



WORLD LEADING
ENERGY STORAGE SYSTEM SOLUTIONS PROVIDER

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Note : The technical data mentioned may be updated or revised due to product development.The data in this brochure is subject to change without notice.The latest datasheet and catalog can be acquired via sales@deye.com.cn

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01

COMPANY PROFILE



LEADING PROVIDER OF ENERGY STORAGE SYSTEM SOLUTIONS

DEYE TECHNOLOGY CO., LTD.

A comprehensive tech manufacturing enterprise, integrating R&D, design, production, sales, and service.

It operates modern intelligent production facilities in Ningbo, Jiaxing, and other locations, spanning over 600,000+ square meters with complete production and testing equipment.

Listed on the Shanghai Stock Exchange in April 2021

500+

R&D PERSONNEL

600000+m²

FLOOR SPACE

2021.4

LISTED

4

CORE INDUSTRY CHAINS



The solar & hybrid inverter



The environmental electrical appliance series



The heat exchanger series



The lithium battery energy storage system

DEVELOPMENT HISTORY



2023

Shanghai Office Established

Deye Cloud team and energy storage R&D center was established in Shanghai.

2020

Energy Storage Business Started

Deye started offering low-voltage, high-voltage batteries, and All-in-One ESS that work seamlessly with Deye's storage inverters.

2007

Inverter Business Started

Deye Inverter team was established and became a provider of inverter solutions.

2021

Listed on SSE

In April, Deye was listed on the main board of the Shanghai Stock Exchange.

2016

Inverter Business Booms

Deye's residential and small-scale C&I inverters have been rapidly evolving to provide customized solutions.

2000

Environmental Appliances

Deye's dehumidifiers have been leading sales on Tmall and JD.com for years.

1990

Mold Injection

Deye originated in manufacturing injection molded parts, molds, and sheet metal.

2024

Revenue hits 10 billion RMB

Diversified in inverters and energy storage, leading in global market share

OUR FACTORY

50B Annual Planned Output
Before 2030

1 Innovation Center



Ningbo Beilun: 32 acres, 130,000 sqm, 12B output

4 Production Bases



Ningbo Cixi Longshan Base: 45 acres, 180,000 sqm, 15B output



Shanghai Innovation Center: 200M investment, 7,000 sqm



Ningbo Beilun 246 Base: 500M investment, 100,000 sqm, 6B output



Haiyan Base: 1.8B investment, 200,000 sqm, 17B output

ULTIMATE SAFETY

LEADING PROVIDER OF ENERGY STORAGE
SYSTEM SOLUTIONS



CONTINUOUS INNOVATION

Deye is committed to continuous innovation with significant R&D capabilities in Shanghai and Ningbo, employing over 500 top-tier researchers and thousands of technical staff.



6GWH+

Capacity 2025



180,000+

Sqm



600,000+

Packs Capacity



300+

R&D Engineers

GLOBAL CERTIFICATIONS

Ensure compliance with regional standards



GLOBAL LAYOUT





8
Overseas Service
Centers



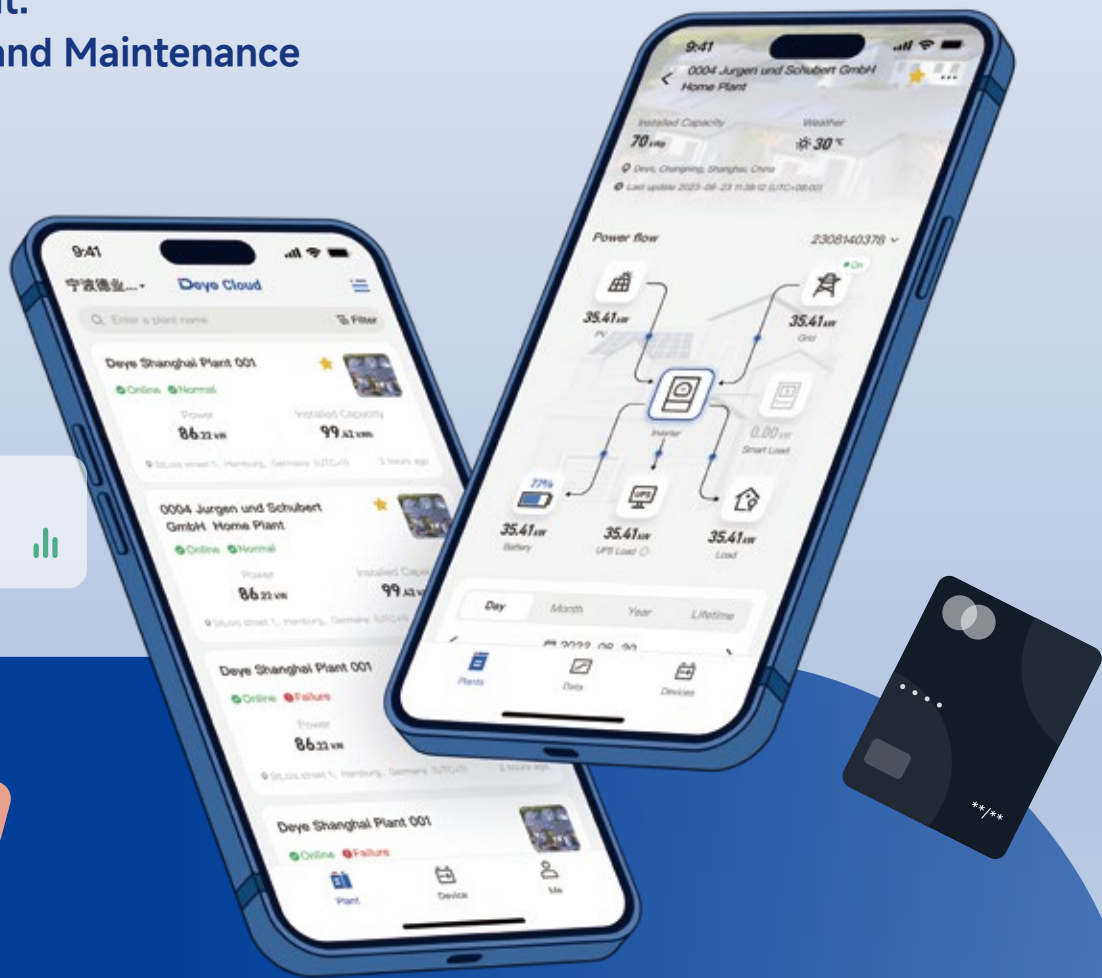
120+
Countries



4M+
Equipment in
Operation

DEYE CLOUD

Cloud Management:
Online Operation and Maintenance



- FW Update
- APP & Web
- Alert Notifications
- Localized Data Centers
- AI Assistant

Deye Cloud is an advanced platform specifically designed for Deye Inverter and ESS, providing users with an outstanding online experience.

Through Deye Cloud, users can easily connect their photovoltaic or energy storage systems to the internet, supporting real-time monitoring of electricity usage and load conditions, cloud-based parameter adjustment, and online firmware updates.

With smart load settings based on time and battery SOC, it is possible to achieve home automation based on energy management.

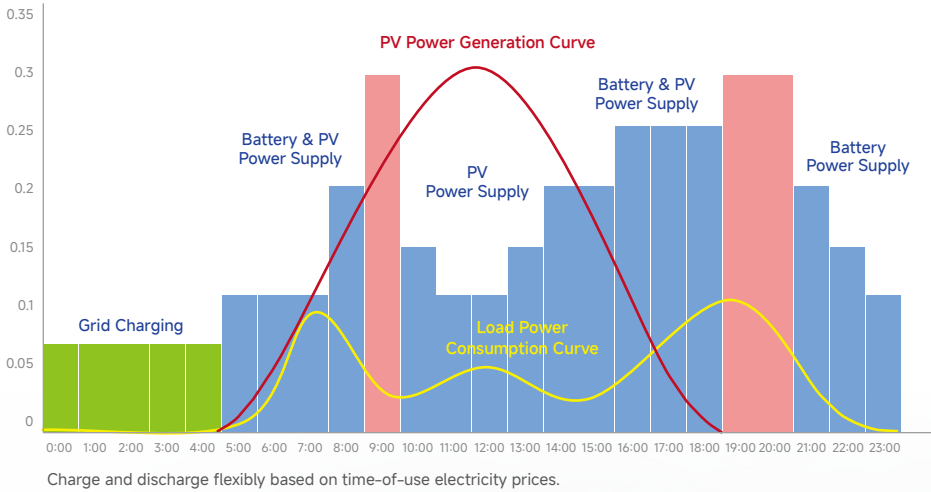
It supports time-of-use or integration with dynamic pricing to achieve the lowest possible electricity costs.

Deye Cloud utilizes two localized data centers in Europe and America to ensure data independence and security.

Customizable Charging and Discharging Function

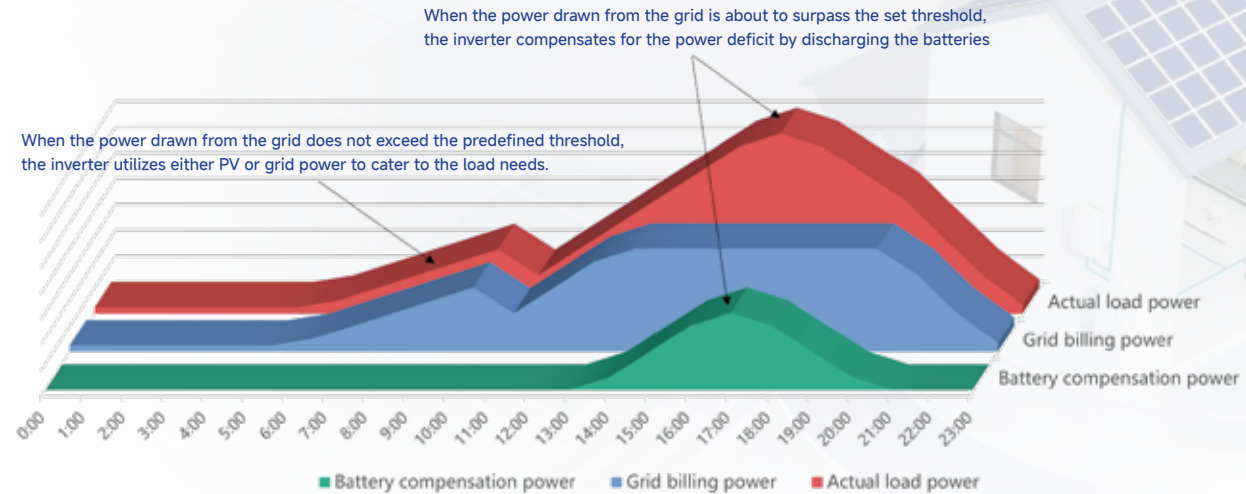
The inverter can be programmed with 6 different charging and discharging time slots to make the most of time-of-use electricity pricing and reduce costs.

Through the **Deye Copilot** feature in the Deye Cloud, the system can also access local dynamic electricity prices, enabling AI to make decisions on selling or buying electricity (available in select regions).



Grid Peak Shaving Function

Grid peak shaving, when the power drawn from the grid approaches the set limit, the battery discharges to supplement part of the power, preventing high-rate electricity usage and reducing costs.



