	Highest altitude	4000m(>2000m derating)

BESS-M

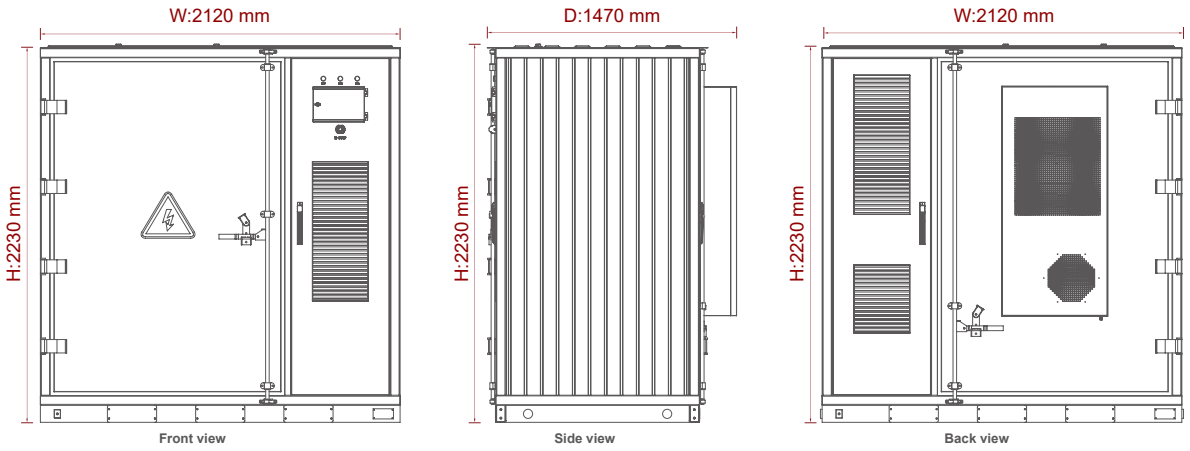
PV-ESS-Diesel Microgrid System

BESS-M 125-271-240（120）

• Features

- Status Indication: Shows system status, including load, storage capacity, and power.
- Multi-Mode 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

BESS-M 125-271-240（120）		
Battery Parameters		
Battery Module	Voltage	57.6V
	Capacity	314 Ah
	Energy	18 kWh
	Cooling method	Dry Self-Cooling
Battery Cluster	Rated voltage	864V
	Grouping method	1P 270 S
	Rated capacity	314 Ah
	Output voltage range	756V~950V
	Rated energy	271kWh
	Max continuous charging current	157 A
	Max continuous discharge current	157 A
Work Environment	Charging operation temperature range	0~45°C
	Working humidity	RH≤80%
	Storage humidity	RH≤80%
PCS Parameters		
PCS Parameter	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-950 V
Parallel	Parallel	Max 5 PCS
STS	Rated power	170KVA
	AC voltage	400V/230V(-20%~15%)
	Frequency	50Hz/60Hz(±5Hz)
	Max AC current	250A
	Switching time	<10 ms
MPPT	PV side	
	Max power	120kW*2（120kW）
	MPPT voltage range	200V-950V
	Rated voltage	600V
	Startup voltage	250V
	PV input string	4
	PV Max current	50A+50A+50A+50A
	Short-Circuit Current	60A+60A+60A+60A
	High voltage side	
	Voltage range	500V-950V
	Rated voltage	680V
	Max current	180A
Parallel	Parallel No.	Max 5 pcs
System Parameters		
System Parameters	Dimension(W*D*H)	2120*1470*2230mm
	Weight(kg)	3210kgs
	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	Dry Self-Cooling
	Relative humidity	5~95%(No Condensing)
	Highest altitude	4000m(>2000m derating)