Spring Series /



SE-G5.1



SE-G10.2



SE-F5 & SE-F12



RW-F5.3-1H3



SE-G5.1 Pro-B



RW-F10.2



RW-G10.6



RW-F16



RW-L2.5A



RW-L5.1



RW-L10.2



AI-W5.1-B



AI-W5.1-B-ESS

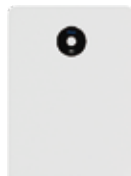
Summer Series /



GB-L PRO



GB-SL



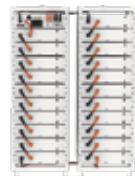
SS-F5.0



SS-F10.0



BOS-B



BOS-A



BOS-GH/BOS-GL



BOS-G



BOS-G Pro



BOS-W



GE-F60



GE-F120-2H2

Autumn Series /



SUN-BK100-2.0KWH-EU-AM2 & AE-F2.0



SUN-BK160/180/200-2.0KWH-EU-AM2



WD-G12200&WD-G12100&WD-G24100

Winter Series /



MS-G215



MS-G215-2H2/3/6



MS-L430-2H2 & MS-LC430-2H2
& MC-L430-2H3



MS-L430-BC-2 & MS-LC430-BC-2
& MC-L430-BC-3



MS-DC420-2



MS-DCC180-2



WS-GS2000-2H3



WS-L4300-2H3/2



WS-PCS2250-2

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SPRING

Series

Residential ESS Solution

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Spring Series
Residential ESS Solution

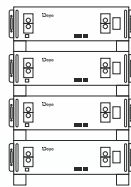
Rack-Mounted Battery(LV)



Support 3-20kW single-phase or three-phase inverters, meeting the application requirements of 1-4 hours

SE-G5.1 & SE-G10.2 (AS, AF, LATAM)

Technical Data



Main Parameters

Model		SE-G5.1	SE-G10.2
Battery Chemistry		LiFePO ₄	
Nominal Capacity ^[1]		100 Ah	200 Ah
Nominal Voltage		51.2V	
Operating Voltage		44.8 V ~ 57.6 V	
Nominal Energy ^[1]		5.12 kWh	10.24 kWh
Cell Configuration		1P16S	2P16S
Scalability ^[3]		Max. 64 pcs pack (327kWh) in parallel	Max. 64 pcs pack (655kWh) in parallel
Charge Current ^[2]	Max. Continuous	50 A	100 A
	Peak	100 A (10 sec)	200 A(10 sec)
Discharge Current ^[2]	Max. Continuous	50 A	100 A
	Peak	100 A (10 sec)	200 A(10 sec)

Other Parameters

Recommend Depth of Discharge	80% DoD	
Dimension (W × D × H, mm)	440 × 540 × 133	710 × 540 × 133
Weight Approximate	44 kg	85 kg
Master LED Indicator	5LED (SOC : 20% ~ SOC100%) , 3LED (working, alarming, protecting)	
Communication Port	CAN2.0, RS485	
IP Rating of Enclosure	IP20	
Operating Temperature	Charge : 0 ~ 55°C, Discharge : -20°C ~ 55°C	
Storage Temperature	0 ~ 35°C	
Relative Humidity	95%	
Altitude	≤2000 m	
Cycle Life	≥6000 (25°C±2°C, 0.2C / 0.2C, 80%DOD, 70%EOL)	
Warranty Period	5 years	
Installation	Wall-Mounted, Floor-Mounted (Stacked) , Rack-Mounted (cabinet depth ≥600mm)	
Certification	UN38.3	

[1] Test conditions : 25°C±2°C, at beginning of life, 0.2C charge & 0.2C discharge,100% DOD.

[2] The current is affected by temperature and SOC.

[3] Max. 32 pcs without external CAN-Box.

*Wall-Mounted, Rack-Mounted, Floor-Mounted



Easy Maintenance

- Support external power supply activation, prevents battery suspension
- Allow over-discharge direct recharge



Exceptional Performance

- Support Max. 0.5C continuous charging and discharging



Enhanced Reliability

- 5 years warranty
- Wide temperature range: -20°C~55°C



Safer

- LFP Battery : safety, long lifespan and high-energy density
- Built-in intelligent BMS, providing complete protection



More Flexible

- Easy to expand, Max. 64 units in parallel(327kWh/655kWh)
- Suitable for residential and commercial use



Spring Series

Off-Grid ESS Solution

Wall-Mounted Battery(LV)

Comprehensive Protection

- Advanced BMS with active fuse

Optimized Energy Density

- Integrated PACK: reduced line loss, enhanced energy density

Easy Maintenance

- Auto-networking, Local monitoring mode for battery, remote monitoring mode for ESS

Superior Performance

- Supports Max. 1.2C (6kW or 12kW) discharge, GaN MOSFETs: 50% loss reduction, high-temp resilient

Flexible Expansion

- Max. 32 units in parallel

Reliable Durability

- Operates reliably in -20°C to 55 °C, natural cooling

SE-F5 & SE-F12 (AS, AF, LATAM)

Technical Data



Main Parameters				
Model		SE-F5		SE-F12
Battery Chemistry		LiFePO ₄		
Capacity ^[1]		100 Ah	Max. 32 pcs in parallel	230 Ah
Scalability				
Nominal Voltage		51.2V		
Operating Voltage		44.8 V ~ 57.6 V		
Nominal Energy ^[1]		5.12 kWh		11.8 kWh
Charge Current ^[2]	Max. Continuous	50 A		115 A
	Peak	75 A (10 sec)		175 A (10 sec)
Discharge Current ^[2]	Max. Continuous	120 A		230 A
	Peak	150 A (10 sec)		280 A (10 sec)
Other Parameters				
Recommend Depth of Discharge		80% DoD		
Dimension (W × D × H, mm)		370 × 548 × 140 mm (Without hanging board)		400 × 583 × 232 mm (Without hanging board)
Weight Approximate		41 kg		82 kg
LED Indicator		LED (SOC, working, protecting) & Buzzer		
IP Rating of Enclosure		IP21		
Operating Temperature		Charge: 0~55°C / Discharge: -20°C~55°C		
Storage Temperature		0~35°C		
Relative Humidity		95% (non-condensing)		
Altitude		≤3000m		
Cycle Life		≥6000(25°C±2°C,0.2C/0.2C,80%DOD,70%EOL)		
Installation		Wall-Mounted, Stack-Mounted		
Communication		CAN2.0, RS485, Bluetooth, APP		
Warranty Period		5 years		
Energy Throughput ^[3]		8 MWh		18 MWh
Certification		UN38.3, MSDS		

[1] Test conditions : 25°C±2°C, at beginning of life and calibration mode, 0.2C charge & 0.2C discharge, 100% DOD.
[2] The current is affected by temperature and SOC.
[3] Conditions apply, refer to Deye Warranty Letter.



Spring Series

Residential ESS Solution

Wall-Mounted Battery(LV)

Support 8-20kW single-phase or three-phase inverters, meeting the application requirements of 1-4 hours

Safer

- LFP Battery: safe, long-lasting, high-efficiency
- Built-in circuit breaker, intelligent BMS
- Eco-friendly materials, non-toxic, pollution-free module

Reliable

- Built-in circuit breaker, support 100A charge and 100A discharge
- Charge from 0°C to 55°C, discharge from -20°C to 55°C

Easy Operation & Maintenance

- Automatic networking for battery modules (No DIP switches)
- Support remotely monitor and upgrade the firmware via Deye inverter
- Support external power supply activation, prevents battery suspension
- Allow over-discharge direct recharge, easy to maintain

Flexible Application

- Support Max.32 units in parallel
- Built-in 10A constant-current limit charge
- Compatible with any brand inverter charge and discharge
- Suitable for providing energy for backup power(residential use)

RW-G10.6 (AS, AF, LATAM)

Technical Data



Main Parameters		
Model	RW-G10.6	
Battery Chemistry	LiFePO ₄	
Built-in Circuit Breaker	125A 1P, 60Vdc	
Capacity (Ah)	208	
Scalability	Max. 32 pcs pack (Max.340kWh) in parallel	
Nominal Voltage (V)	51.2	
Operating Voltage (V)	44.8 ~ 57.6	
Nominal Energy (kWh)	10.64	
Usable Energy (kWh) ^[1]	9.58	
Charge / Discharge	Max. Continuous	100 / 100
Current (A) ^[2]	Peak	200 / 200 (10 sec)

Other Parameters	
Recommend Depth of Discharge	90%
Dimension (W × H × D, mm)	600 × 750 × 200 (Without hanging board)
Weight Approximate (kg)	96
Master LED Indicator	LED (SOC : 20% ~ SOC100% and working state)
IP Rating of Enclosure	IP20
Operating Temperature	Charge : 0 ~ 55°C / Discharge : -20°C ~ 55°C
Recommend Operating Temperature	15°C ~ 35°C
Storage Temperature	0°C ~ 35°C
Relative Humidity	95% non-condensing
Altitude	≤2000m
Cycle Life	≥6000 (25°C±2°C, 0.5C / 0.5C, 90%DOD, 70%EOL)
Installation	Wall-Mounted, Floor-Mounted
Communication Port	CAN2.0, RS485
Warranty Period	5 years
Energy Throughput	16MWh (25°C, 0.5C / 0.5C, 70%EOL)
Certification	UN38.3

[1] Test conditions : 25°C±2°C, at beginning of life, 0.3C charge & 0.3C discharge,100% DOD.
[2] The current is affected by temperature and SOC.

*Wall-Mounted, Floor-Mounted

Spring Series
Residential ESS Solution

Wall-Mounted Battery(LV)



Support 8-20kW single-phase or three-phase inverters, meeting the application requirements of 1-4 hours



Safer

- LFP Battery : Safe, long-lasting, high-efficiency. Built-in circuit breaker, Intelligent BMS. Eco-friendly materials, non-toxic, pollution-free module.



Easy Operation & Maintenance

- Battery module auto networking (No DIP switches)
- Support remotely monitoring and upgrade the firmware via Deye inverter
- Support external power supply activation, prevents battery suspension
- Allow over-discharge direct recharge, easy to maintain.



Reliable

- Built-in circuit breaker, Support 160A charge and 160A discharge
- Charge from 0°C to 55°C, discharge from -20°C to 55°C

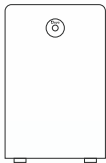


Flexible Application

- Support Max. 32 units in parallel
- Built-in 10A constant-current limit charge
- Compatible with any brand inverter charge and discharge
- Suited to provide energy for backup power, residential,etc.

RW-F16(EU, AS, AF, LATAM)

Technical Data



Main Parameters

Model	RW-F16	
Battery Chemistry	LiFePO ₄	
Built-in Circuit Breaker	125A 2P, 60Vdc	
Capacity (Ah)	314	
Scalability	Max. 32 pcs pack (Max.512kWh) in parallel	
Nominal Voltage (V)	51.2	
Operating Voltage (V)	44.8 ~ 57.6	
Nominal Energy (kWh)	16	
Usable Energy (kWh) ^[1]	14.4	
Charge / Discharge	Recommend	/
Current (A) ^[2]	Max.	160 / 160
	Peak (25°C)	300 / 300 (10 sec)

Other Parameters

Recommend Depth of Discharge	90%
Dimension (W × H × D, mm)	480 × 830 × 230 (Without hanging board)
Weight Approximate (kg)	122
Master LED Indicator	LED (SOC and working state)
IP Rating of Enclosure	IP20
Operating Temperature	Charge : 0 ~ 55°C / Discharge : -20°C ~ 55°C
Recommend Operating Temperature	15°C ~ 35°C
Storage Temperature	0°C ~ 35°C
Relative Humidity	95%
Altitude	≤2000m
Cycle Life	≥6000 (25°C±2°C, 0.5C / 0.5C, 90%DOD, 70%EOL)
Installation	Wall-Mounted, Floor-Mounted
Communication Port	CAN2.0, RS485
Warranty Period	5 years
Energy Throughput ^[3]	52.5MWh (25°C, 0.5C / 0.5C, 70%EOL)
Certification	UN38.3, CE, CB

[1] Test conditions : 25°C±2°C, at beginning of life, 0.5C charge & 0.5C discharge,100% DOD.

[2] The current is affected by temperature and SOC.

[3] Conditions apply, refer to Deye Warranty Letter.

*Wall-Mounted, Floor-Mounted

Spring Series
Residential ESS Solution

Wall-Mounted Battery(LV)

Support 3-20kW single-phase or three-phase inverters, meeting the application requirements of 1-4 hours

RW-L2.5A & RW-L5.1 & RW-L10.2(AS, AF, LATAM)

Technical Data

Main Parameters

Model	RW-L2.5A	RW-L5.1	RW-L10.2
Battery Chemistry	LiFePO ₄		
Built-in Circuit Breaker	125A 1P, 60Vdc		125A 2P, 60Vdc
Capacity (Ah) ^[1]	100		200
Scalability	Max. 32 pcs in parallel		
Nominal Voltage (V)	25.6	51.2	
Operating Voltage (V)	22.4 ~ 28.8	44.8 ~ 57.6	
Nominal Energy (kWh) ^[1]	2.56	5.12	10.24
Usable Energy (kWh@90%DoD) ^[1]	2.3	4.61	9.22
Charge / Discharge	Max. Continuous	100 / 120	
Current (A) ^[2]	Peak	200 / 200 (10 sec)	
		300 / 300 (10 sec)	

Other Parameters

Recommend Depth of Discharge	90%		
Dimension (W×H×D,mm) (Without hanging board)	350 × 680 × 160	420 × 680 × 160	745 × 745 × 170
Weight Approximate (kg)	32	50	100
Master LED Indicator	LED (SOC and working state)		
IP Rating of Enclosure	IP65		
Operating Temperature	Charge : 0 ~ 55°C / Discharge : -20°C ~ 55°C		
Recommend Operating Temperature	15°C ~ 35°C		
Storage Temperature	0 ~ 35°C		
Relative Humidity	95%		
Altitude	≤2000m		
Cycle Life	≥6000 (25°C±2°C, 0.5C / 0.5C, 90%DOD, 70%EOL)		
Installation	Wall-Mounted, Floor-Mounted		
Communication Port	CAN2.0, RS485		
Warranty Period	10 years		
Energy Throughput ^[3]	4MWh	8MWh	16MWh
Certification	UN38.3, CE, CB		

[1] Test conditions : 25°C±2°C, at beginning of life and calibration mode, 0.5C charge & 0.5C discharge,100% DOD.

[2] The current is affected by temperature and SOC.

[3] Conditions apply, refer to Deye Warranty Letter.

*Wall-Mounted, Rack-Mounted, Floor-Mounted



Automatic Recovery Function

- Minimum cold-start capability of 9V



1C Charge, 1.2C Discharge

- Compared to traditional products, performance improve by 20%



Flexible Expansion

- Max. 32 units in parallel, ideal for backup power



Smart Fuse, Safe Power

- Prevents thermal runaway in key circuits for ultimate safety



Reverse Polarity Protection

- Prevents battery and BMS damage from incorrect wiring



Seamless Convenience

- Automatic battery networking and remote monitoring/upgrade support

Spring Series
Residential ESS Solution

All-in-One ESS (LV)



RW-F5.3-1H3 (EU, AS, AF, LATAM)



Enhanced Reliability

- Built-in Intelligent BMS, providing complete protection
- Natural cooling
- IP65 - rated for indoor and outdoor use
- Wide temperature range : -10°C to 55°C



Flexible Expansion

- Max.16 units in parallel (80kW/84.8kWh)
Support expansion of Deye 5.3kWh LV battery,allowing up to 31 batteries for a Max. capacity of 164.3kWh



Easy Installation

- Flat design, wall-mounted, saving installation space, quick and easy installation



Smart Application

- Peak-shaving, smart load, AC couple etc.
- Fast switching time of 4ms, ensuring your energy security



All-in-One Design

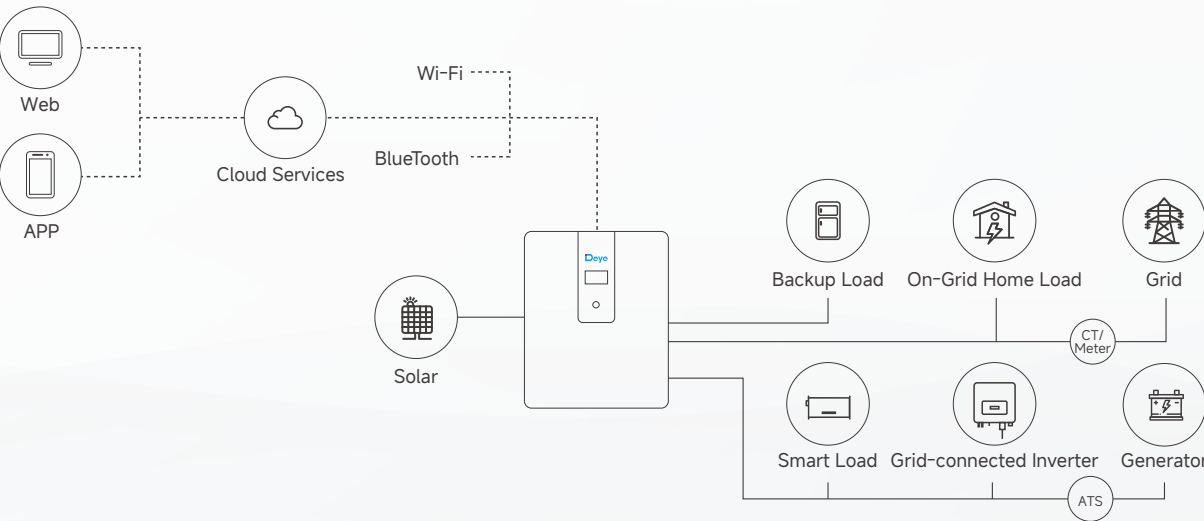
- Integrated 5kW hybrid inverter and 5.3kWh LFP battery



Intelligent Control

- Comfortable and easy control via App, PC or Touch-Display

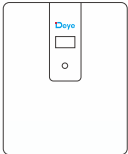
System Application Topology Diagram



*Wall-Mounted, Floor-Mounted

RW-F5.3-1H3 (EU, AS, AF, LATAM)

Technical Data

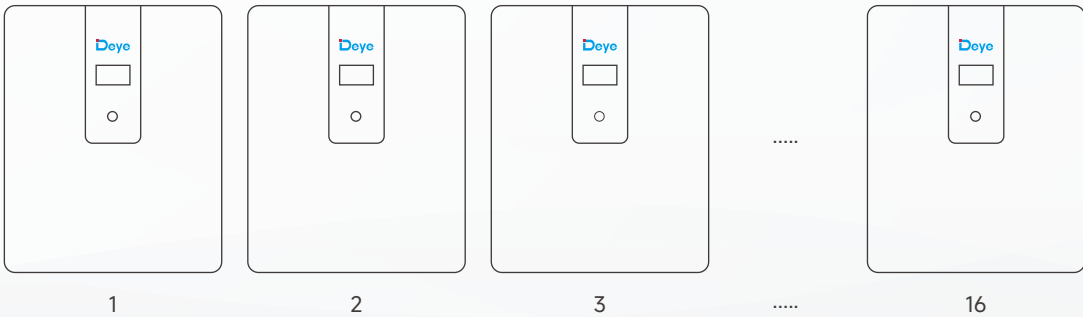


AC Technical Specification	
Model	RW-F5.3-1H3
Rated AC Input / Output Active Power (W)	5000 / 5000
Max AC Input / Output Apparent Power (VA)	5500
Peak Power (off grid)	2 time of rated power, 10s
AC Output Rated Current (A)	22.8 / 21.8
Max. AC Current (A)	25 / 24
Max Continuous AC Passthrough (grid to load) (A)	35
Rated Input / Output Voltage / Range (V)	220V / 230, 0.85Un~1.1Un
Rated Input / Output Grid Frequency/Range (Hz)	50Hz / 45Hz ~ 55Hz, 60Hz / 55Hz ~ 65Hz
Grid Connection Form	L+N+PE
Power Factor	0.8 leading to 0.8 lagging
Total Harmonic Distortion (THDi)	<3% (of nominal power)
DC injection current (mA)	<0.5% In

DC Technical Specification	
Max. PV Access Power (W)	10000
Max. PV Input Power (W)	8000
Max. PV Input Voltage (Vdc)	500
Start Up PV Voltage (Vdc)	125
MPPT Voltage Range (Vdc)	150 ~ 425
Full Load MPPT Voltage Range (Vdc)	300 ~ 425
Rated PV Input Voltage (Vdc)	370
Max. Operating PV Input Current (A)	18+18
Max. PV Input Short-circuit Current (A)	27+27
Number of MPP Trackers	2
No. of Strings Per MPP Tracker	1 + 1
Battery Chemistry	LiFePO4
Battery Nominal Voltage (V)	51.2
Battery Energy Configuration (kWh)	5.32
Max. Charging / Discharging Current (A)	100
Battery Operating Voltage (V)	44.8 ~ 57.6
Battery Cycle Life	≥6000 (@25°C±2°C, 0.5C / 0.5C, 70%EOL)

Other Technical Specification	
Model	RW-F5.3-1H3
Dimension (W × D × H, mm)	616 × 191 × 690 (Excluding connectors and brackets)
Weight Appr. (kg)	71
IP Rating of Enclosure	IP65
Operating Temperature Range (°C)	-10°C ~ 55°C
Permissible Ambient Humidity	0~100%
Inverter Topology	Non-Isolated
Over Voltage Category	OVC II (DC), OVC III (AC)
Type Of Cooling	Natural Cooling
Noise (dB)	<30
Display	Touch LCD
Monitor Mode	WiFi, Bluetooth
Installation Style	Wall-Mounted, Floor-Mounted
Max. Efficiency	97%
Max. charging / discharging Efficiency	95.5%
MPPT Efficiency	>99%
Safety EMC / Standard	IEC / EN 61000-6-1 / 2 / 3 / 4 , IEC / EN 62109-1, IEC / EN 62109-2
Grid Regulation	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, VDE-AR-N 4105
Certification	UN38.3, CE, CB, IEC62619
Warranty Period	5/10 years (the Warranty Period Depends on the Final Installation Site. More Info Please Refer to Warranty Policy)

Maximum support for 16 units in parallel	
RW-F5.3-1H3	80kW/84.8kWh



Spring Series
Residential ESS Solution

Rack-Mounted Battery(LV)

Support 3/5/6/8kW single-phase or three-phase inverters, meeting the application requirements of 1-4 hours



Eco-Friendly

- Use environmental protection materials, the whole module non-toxic, pollution-free



Convenient

- Battery module auto networking, easy maintenance
- Support remote monitoring and upgrade
- Support USB drive upgrade the firmware



Reliable

- Support high discharge power
- IP20, natural cooling
- Wide temperature range : -20°C to 55°C



Safer

- Cobalt Free Lithium Iron Phosphate LFP Battery : safety and long lifespan, high efficiency and high power
- Intelligent BMS, providing complete protection

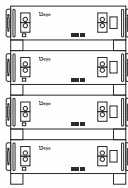


Flexible

- Modular design, easy to expand, Max. 64 units in parallel, Max. capacity of 327kWh
- Suitable for residential and commercial applications to increase the self-consumption ratio

SE-G5.1 Pro-B (EU, NA, AU, AS, AF, LATAM)

Technical Data



Main Parameters

Battery Chemistry		LiFePO ₄
Built-in Circuit Breaker		125A 2P, 60Vdc
Capacity (Ah)		100
Scalability		Max. 64 pcs pack (327kWh) in parallel (Max. 32 pcs no external setup)
Nominal Voltage (V)		51.2
Operating Voltage (V)		43.2 ~ 57.6
Energy (kWh)		5.12
Usable Energy (kWh) ^[1]		4.6
Charge / Discharge Current (A) ^[2]	Recommend	50
	Max.	100
	Peak (2mins, 25°C)	150

Other Parameters

Recommend Depth of Discharge	90%
Dimension (W × H × D, mm)	440 × 133 × 540
Weight Approximate (kg)	45
Master LED Indicator	5LED (SOC : 20% ~ SOC100%) , 3LED (working, alarming, protecting)
IP Rating of Enclosure	IP20
Operating Temperature	Charge : 0~55°C (Optional heating : -20°C ~ 55°C), Discharge : -20°C~55°C
Storage Temperature	0°C ~ 35°C
Humidity	5% ~ 95%
Altitude	≤2000m
Cycle Life	≥6000 (25°C±2°C, 0.5C / 0.5C, 90%DOD, 70%EOL)
Installation	Wall-Mounted, Floor-Mounted, Rack-Mounted (19-inch standard cabinet, cabinet depth ≥600mm)
Communication Port	CAN2.0, RS485
Warranty Period	10 years
Energy Throughput	16MWh@70%EOL
Certification	UN38.3, IEC62619, CE, CB, UK, VDE 2510-50, CEI 0-21, FCC, UL1973, UL9540, UL9540A

[1] DC Usable Energy, test conditions: 90% DOD, 0.5C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.