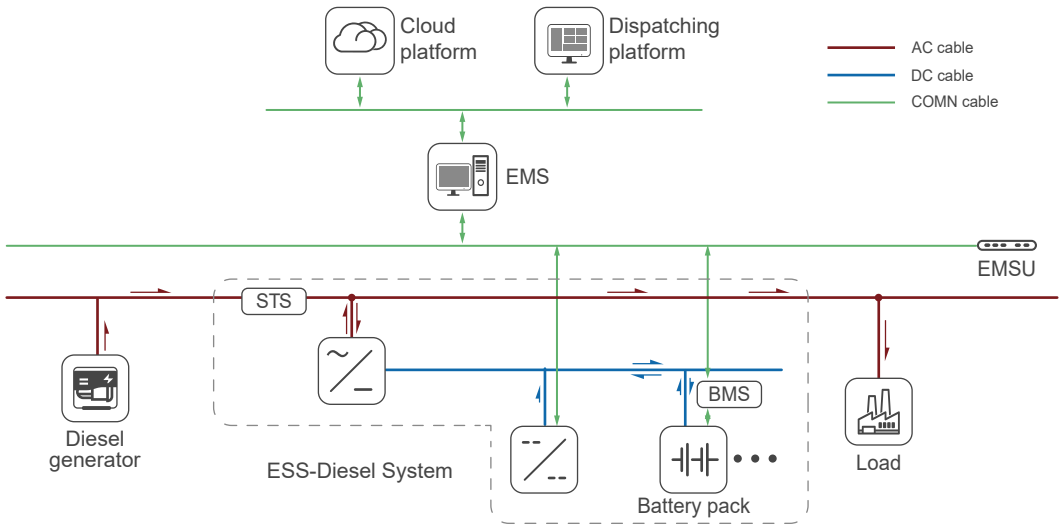
ESS-Diesel System

* Reduced fuel consumption * Load balancing * Stable power output

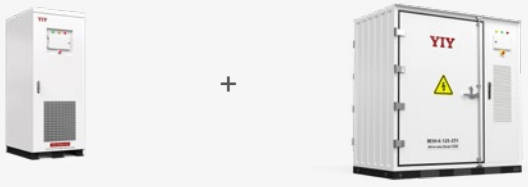
• Overview

Introducing energy storage systems into scenarios powered solely by generator sets (typically diesel or gas generators) can fundamentally change their operating mode, upgrading them from a single backup power source to an efficient, intelligent, and integrated power supply system. Generator sets operate most fuel-efficiently at high load level, while low loads result in high fuel consumption and accelerated wear. Energy storage systems can charge during periods of low load and discharge during peak loads, thus "smoothing" the load curve and allowing the generator sets to operate stably in the efficient and economical range for extended periods, significantly reducing fuel consumption and maintenance costs. Simultaneously, energy storage can handle instantaneous peak loads, reducing the peak power requirements of the generator sets and allowing for the selection of smaller, lower-cost units, thus reducing initial investment. Generator sets require several seconds to respond to sudden load increases (such as the start-up of large motors), which can lead to voltage drops. Energy storage systems can respond instantaneously, providing short-term high-power support to ensure stable voltage and frequency, preventing sensitive equipment from shutting down due to power quality issues. Furthermore, energy storage can serve as a backup power source in case of generator set failure, during maintenance, or for nighttime power needs.

• System Topology



Applicable Equipment:



Power Distribution Cabinet + ESS-Diesel System

• Applications

Back Up | Diesel–Electric Hybrid | Emergency power supply | High-Power Mobile Power Supply

BESS-G

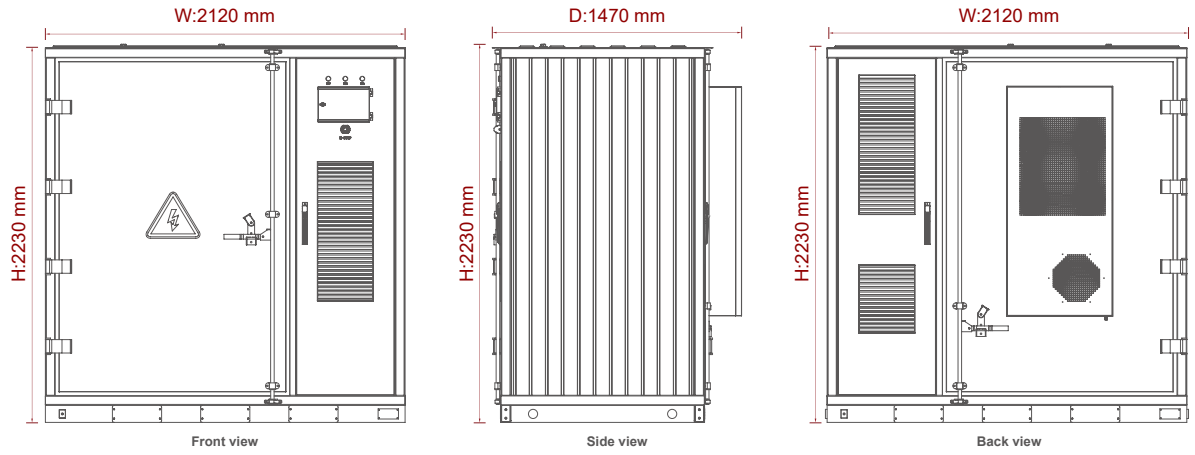
ESS-Diesel System

BESS-G 125-271

• Features

- Status Indication: Shows system status, including load, storage capacity, and power.
- Multi-Mode Operation: Supports multi-level priority control for reliable power from PV,energy storage,grid,diesel generators 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