[2] The current is affected by temperature and SOC.

*Wall-Mounted, Rack-Mounted, Floor-Mounted

Spring Series
Residential ESS Solution

Wall-Mounted Battery(LV)



Support 8-20kW single-phase or three-phase inverters, meeting the application requirements of 1-4 hours



Exceptional Performance

- RW-F10.2/RW-F10.2-B supports up to 1C/1.2C charging and discharging
- Peak discharge current of 300A for up to 2mins



Smarter

- Battery module auto networking (No DIP switch code)
- Support Deye remote monitoring and upgrade
- Supports Deye inverters to form a stack all-in-one system



Enhanced Reliability

- ≥6000 Cycles, 90%DOD, 70%EOL
- 10 years warranty for long-term peace of mind
- Wide temperature range: -20°C~55°C
- IP65-rated for indoor and outdoor use



More Flexible

- Modular design, easy to expand
- Support Max. 32 units in parallel
- RW-F10.2 has a maximum capacity of 326kWh
- RW-F10.2-B has a maximum capacity of 327kWh
- Suitable for residential and commercial use



Safer

- LFP Battery: safety, long lifespan and high-energy density
- Built-in intelligent BMS, providing complete protection
- Support natural cooling
- Use high-quality environmental protection materials

RW-F10.2 (EU, AU) RW-F10.2-B (NA)

Technical Data



Main Parameters

Model	RW-F10.2 (EU, AU)	RW-F10.2-B (NA)
Battery Type	LiFePO ₄	
Built-In Circuit Breaker	125A 4P 60Vdc	
Capacity (Ah)	200	
Nominal Voltage (V)	51.2	
Operating Voltage (V)	43.2~57.6	
Scalability	Max. 32 pcs pack in parallel (Max. 326kwh)	Max. 32 pcs pack in paralle (Max. 327kWh)
Rated Energy (kWh)	10.2	10.24
Usable Energy (kWh)	9.2(90%DOD)	9.2
Rated DC Power (kW)	6	/
Max DC Power (kW)	12	/
Charge / Discharge Current (A) ^[2]	Recommend Max. Peak	Charge:100/Discharge: 100 Charge:198/Discharge: 240 Discharge: 300(2mins,25°C)

Other Parameters

Recommend Depth of Discharge	90%	
Dimension (W × H × D, mm)	600 × 760 × 200 (Without hanging board)	600×830×200 (Without hanging board)
Weight Approximate (kg)	104	235.9 lbs.(107kg)
Master LED indicator	SOC state(20%-100%) work state(alarming, protecting)	LED(SOC:20%-100% and working state)
IP Rating of Enclosure	IP65	NEMA 3R(IP65)
Operating Temperature (°C)	Charge:1~55°C Discharge:-20°C~55°C	Charge: 33 °F ~ 131 °F (1 ~ 55°C) Discharge: -4 °F ~ 131 °F (-20°C ~ 55°C) Recommend: 59 °F ~ 95 °F (15°C ~ 35°C)
Storage Temperature (°C)	32°F ~ 95°F (0 ~ 35°C)	
External Ambient Temperature Range (°C)	/	-4°F ~ 131°F (-20°C ~ 55°C, with heating film)
Humidity	5%-95%	
Altitude	≤ 3000m	≤ Max. 9,843 ft (3,000m)
Cycle Life	≥6000(25°C+2°C,0.5C/0.5C,90%DOD,70%EOL)	
Installation Location	Wall-Mounted, Floor-Mounted	
Communication Port	CAN2.0., RS485	
Warranty Period	10 years	
Energy Throughput	32MWh(25°C,0.5C/0.5C,70%EOL)	
Certification	UN38.3, IEC 62619, CE, CEI 0-21, VDE 2510-50, CEC	UN38.3, FCC, UL 1973, UL 9540A

*Wall-Mounted, Floor-Mounted

Spring Series
Residential ESS Solution

Stacked Battery(LV)



Support 3/5/6/8/12kW single-phase or three-phase inverters, meeting the application requirements of 1-4 hours



Smarter

- Battery module auto networking (No DIP switch code)
- Support remote monitoring and upgrade the firmware



Exceptional Performance

- Support Max. 1C continuous charging and discharging
- Peak discharge current of 360A for up to 10s (6 units)



Enhanced Reliability

- ≥6000 Cycles, 90%DOD, 70%EOL
- 10 years warranty for long-term peace of mind
- Wide temperature range: -20°C ~ 55°C
- IP65-rated for indoor and outdoor use



Safer

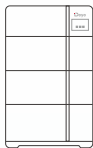
- LFP Battery: safety, long lifespan and high-energy density
- Built-in intelligent BMS, providing complete protection
- Support high discharge power and natural cooling
- Use high-quality environmental protection materials



More Flexible

- Modular design, easy to expand
- Up to 6 clusters (36 packs) can be supported in parallel
- The max power of the system can reach 184kW
- Suitable for residential and commercial use

AI-W5.1-B (EU, NA, AU)
Technical Data



Main Parameters

Battery Type		LiFePO ₄					
Built-in Circuit Breaker		125A 2P, 60Vdc					
Battery Module Energy (kWh)		5.12					
Battery Module Nominal Voltage (V)		51.2					
Battery Module Capacity (Ah)		100					
scalability		1	2	3	4	5	6
System Nominal Voltage (V)		51.2					
System operating Voltage (V)		44.8~57.6					
System Energy (kWh)		5.12	10.24	15.36	20.48	25.6	30.72
System Usable Energy (kWh)		4.6	9.2	13.8	18.4	23	27.6
Charge / Discharge Current (A)	Recommend	50	100	150	200	250	250
	Max.	100	180	250	250	250	250
	Peak (2mins, 25°C)	150	270	360	360	360	360

Other Parameters

Working Temperature (°C)		Charge:-20°C~55°C/Discharge: -20°C~55°C					
Storage Temperature (°C)		0°C~35°C					
Communication Port		CAN2.0,RS485					
Humidity		5%~95%					
Altitude		≤2000m					
IP Rating of Enclosure		IP65 (after stacking)					
System Dimension (W x H x D.mm)		720 x255 x300(without terminal parts)					
System Weight Approximate (kg)		55					
Module Dimension (W x H x D.mm)		720 × 255 × 569	720 × 255 × 850	720 × 255 × 1131	720 × 255 × 1412	720 × 255 × 1693	720 × 255 × 1974
	Module Weight Approximate (kg)	74.5	127.5	180.5	233.5	286.5	339.5
Master LED Indicator		Battery module: 3LED (working, alarming, protecting), PDU module: 5LED (SOC: 20%~100%) & 3LED (working, alarming, protecting)					
Installation Location		Wall-Mounted, Floor-Mounted					
Recommend Depth of Discharge		90%					
Cycle Life		≥6000 (25°C ±2°C, 0.5C / 0.5C, 90%DOD, 70%EOL)					
Warranty Period		10 years					
Energy Throughput		16MWh (Battery Module @70%EOL)					
Certification		UN38.3, IEC 62619, CE, UK, VDE 2510-50, CEI 0-21, CE-LVD, CEC, FCC, UL1973, UL9540, UL9540A					

*Wall-Mounted, Floor-Mounted

Spring Series
Residential ESS Solution

All-in-One ESS (LV)



AI-W5.1-B-ESS (EU, NA, AU)



Swift Security

- Fast switching time of 4ms ensuring energy security



Scalable

- Flat and stackable design
- Capacity of 5kWh~30kWh



Flexible

- No wiring and extra fixing screws
- Quick and easy installation



Smart

- Peak-shaving, smart load AC coupling, etc.



All-in-One

- Integrated hybrid inverter and LFP battery



Convenient

- Comfortable and easy control via App
PC or Touch-Display

≥6000

Cycles

IP65

Rated for indoor and
outdoor use

70%

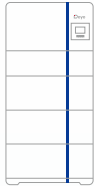
EOL

10 years

Warranty for long-term
peace of mind

AI-W5.1-B-ESS (EU, NA, AU)

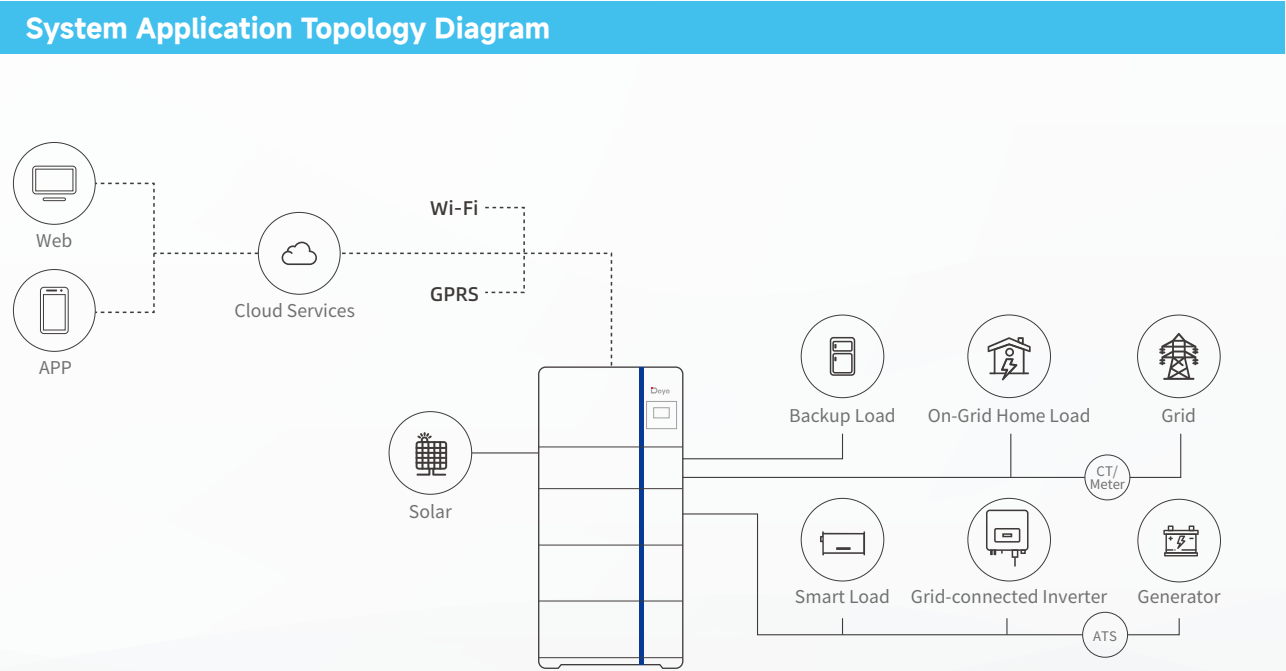
Technical Data



Model	AI-W5.1-3.6P1-EU-B	AI-W5.1-5P1-EU-B	AI-W5.1-6P1-EU-B	AI-W5.1-7.6P1-EU-B	AI-W5.1-8P1-EU-B	AI-W5.1-5P3-EU-B	AI-W5.1-6P3-EU-B	AI-W5.1-8P3-EU-B	AI-W5.1-10P3-EU-B	AI-W5.1-12P3-EU-B
System Specification										
Nominal Output Power / UPS Power (W)	3600 /3600	5000 /5000	6000 /6000	7600 /7600	8000 /8000	5000 /5000	6000 /6000	8000 /8000	10000 /10000	12000 /12000
AC Output Frequency and Voltage	50/60Hz;L/N/PE 220/230Vac					50/60Hz;3L/N/PE 220/380,230/400Vac				
Grid Type	Single Phase					Three Phase				
Recommended Energy Configuration	5kwh(Min.)			10kwh(Min.)		5kWh(Min.)		10kwh(Min.)		15kwh(Min)
Max. Charging / Discharging Current (A)	90	120	135	190	190	120	135	190	210	240
Battery Operating Voltage (V)	44.8 ~ 57.6									
Battery Chemistry	LiFePO4									
IP Rating of Enclosure	IP65 (after stacking)									
System Certification	IEC62619, IEC60730, CE, VDE2510-50, CEI 0-21									
Warranty Period	10 years									

Inverter Technical Specification										
Max. PV Access Power (W)	7200	10000	12000	15200	16000	10000	12000	16000	20000	24000
Max. PV Input Power (W)	5760	8000	9600	12160	12800	8000	9600	12800	16000	19200
Max PV Input Voltage (V)	500					800				
Rated PV Input Voltage (Vdc)	370					550				
Start Up DC Voltage (Vdc)	125					160				
MPPT Voltage Range (Vdc)	150 ~ 425					200 ~ 650				
Max. PV Input Current (A)	18+18			32+32		36+20				
Max. PV Short-circuit Current (A)	27+27			48+48		54+30				
No.of MPP Trackers /	2/1+1			2/2+2		2 /2+1				
No.of String Per MPP Tracker										
Peak Power (off grid)						2 time of rated power, 10s				
Power Factor						0.8 leading to 0.8 lagging				
DC injection current (mA)						THD<3% (Linear load<1.5%)				
Display						LCD				
Relative Humidity						0% ~ 100% (No Condensing)				
Dimension (W × D × H, mm)	720 × 255 × 330					720 × 255 × 440				
Weight (kg)	34					38				
Communication with BMS	CAN2.0									
Safety	IEC / EN 62109-1, IEC / EN 62109-2, IEC / EN 61000-6-1, IEC / EN 61000-6-2, IEC / EN 61000-6-3, IEC / EN 61000-6-4									
Grid Regulation	VDE4105, IEC61727 / 62116, VDE0126, AS4777.2, CEI 0-21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149 / NBR16150									
Max. Efficiency						97.60%				
Max. charging / discharging efficiency						95.50%				

Model	AI-W5.1-3.6P1-EU-B	AI-W5.1-5P1-EU-B	AI-W5.1-6P1-EU-B	AI-W5.1-7.6P1-EU-B	AI-W5.1-8P1-EU-B	AI-W5.1-5P3-EU-B	AI-W5.1-6P3-EU-B	AI-W5.1-8P3-EU-B	AI-W5.1-10P3-EU-B	AI-W5.1-12P3-EU-B
Battery Technical Specification										
Built-in Circuit Breaker	125A 2P, 60Vdc									
Nominal Voltage (V)	51.2									
Battery Module Energy (kWh)	5.12									
Module Scalability	Max.36 pcs in parallel (Max. capacity of 184kWh)									
Battery Module Dimension	720 × 255 × 300 (W × D × H, mm)									
Battery Base Dimension	720 × 255 × 68 (W × D × H, mm)									
Battery PDU3 Dimension	720 × 255 × 228 (W × D × H, mm)									
Battery Module Weight (kg)	55									
Operating Temperature Range	Charge : -20°C ~ 55°C / Discharge : -20°C ~ +55°C									
Cycle Life	≥6000 (25°C±2°C, 0.5C / 0.5C, 90%DOD, 70%EOL)									
Battery Module Certification	IEC62619, CE, UK, VDE2510-50, CEI 0-21, UN38.3, CE-LVD, CEC									



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Summer Series
Residential ESS Solution

Stacked Battery(HV)



GB-L (EU) & GB-L PRO (EU)



Safer

- LFP Battery: safety, long lifespan and high-energy density
- Built-in explosion relief device to dredge gas
- Built-in fire protection device to cut off the fire source for 3 seconds
- Use high-quality environmental protection materials



Enhanced Reliability

- ≥6000 Cycles, 70%EOL
- 10 years warranty for long-term peace of mind
- Wide temperature range: -20°C ~ 60°C
- IP65-rated for indoor and outdoor use
- Anti-corrosion grade ≥ C2



Smarter

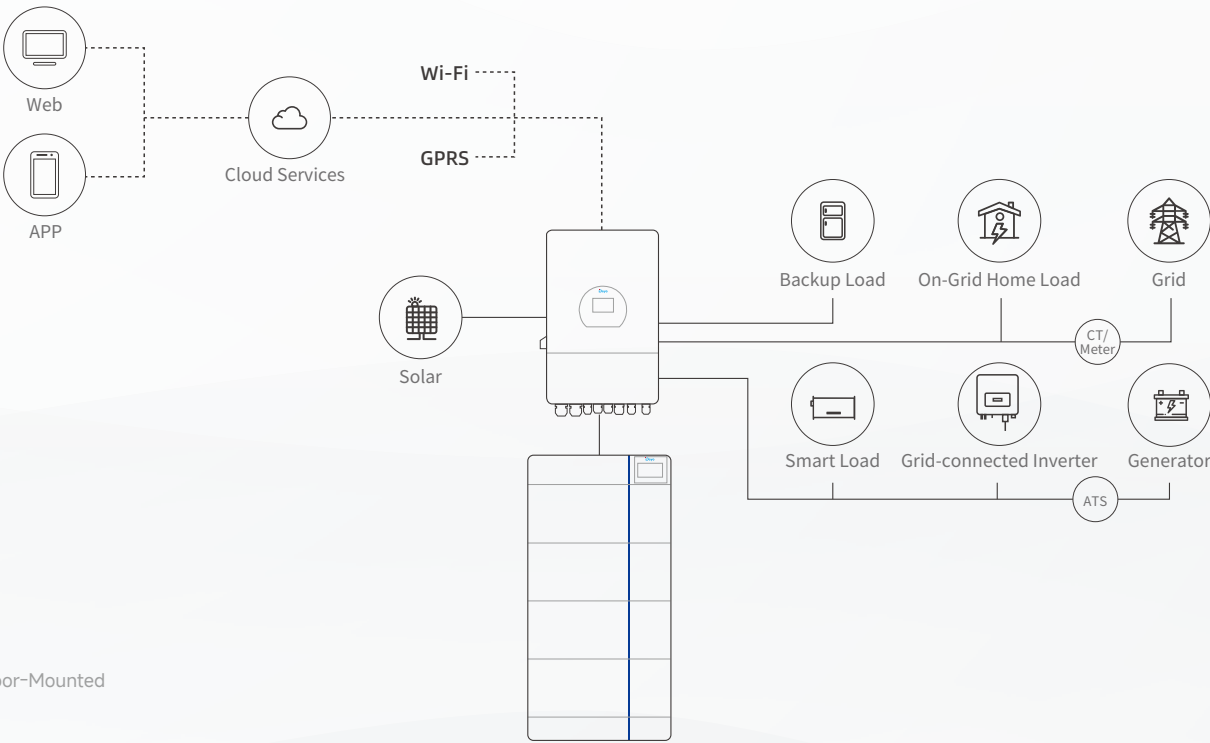
- Temperature detection of key parts, cell, power plug-in, etc
- Optional heating function for low-temperature applications
- Support remote upgrade, real-time battery warning information push, LCD data display



More Flexible

- Modules are connected in series without cable connection
- And high-voltage platform improves system efficiency
- Battery Module: 2 ~ 6 pcs in series (optional)

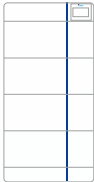
Support 5~20kW three-phase inverters, meeting the application requirements of 1-4 hours



*Floor-Mounted

GB-L (EU) & GB-L PRO (EU)

Technical Data



Main Parameters						
Model		GB-L				
Battery Type		LiFePO ₄				
Battery Module Energy (kWh)		4.09				
Battery Module Nominal Voltage (V)		102.4				
Battery Module Capacity (Ah)		40				
Battery System Model		GB-L8	GB-L12	GB-L16	GB-L20	GB-L24
Battery Module Qty In Series (Optional)		2	3	4	5	6
System Nominal Voltage (V)		204.8	307.2	409.6	512	614.4
System Operating Voltage (V)		166.4~700				
System Energy (kWh)		8.18	12.27	16.36	20.45	24.54
System Usable Energy (kWh)		7.36	11.04	14.72	18.4	22.08
Charge / Discharge Current (A) ^[2]	Recommend	20				
	Max.	40				
	Peak (25°C)	50				

Other Parameters						
Operating Temperature (°C)		Charge:0~55/Discharge:-20~60				
Storage Temperature (°C)		0~35				
Communication Port		CAN2.0, RS485				
Humidity		5%~90%				
Altitude		≤2000m				
IP Rating of Enclosure		IP65				
System Dimension (W x H x D, mm)	540 × 385 ×	540 × 385 ×	540 × 385 ×	540 × 385 ×	540 × 385 ×	
	650	870	1090	1310	1530	
System Weight Approximate (kg)	97	136	175	214	253	
LCD Display		SOC%, Power, Total Voltage				
Installation Location		Floor-Mounted				
Recommend Depth of Discharge		0.9				
Cycle Life		25+2°C,0.5C/0.5C,EOL70%≥6000				
Warranty Period		10 years				
Certification		CE / IEC 62619 / VDE 2510-50 / UN38.3				

Inverter	1h	2h	3h	4h
SUN-5K-SG01HP3-EU-AM2	X2	X3	X4	X5
SUN-6K-SG01HP3-EU-AM2	X2	X3	X5	X6
SUN-8K-SG01HP3-EU-AM2	X3	X4	X6	/
SUN-10K-SG01HP3-EU-AM2	X4	X5	/	/
SUN-12K-SG01HP3-EU-AM2	X5	X6	/	/
SUN-15K-SG01HP3-EU-AM2	X5	/	/	/
SUN-20K-SG01HP3-EU-AM2	X6	/	/	/

Main Parameters						
Model		GB-L PRO				
Cell chemistry		LiFePO ₄				
Module model		GB-L-PRO				
Module Energy (kWh)		4				
Module Nominal Voltage (V)		102.4				
Module Capacity (Ah)		40				
Battery System Model		GB-L8 PRO	GB-L12 PRO	GB-L16 PRO	GB-L20 PRO	GB-L24 PRO
Battery Module Qty in Series (Optional)		2	3	4	5	6
System Nominal Voltage (V)		204.8	307.2	409.6	512	614.4
System operating Voltage (V)		166.4~700				
System Energy (kWh)		8	12	16	20	24
System Usable Energy (kWh)		7.2	10.8	14.4	18	21.6
Charge / Discharge Current (A) ^[2]	Recommend	20				
	Max.	40				
	Peak (25°C)	50				

Other Parameters						
Working Temperature (°C)		Charge : -20~55/Discharge: -20~55				
LCD Display		SOC%, Power, Total Voltage				
Communication Port		CAN2.0,RS485				
Humidity		5%~90%				
Altitude		≤2000m				
IP Rating of Enclosure		IP65				
Storage Temperature (°C)		0~35				
Dimension (W × H × D, mm)	540 × 385 ×	540 × 385 ×	540 × 385 ×	540 × 385 ×	540 × 385 ×	
	650	870	1090	1310	1530	
Weight (kg)	97	136	175	214	253	
Installation Location		Floor-Mounted				
Recommend Depth of Discharge		0.9				
Cycle Life		25+2°C,0.5C/0.5C,EOL70%≥6000				
Warranty Period		10 years				
Certification		CE / IEC 62619 / VDE 2510-50 / UN38.3				

Inverter	1h	2h	3h	4h
SUN-5K-SG01HP3-EU-AM2	X2	X3	X4	X5
SUN-6K-SG01HP3-EU-AM2	X2	X3	X5	X6
SUN-8K-SG01HP3-EU-AM2	X3	X4	X6	/
SUN-10K-SG01HP3-EU-AM2	X4	X5	/	/
SUN-12K-SG01HP3-EU-AM2	X5	X6	/	/
SUN-15K-SG01HP3-EU-AM2	X5	/	/	/
SUN-20K-SG01HP3-EU-AM2	X6	/	/	/

*Floor-Mounted

Summer Series
Residential ESS Solution

All-in-One ESS(HV)

GB-SL (EU)



Exceptional Performance

- All-in-One design
- Beautiful appearance and scene integration
- 100% unbalanced output, each phase
- Max. output up to 60% rated power



Smarter

- Temperature detection of key parts, cell, power plug-in, etc.
- Optional heating function for low-temperature applications