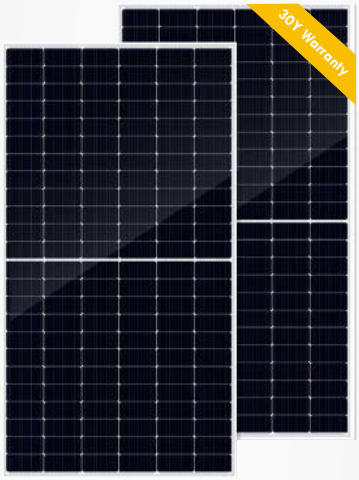


• Technical Parameter

BESS-G 125-271		
Battery Parameters		
Battery Module	Voltage	57.6V
	Capacity	314 Ah
	Energy	18 kWh
	Cooling method	Dry Self-Cooling
Battery Cluster	Rated voltage	864V
	Grouping method	1P 270 S
	Rated capacity	314 Ah
	Output voltage range	756V~950V
	Rated energy	271kWh
	Max continuous charging current	157 A
	Max continuous discharge current	157 A
Work Environment	Charging operation temperature range	0~45°C
	Working humidity	RH≤80%
	Storage humidity	RH≤80%
AC side		
PCS Parameter	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-950 V
Parallel	Parallel	Max 5 PCS
System Parameters		
System Parameters	Dimension(W*D*H)	2120*1470*2230mm
	Weight(kg)	3210kgs
	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	Dry Self-Cooling
	Relative humidity	5~95%(No Condensing)
	Highest altitude	4000m(>2000m derating)

560W-600W Solar Panel

Bifacial Monocrystalline Module



• Features

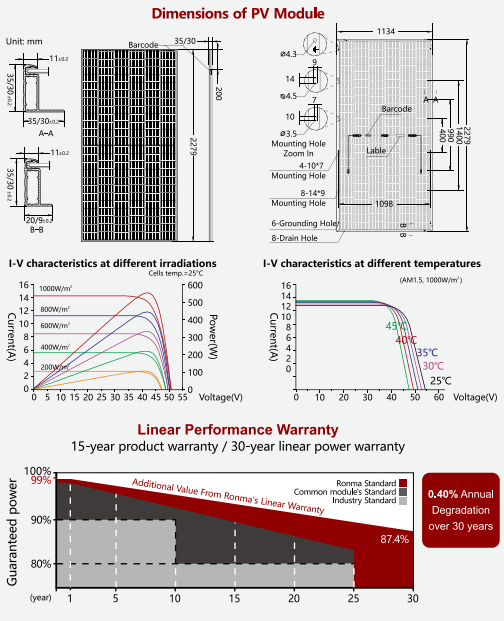
- Higher Power Output
- Multi Busbar Technology
- PID Resistance
- Low-light Performance
- Durability Against Extreme Environmental Conditions
- EL Full Inspection

• 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/m², rear 135W/m², Cell Temperature 25°C, AM=1.5



Linear Performance Warranty

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

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	Φlsc=80%±10%,ΦVoc=100%±3%,ΦPmax=80%±10%								

*STC: Irradiance 1000W/m², module temperature 25°C , AM=1.5

Mechanical Characteristics

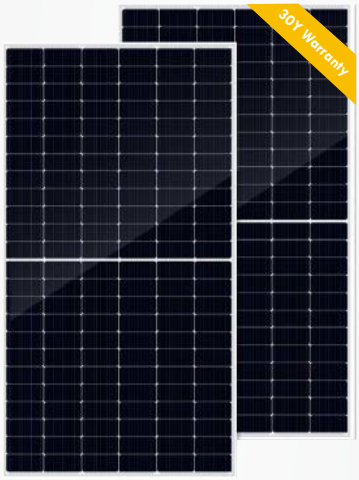
Number of Cells	144pcs
Type of Cell	N-TOPCon Mono
Thickness of Glass(mm)	2.0
Type of Frame	Anodized Aluminum Alloy
Size of Module(mm)	2279×1134×30
Weight(kg)	32
Junction Box	IP68, 1500V DC, 3 Diodes
Cables/Connectors	4.0mm², MC4 compatible
Length of Cable	+300mm/-200mm Length can be customized(connector 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