Enhanced Reliability

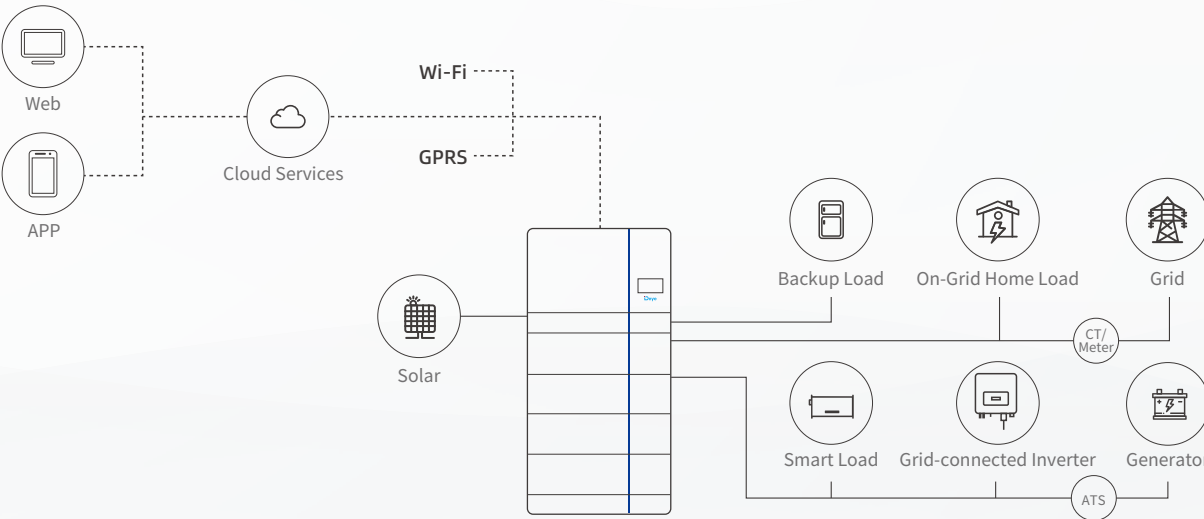
- ≥6000 Cycles, 70%EOL
- Wide temperature range: -20°C ~ 60°C
- IP65-rated for indoor and outdoor use
- Support storing energy from diesel generator



More Flexible

- Max. 10 pcs parallel for on-grid and off-grid operation
- Modules are connected in series without cable connection, and high-voltage platform improves system efficiency

System Application Topology Diagram



*Floor-Mounted

GB-SL (EU)

Technical Data



Battery Technical Specification							
Main Parameters							
Battery Type		LiFePO ₄					
Battery Module Energy (kWh)		4.09					
Battery Module Nominal Voltage (V)		102.4					
Battery Module Capacity (Ah)		40					
Battery Module Qty in Series (Optional)		2	3	4	5	6	
Scalability		204.8	307.2	409.6	512	614.4	
System Operating Voltage (V)		179.2~691.2					
System Energy (kWh)		8.18	12.27	16.36	20.45	24.54	
System Usable Energy (kWh)		7.36	11.04	14.72	18.4	22.08	
Charge / Discharge	Recommend	20					
	Max.	40					
	Peak (25°C)	50@2min					
Other Parameters							
Operating Temperature (°C)		Charge : 0-55 / Discharge : -20-60					
Thermal Management		Natural Cooling					
Communication Port		CAN2.0 / RS485					
Humidity		5 ~ 85%RH					
Altitude		≤ 2000					
IP Rating of Enclosure		IP65					
Noise (dB)		< 55					
Module Dimension (W × H × D, mm)	540 × 385 ×	540 × 385 ×	540 × 385 ×	540 × 385 ×	540 × 385 ×		
	1100	1320	1540	1760	1980		
Module Weight Approximate (kg)		137	176	215	254	293	
Installation Location		Floor-Mounted					
Recommend Depth of Discharge		90%					
Cycle Life		25 ±2°C, 0.5C / 0.5C, 70%EOL ≥ 6000					
Warranty Period		10 years					
Certification		CE / IEC 62619 / VDE 2510-50 / UN38.3					
Inverter Technical Specification							
Inverter Model	GB-S5K	GB-S6K	GB-S8K	GB-S10K	GB-S12K	GB-S15K	GB-S20K
Efficiency							
Max. Efficiency		97.6%					
Euro Efficiency		97%					
MPPT Efficiency		99%					
Protection							
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge protection						
	Output Over Voltage Protection						
Output Over Voltage Protection		DC Type II / AC Type III					
Certifications and standards		CEI 0-21, VDE-AR-N 4105, NRS 097, IEC 62116, IEC 61727, G99, G98					
Grid Regulation		VDE 0126-1-1, RD 1699, C10-11					
Safety EMC /standard		IEC / EN 61000-6-1 / 2 / 3 / 4, IEC / EN 62109-1, IEC / EN 62109-2					
General Data							
Operating Temperature Range (°C)		-40 ~ 60°C, >45°C derating					
Cooling	Free cooling	Smart cooling					
Communication With BMS		RS485; CAN					
Warranty Period		5 years					

Inverter Technical Specification							
Inverter Model	GB-S5K	GB-S6K	GB-S8K	GB-S10K	GB-S12K	GB-S15K	GB-S20K
Main Parameters							
Battery Type	LI-ION						
Battery Voltage Range (V)	160 ~ 700						
Max. Charging Current (A)	30		37				
Max. Discharging Current (A)	30		37				
Number of Battery Input	1						
Charging Strategy for Li-Ion Battery	Self-adaption to BMS						
PV String Input Data							
Start Up Dc Voltage (Vdc)	150						
Max. DC input Power (W)	6500	7800	10400	13000	15600	19500	26000
Max. Dc Input Voltage (V)	1000						
MPPT Range (V)	150~850						
Full Load Dc Voltage Range (V)	195~850	195~850	260~850	325~850	340~850	420~850	500~850
Rated Dc Input Voltage (V)	600						
PV Input Current (A)	20+20				26+20		26+26
Max.PV ISC (A)	30+30				39+30		39+39
Number of MPP Trackers	2						
Number of Strings Per MPP Tracker	1+1				2+1		2+2
AC Output Data							
Rated Ac Output and UPs Power (W)	5000	6000	8000	10000	12000	15000	20000
Max. Ac Output Power (W)	5500	6600	8800	11000	13200	16500	22000
AC Output Rated Current (A)	7.6 / 7.3	9.1 / 8.7	12.2 / 11.6	15.2 / 14.5	18.2 / 17.4	22.8 / 21.8	30.4 / 29
Max. Ac Output (off-gird) Current (A)	8.4 / 8	10 / 9.6	13.4 / 12.8	16.7 / 16	20 / 19.2	25 / 24	33.4 / 31.9
Max. Three-phase Unbalanced output Current (A)	13	13	18	22	25	30	35
Max. Continuous AC Pass Through (A)	40				80		
Peak Power (off grid)	1.5 times of rated power, 10s						
Generator input / Smart Load / AC Couple Current (A)	7.6 / 40 / 7.6	9.1 / 40 / 9.1	12.2 / 40 / 12.2	15.2 / 40 / 15.2	18.2 / 80 / 18.2	22.8 / 80 / 22.8	30.4 / 80 / 30.4
Power Factor	0.8 leading to 0.8 lagging						
Output Frequency and Voltage	50 / 60Hz; 3L / N / PE 220 / 380, 230 / 400Vac						
Grid Type	Three Phase						
DC Injection Current (mA)	<0.5%In						

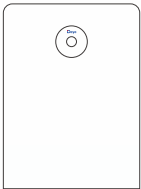
*Floor-Mounted



Summer Series
Residential ESS Solution

Wall-Mounted Battery (HV)

SS-F5.0 (EU) SS-F10.0 (EU)
Technical Data



Main Parameters

Model	SS-F5.0	SS-F10.0
Cell Chemistry	LiFePO ₄	
Battery System Capacity (Ah)	20Ah	
Battery System Nominal Voltage (Vdc)	256	512
Battery System Operating Voltage (Vdc)	224 ~ 292	448 ~ 584
Discharge / charge current (A)	Recommend	10
	Max.	20

Other Parameters

Ambient operating Temperature (°C)	Charge / Discharge : -20 ~ 55	
Status Indicator	SOC Fault Code	
Communication Port	CAN2.0 / RS485	
Humidity	0% ~ 100%RH	
Altitude	3000m	
IP Rating of Enclosure	IP65	
Dimension (W × D × H, mm)	474 × 200 × 646	870 × 200 × 646
Weight Approximate (kg)	45	85
Installation Location	Wall Mounted, Floor-Mounted	
Recommend storage Temperature (°C)	0 ~ 35	
Recommend Depth of Discharge	90%	
Cycle Life	25±2°C, 0.5C / 0.5C, EOL70%≥6000	
Warranty Period	10 years	
Certification	UN38.3, IEC, VED, CEI	



Cell to Pack design

- No module design, integrated design from battery cell to battery pack



Control integration design

- No control box design, integrated design of power circuit and BMS



Lightweight

- Plastic box replaces sheet metal shell, energy weight density increased by 14%



Simple operation and maintenance

- MC4 quick-connect terminals are used for easy electrical installation; visual fault code, local diagnosis of core faults, and remote real-time monitoring



Excellent performance

- No less than 6 units in parallel, minimum power can reach 60kWh
- Maximum 0.15A balanced current, balancing capacity increased by 3 times
- Battery DC side arc detection



Exquisite appearance

- Brushed metal panel, LCD display

Summer Series
Indoor C&I ESS Solution

Rack-Mounted Battery (HV)



Intelligent Control

- Peak-valley mgmt, anti-backflow, overload protection
- Load tracking, demand control, backup power, phase separation



Scalable

- Support up to 20 units in parallel, maximum 2MW/4.3MWh



Multi-Fusion

- Integrated EMS, PCS, and BMS
- Support expansion of MPPT module
- Support off-grid backup



Reliable

- Operating temp : -20°C to 55°C
- Operate up to 3000m altitude
- 11x overload capacity
- Balancing solutions extend battery life
- Triple auxiliary power design for stable supply



Easy Maintenance

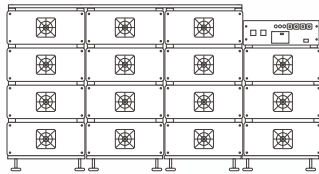
- 5U Standard Chassis
- User Interface & Bluetooth App
- USB & Cloud Upgrades
- TCP Protocol for EMS
- Fault Signal Input Support



Safer

- LFP batteries
- Support aerosol fire extinguishing

BOS-B (AS, AF, LATAM, EU, AU)
Technical Data



Main Parameters

Battery Module Energy (kWh)		14.3
Battery Module Nominal Voltage (V)		51.2
Battery Module Capacity (Ah)		280
Module Weight Approximate (kg)		122
Battery Module Qty In Series (Optional)		15
Scalability		5 ~ 15
System Nominal Voltage (V)		768
System Energy (kWh)		214.5
System Usable Energy (kWh)		193.05
Charge / Discharge	Recommend	140
Current (A)	Max.	168

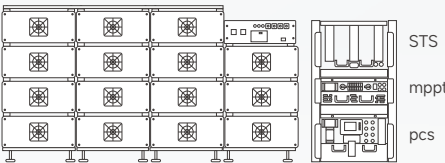
Other Parameters

Operating Temperature (°C)	discharge : -20 ~ 55	charge : 0 ~ 55
Storage Temperature (°C)	0 ~ 35	
Thermal Management	Smart fan cooling	
LCD Display	SOC / Fault Code	
Status Indicator	Yellow : Battery High Voltage Power On Red : Battery System Alarm	
Communication Port	TCP / RS485 / CAN	
Communication With BMS	CAN	
Humidity	5% ~ 85%	
Altitude	≤3000m	
IP Rating of Enclosure	IP20	
Noise (dB)	TBD	
System Dimension (W × H × D, mm)	2150 × 1136 × 800	
System Weight Approximate (kg)	1850	
Installation Location	Rack Mounted	
Recommend Depth of Discharge	90%	
Cycle Life	25±2°C, 0.5C / 0.5C, EOL70%≥6000	
Warranty Period	10 years	
Certification	CE / IEC62619 / IEC62040 / UN38.3 / CEC	

Backup Power Duration Plan

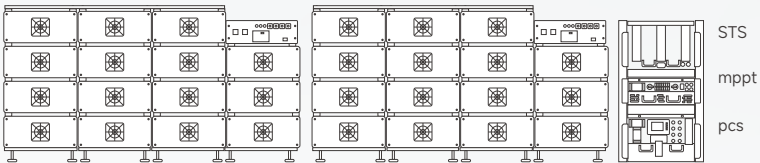
	2 hours	4 hours
Hybrid inverter power	100kW	100kW
Battery model	BOS-B 215kWh	BOS-B 215kWh × 2

BOS-B 215kWh



2 hours

BOS-B 215kWh



4 hours

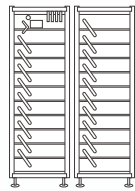
Summer Series
Small-Scale C&I ESS Solution

Rack-Mounted Battery (HV)



BOS-A (NA, AS, AF, LATAM, EU)

Technical Data



Main Parameters

Cell Chemistry	LiFePO ₄		
Module Energy (kWh)	7.68		
Module Nominal Voltage (V)	38.4		
Module Capacity (Ah)	200		
Module Dimension (W × D × H, mm)	601.5 × 520 × 135		
Module Weight Approximate (kg)	70		
Battery Module Qty In Series (Optional)	7	13	21
System Nominal Voltage (V)	268.8	499.2	806.4
System Operating Voltage (V)	235.2 ~ 306.6	436.8 ~ 569.4	705.6 ~ 919.8
System Energy (kWh)	53.76	99.84	161.28
System Usable Energy (kWh) ¹	48.38	89.85	145.15
Charge / Discharge	Recommend	100	
Current (A) ^[2]	Max.	160	

Other Parameters

Working Temperature (°C)	Charge : 0 ~ 55 / Discharge : -20 ~ 55		
Status Indicator	Yellow : Battery High Voltage Power On Red : Battery System Alarm		
Communication Port	CAN2.0		
Humidity	5% ~ 85%RH		
Altitude	≤3000m		
IP Rating of Enclosure	IP20		
Dimension (W × D × H, mm)	610 × 610 × 1900	610 × 610 × 2350	(610 × 610 × 1900) × 2
Weight Approximate (kg)	558	985	1586
Installation Location	Rack-Mounted		
Storage Temperature (°C)	0 ~ 35		
Recommend Depth of Discharge	90%		
Cycle Life	≥6000 (25±2°C, 0.5C / 0.5C, EOL70%)		
Warranty Period	10 years		
Certification	CUN38.3, IEC, VDE, UL1973, UL9540A, FCC, UL9540		

Inverter	1h	2h	3h	4h
SUN-30K-SG01HP3-EU-BM3	/	X8	X12	X16
SUN-40K-SG01HP3-EU-BM4	/	X11	X16	X11 X2
SUN-50K-SG01HP3-EU-BM4	/	X13	/	X13 X2
SUN-60K-SG02HP3-EU-EM4	/	X16	X12 X2	X16 X2
SUN-80K-SG02HP3-EU-EM6	/	X21	X16 X2	X21 X2

1. DC Usable Energy, test conditions : 90%DOD, 0.3C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.
2. The current is affected by temperature and SOC.



Safe and Reliable

- Intelligent BMS
- Firefighting module
- Dual electrode disconnection design
- Support up to 160A current output



Flexible Expansion

- Support 7 ~ 21 packs
- Inverter 50 ~ 100kW, Battery 54 ~ 161kWh
- Easy capacity expansion and save more budget



Smart Operation

- Cloud-based monitoring
- Keep track of the operating status
- Intelligent strategy control
- Effectively saving on electricity bill



Intelligent Control

- Protection against over-discharge, over-charge, over-current and extreme temperatures
- Automatically manage charge / discharge
- States and balances cell current voltage
- Uploading of battery data via TCP protocol



Easy Installation

- 3U rack embedded design
- A concise data display interface
- Multiple battery modules can be in parallel for expanding
- Dual power output plugins, each supports 100A
- Connectable to two inverter DC interfaces
- USB, Bluetooth connection



Long Service Life

- 10-year warranty
- 6000 cycles

Summer Series
Small-Scale C&I ESS Solution

Rack-Mounted Battery (HV)



Intelligent Functions

- Protection functions against over-discharge, over-charge, over-current, over-high or low temperature
- Automatically manage charge/discharge and balance current/voltage
- Less self-discharge, up to 6 months without charging it on shelf
- No memory effect, excellent performance of shallow charge and discharge



Convenient

- 19-inch embedded design
- Support USB and Wi-Fi upgrade(optional)
- Support remotely monitoring and upgrade
- Multiple battery modules can be in parallel



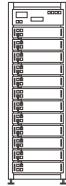
Safe and Reliable

- LFP Battery: safety, long lifespan and high-energy density
- The module is non-toxic, non-polluting, and eco-friendly
- Working temperature: -20°C ~ 55°C

1. DC Usable Energy, test conditions : 90% DOD, 0.3C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.
2. The current is affected by temperature and SOC.

BOS-GH/BOS-GL(JP,NA)

Technical Data



Main Parameters

Model	BOS-GL60	BOS-GH40	BOS-GH60
Cell Chemistry	LiFePO ₄		
Module Energy (kWh)	5.12		
Module Nominal Voltage (V)	51.2		
Module Capacity (Ah)	100		
Battery Module Qty In Series (Optional)	6	8	12
System Nominal Voltage (V)	307.2	409.6	614.4
System Operating Voltage (V)	240 ~ 350.4	320 ~ 467.2	480 ~ 700.8
System Energy (kWh)	61.44	40.96	61.44
System Usable Energy (kWh)	55.29	36.86	55.29
Charge / Discharge ²	Recommend	50	
Current (A)	Max.	100	
	Peak Discharge (2 mins, 25°C)	125	

DC Technical Specification

Working Temperature (°C)	Charge : 0 ~ 55 / Discharge : -20 ~ 55		
Status Indicator	Yellow : Battery High Voltage Power On Red : Battery System Alarm		
Communication Port	CAN2.0 / RS485		
Humidity	5% ~ 85%RH		
Altitude	≤2000m		
IP Rating of Enclosure	IP20		
Dimension (W × D × H, mm)	530 × 667 × 2187	530 × 667 × 1629	530 × 667 × 2187
Weight Approximate (kg)	75+45 × 12+20=635kg	53+45 × 8+20=433kg	75+45 × 12+20=635kg
Installation Location	Rack Mounting		
Storage Temperature (°C)	0 ~ 35		
Recommend Depth of Discharge	90%		
Cycle Life	25±2°C, 0.5C / 0.5C, EOL70%≥6000		
Warranty Period	10 years		
Certification	UL1973 / UL9540A / UN38.3 / UL9540 / FCC		

Backup Power Duration Plan

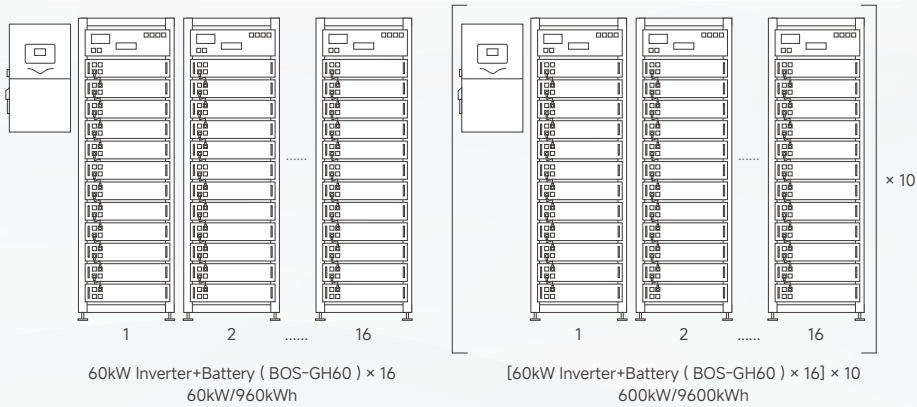
	1 hour		2 hours	
Hybrid inverter power	30kW	60kW	60kW	30kW
Battery model	BOS-GH40	BOS-GH60	BOS-GH60	BOS-GL60
Number of batteries	1 pc	1 pc	2 pcs	1 pcs

BOS-GH60 | Minimum 4 battery packs connected in series, maximum 12 batteries

Battery Module Number	BOS-G20	BOS-G25	BOS-G30	BOS-G35	BOS-G40	BOS-G45	BOS-G50	BOS-G55	BOS-G60
Battery Module Qty In Series (Optional)	4	5	6	7	8	9	10	11	12
System Energy (kWh)	20.48	25.6	30.72	35.84	40.96	46.08	51.2	56.32	61.44

Supports up to 16 battery clusters in parallel

Supports up to 10 AC inverters in parallel



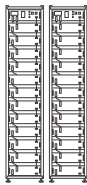
Summer Series
Small-Scale C&I ESS Solution

Rack-Mounted Battery (HV)



BOS-G (AU)

Technical Data



Main Parameters

Cell Chemistry	LiFePO ₄									
Module Energy (kWh)	5.12									
Module Nominal Voltage (V)	51.2									
Module Capacity (Ah)	100									
Battery Module Number	BOS-G15	BOS-G20	BOS-G25	BOS-G30	BOS-G35	BOS-G40	BOS-G45	BOS-G50	BOS-G55	BOS-G60
Battery Module Qty In Series (Optional)	3	4	5	6	7	8	9	10	11	12
System Nominal Voltage (V)	153.6	204.8	256	307.2	358.4	409.6	460.8	512	563.2	614.4
System Operating Voltage (V)	124.8~175.2	166.4~233.6	208~292	249.6~350.4	291.2~408.8	332.8~467.2	374.4~525.6	416~584	457.6~642.4	499.2~700
System Energy (kWh)	15.36	20.48	25.6	30.72	35.84	40.96	46.08	51.2	56.32	61.44
System Usable Energy (kWh)	13.82	18.43	23.04	27.64	32.25	36.86	41.47	46.08	50.68	55.29
Rted DC Power	15.36	20.48	25.6	30.72	35.84	40.96	46.08	51.2	56.32	61.44
Charge / Discharge ¹	Recommend	50								
Current (A)	Max.	100								
	Peak Discharge (2 mins, 25°C)	125								
Working Temperature (°C)	Charge : 0 ~ 55 / Discharge : -20~55									
Status Indicator	Yellow : Battery High Voltage Power On Red : Battery System Alarm									
Communication Port	CAN2.0 / RS485									
Humidity	5% ~ 85%RH									
Altitude	≤2000m									
IP Rating of Enclosure	IP20									
Dimension (W × D × H, mm)	530 × 602 × 1629					530 × 602 × 2187				
Weight Approximate (kg)	388					562				
Installation Location	Rack Mounting									
Storage Temperature (°C)	0 ~ 35									
Recommend Depth of Discharge	90%									
Cycle Life	25±2°C, 0.5C/0.5C, EOL70%≥6000									
Warranty Period	10 years									
Certification	UN38.3, IEC, CEC									

1. The current is affected by temperature and SOC.



Intelligent Control

- Over-discharge/charge/current protection
- Over-high or low temperature protection



Flexible Expansion

- Support 3 ~ 12 packs in series



High-Efficiency Use

- Low self-discharge for 6 months
- No memory effect



19-Inch Embedded Design

- Comfortable for installation



Upgrade Options

- Support USB and Wi-Fi (optional) upgrades
- Support remote upgrades



Battery Protection

- Auto charge and discharge
- Cell voltage balancing

Summer Series
Small-Scale C&I ESS Solution

Rack-Mounted Battery (HV)



Safer

- LFP Battery: safety, long lifespan and high-energy density
- Built-in intelligent BMS, providing complete protection
- Protection functions against over-discharge, over-charge, over-current, over-high or low temperature



Exceptional Performance

- Automatically manage charge/discharge and balance current/voltage
- Less self-discharge, up to 6 months without charging on shelf
- No memory effect, performs well with shallow charges and discharges
- Peak discharge current of 125A 2mins