600W-630W Solar Panel

Bifacial Monocrystalline Module



• Features

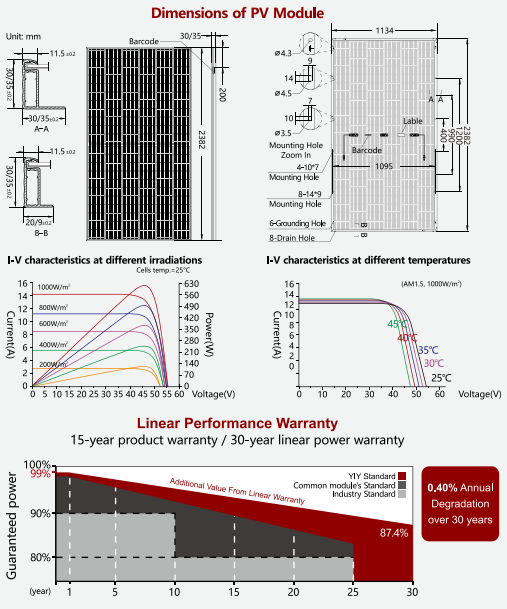
- Higher Power Output
- Multi Busbar Technology
- PID Resistance
- Low-light Performance
- Durability Against Extreme Environmental Conditions
- EL Full Inspection

• 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-Impp(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/m², 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-Impp(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/m², ambient temperature 20°C , wind speed 1m/s

Electrical characteristics with different rear side power gain

	Pmax/W	Voc/V	Isc/A	Vmpp/V	Impp/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

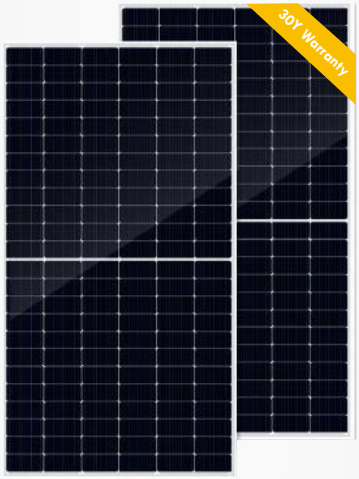
Number of Cells	132pcs
Type of Cell	N-TOPCon Mono
Thickness of Glass(mm)	2.0
Type of Frame	Anodized Aluminum Alloy
Size of Module(mm)	2382×1134×35/30
Weight(kg)	33
Junction Box	IP68, 1500V DC 3 Diodes;Cables/connectors; 4.0mm², MC4 compatible
Length of Cable	+300mm/-200mm Length can be customized(connector 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

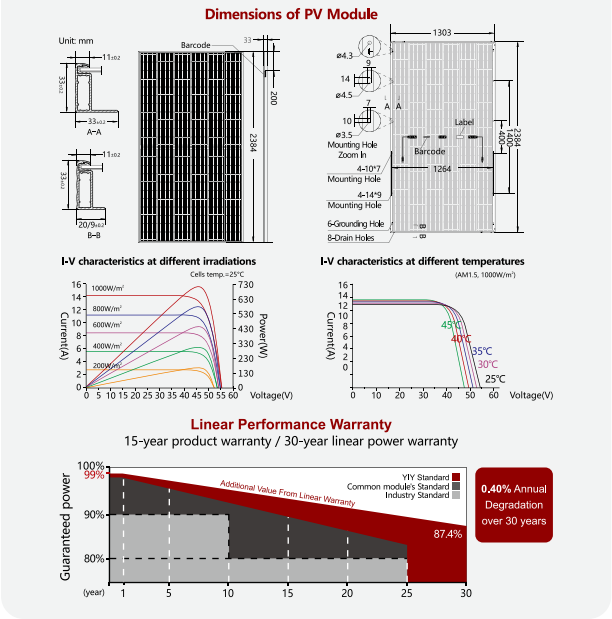
- Higher Power Output
- Multi Busbar Technology
- PID Resistance
- Low-light Performance
- Durability Against Extreme Environmental Conditions
- EL Full Inspection

• 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/m², rear 135W/m², 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/m², 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	4.0mm², 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

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