More Flexible

- Multiple battery modules can be in parallel
- Support 5~17 packs in series



Enhanced Reliability

- ≥6000 Cycles, 70%EOL
- 10 years warranty for long-term peace of mind
- Wide temperature range: -20°C~55°C
- IP20-rated for indoor environments

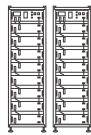


Smarter

- Support remotely monitoring and upgrade
- Support USB and Wi-Fi (optional) upgrade

BOS-G PRO (EU, SA)

Technical Data



Main Parameters

Cell Chemistry	LiFePO ₄			
Module Energy (kWh)	5.12			
Module Nominal Voltage (V)	51.2			
Module Capacity (Ah)	100			
Battery Module Number	BOS-G25 Pro	BOS-G40 Pro	BOS-G60 Pro	BOS-G80 Pro
Battery Module Qty In Series (Optional)	5 (Min)	8	12	16
System Nominal Voltage (V)	256	409.6	614.4	819.2
System Operating Voltage (V)	220~292	352~467.2	528~700.8	704~934.4
System Energy (kWh)	25.6	40.96	61.44	81.92
System Usable Energy (kWh)	23.04	36.86	55.3	73.73
Rated DC Power	25.6	40.96	61.44	81.92
Charge / Discharge	Recommend	50		
Current (A)	Max.	100		
	Peak Discharge (2 mins, 25°C)	125		

Other Parameters

Operating Temperature (°C)	Charge : 0 ~ 55 / Discharge : -20 ~ 55			
Status Indicator	Yellow : Battery High Voltage Power On Red : Battery System Alarm			
Communication Port	CAN2.0 / RS485			
Humidity	5% ~ 85%RH			
Altitude	≤3000m			
IP Rating of Enclosure	IP20			
System Dimension (W x D x H,mm)	530 × 602 × 1629		530 × 602 × 2219	1060 × 602 × 1629
System Weight Approximate (kg)	290	428	622	837
Installation Location	Rack Mounting			
Storage Temperature(°C)	0 ~ 35			
Recommend Depth of Discharge	90%			
Cycle Life	25±2°C, 0.5C / 0.5C, EOL70%≥6000			
Warranty Period	10 years			
Certification	UN38.3, IEC, VDE, CEC			

Inverter	1h	2h	3h	4h
SUN-30K-SG01HP3-EU-BM3	X6	X12	X9 X2	X12 X2
SUN-40K-SG01HP3-EU-BM4	X8	X8 X2	X12 X2	X11 X3
SUN-50K-SG01HP3-EU-BM4	X10	X10 X2	X10 X3	X10 X4
SUN-60K-SG02HP3-EU-EM4	X12	X12 X2	X12 X3	X16 X3
SUN-80K-SG02HP3-EU-EM6	X16	X16 X2	X16 X3	X16 X4

Summer Series
Small-Scale C&I ESS Solution

Rack-Mounted Battery (HV)



Safe and Reliable

- LFP Battery : Safe, long-lasting, high-efficiency
- Less self-discharge, up to 6 months without charging
- No memory effect, excellent with shallow charge and discharge



Excellent Performance

- Working temperature range : -20°C ~ 55°C
- Excellent discharge performance and cycle life



Smarter

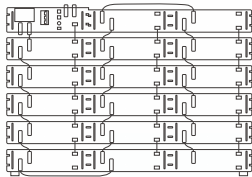
- Protect against over-discharge, over-charge, over-current, and extreme temperatures
- Automatically manage charge, discharge, and cell balancing



Flexible

- Multiple battery modules can be in parallel
- Support USB and remote upgrades (Compatible with Deye inverter)

BOS-W (AS, AF, LATAM)
Technical Data



Main Parameters

Cell Chemistry	LiFePO ₄			
Module Energy (kWh)	5.12			
Module Nominal Voltage (V)	51.2			
Module Capacity (Ah)	100			
Battery Module Number	BOS-W25	BOS-W40	BOS-W60	BOS-W80
Battery Module Qty In Series (Optional)	5 (Min)	8	12	16
System Nominal Voltage (V)	256	409.6	614.4	819.2
System Operating Voltage (V)	220 ~ 292	352 ~ 467.2	528 ~ 700.8	704 ~ 934.4
System Energy (kWh)	25.6	40.96	61.44	81.92
System Usable Energy (kWh) ¹	23.04	36.86	55.3	73.73
Rated DC Power	25.6	40.96	55.3	81.92
Charge / Discharge Current (A) ^[2]	Recommend	50		
	Max.	100		
	Peak (25°C)	125		

Other Parameters

Working Temperature (°C)	Charge : 0 ~ 55 / Discharge : -20 ~ 55			
Status Indicator	Yellow : Battery High Voltage Power On Red : Battery System Alarm			
Communication Port	CAN2.0 / RS485			
Humidity	5% ~ 85%RH			
Altitude	≤3000m			
IP Rating of Enclosure	IP20			
Weight Approximate (kg)	249	387	571	755
Installation Location	Rack Mounting			
Storage Temperature (°C)	0 ~ 35			
Recommend Depth of Discharge	90%			
Cycle Life	25±2°C, 0.5C / 0.5C, EOL70%≥6000			
Warranty Period	5 years			
Certification	UN38.3			

Typical Application Solutions

16 × W60+50kW Inverter	Maximum support for 16 racks of batteries in parallel
(16 × W60+50kW Inverter) × 10	Maximum support for 10 inverters in AC parallel opeartion
16 × W80+80kW Inverter	Maximum support for 16 racks of batteries in parallel
(16 × W80+80kW Inverter) × 10	Maximum support for 10 inverters in AC parallel opeartion

1. DC Usable Energy, test conditions : 90% DOD, 0.3C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.
2. The current is affected by temperature and SOC.
3. Made in China.

Summer Series

Small-Scale C&I ESS Solution

Small-Scale C&I Battery Cabinet



Safety Protection

- Lithium iron phosphate LFP batteries, battery packs and
- Systems all use aerosol fire suppression solutions



Integrated Technology

- EMS, hybrid inverter and BMS integration technology
- Power supply redundancy design
- Support for black start function, off-grid operation



Total Protection

- Combustible gas, smoke and temperature detection
- System active exhaust and fire alarm



Flexible Extension

- Support battery expansion a maximum capacity of
- 3600kWh(Off-grid)

GE-F60 (NA, AS, AF, LATAM, EU, AU)

Technical Data



Main Parameters

Cell Chemistry		LiFePO ₄
Module Energy (kWh)		5.12
Module Nominal Voltage (V)		51.2
Module Capacity (Ah)		100
Battery Module Qty In Series		12
System Nominal Voltage (V)		614.4
System Operating Voltage (V)		480 ~ 700
System Energy (kWh)		61.44
System Usable Energy (kWh) ¹		55.29
Rated DC Power		61.44
Charge / Discharge ²	Recommend	50
	Max.	100
	Peak Discharge (2 mins, 25°C)	125

Other Parameters

Status Indicator	Yellow : Battery High Voltage Power On	Red : Battery System Alarm
Communication Port	CAN2.0 / RS485	
Humidity	5% ~ 85%RH	
Altitude	≤2000m	
IP Rating of Enclosure	IP55	
Dimension (W × D × H, mm)	783 × 1059 × 2235	
Weight Approximate (kg)	1070	
Installation Method	Floor-Mounted	
Storage Temperature (°C)	0 ~ 35	
Operating Temperature (°C)	-30 ~ 60 (> 45 derating)	
Recommend Depth of Discharge	90%	
Cycle Life	≥6000 (25±2°C, 0.5C / 0.5C, EOL70%)	
Warranty Period	10 years	
Certification	UN38.3, IEC, VDE, CEI, CEC, FCC, UL1973, UL9540A, UL9540	

Typical Application Solutions

6 × F60+50kW Inverter	Maximum 6 DC parallel-connected units	Up to : 50kW / 360kWh
(6 × F60+50kW Inverter) × 10	Maximum 10 groups AC parallel	Up to : 500kW / 3600kWh
(F60+50kW Inverter) × 10	Maximum 10 groups AC parallel	Up to : 500kW / 600kWh
10 × F120	30kW/ 50kW Inverter selectable	Up to : 500kW / 1200kWh
F120+4 × F60	1+4 Combined DC Expansion	Up to : 50kW / 360kWh
(F120+4 × F60) × 10	Maximum 10 groups AC parallel	Up to : 500kW / 3600kWh

1. DC Usable Energy, test conditions : 90% DOD, 0.3C charge & discharge at 25°C. System usable energy may vary due to system configuration parameters.

2. The current is affected by temperature and SOC.

3. Made in China.

Summer Series
Small-Scale C&I ESS Solution

Small-Scale C&I ESS



Protection

- Combustible gas, smoke and temperature detection
- System active exhaust and fire alarm
- Battery pack and system use aerosol fire suppression



Multi-Fusion

- All-in-One design
- EMS, hybrid inverter and BMS integrated technology
- Support black start function and off-grid operation
- Power supply redundancy design



Enhanced Reliability

- Maximum battery temperature $\leq 35^{\circ}\text{C}$ at rated power
- IP55-rated for outdoor use
- Wide temperature range: $-20^{\circ}\text{C} \sim 55^{\circ}\text{C}$



Flexible

- F120 supports the integration of 30/40/50kW inverters
- Support expansion a maximum capacity of 3600kWh

GE-F120-2H2/4/6 (NA, AU, EU)

Technical Data



System Specification

Model	GE-F120-4H2	GE-F120-3H2	GE-F120-2H2
Main Parameters			
Nominal Output Power / UPS Power (W)	30000	40000	50000
AC Output Frequency and Voltage	50 / 60Hz ; 220 / 380, 230 / 400Vac		
Grid Type	3L / N / PE		
Number of Parallel (Off-grid)	10		
Energy Configuration (kWh)	122.8		
Dimension (W × D × H, mm)	1780 × 1056 × 2235		
Weight Approximate (kg)	2090		
AC Output Rated Current (A)	45	60	75.8
Battery Operating Voltage (V)	500 ~ 700		
Max. RTE	89%		
Battery Chemistry	LiFePO ₄		
IP Rating of Enclosure	IP55		
Installation Method	Floor-Mounted		
Storage Temperature (°C)	0 ~ 35		
Operating Temperature (°C)	-20 ~ 55 (> 43 derating)		
Warranty Period	10 years		

Inverter Technical Specification

Max. PV Input Power (W)	39000	52000	65000
Max. PV Input Current (A)	36+36+36	36+36+36+36	36+36+36+36
Rated PV Input Voltage (Vdc)	600		
Start Up DC Voltage (Vdc)	180		
MPPT Voltage Range (Vdc)	150-850		
Max. PV Short-circuit Current (A)	55+55+55	55+55+55+55	55+55+55+55
Number of MPPT	3	4	4
Peak Power (off grid)	1.5 time of rated power, 10s		
Power Factor	0.8 leading to 0.8 lagging		
THD	<3%		
DC Injection current (mA)	<0.5%In		
Display	LCD		
Operating Temperature Range (°C)	-40 ~ 60 (> 45 derating)		
Relative Humidity	15% ~ 85% (No Condensing)		
Dimension (W × D × H, mm)	527 × 294 × 894		
Inverter Communication	CAN, RS485, WIFI, ETH		
Grid Regulation	VDE 4105, IEC 61727 / 62116, VDE 0126, AS 4777.2, CEI 0-21, EN 50549-1, G98, G99, C10-11, UNE 217002, NBR 16149 / NBR 16150		
Max. Efficiency	97.6%		
MPPT Efficiency	99.9%		

Battery Technical Specification

Battery Module Nominal Voltage (V)	51.2
Battery Module Energy (kWh)	5.12
BMS Communication	CAN
Battery Module Dimension (W × D × H mm)	440 × 570 × 133
Battery Module Weight (kg)	44
Cycle Life	≥6000 (@25°C±2°C, 0.5C / 0.5C, 70%EOL)
Battery Module Certification	UN38.3, IEC 62619, IEC 61000, VED, CEI, FCC, UL1973, UL9540, UL9540A

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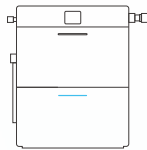
Autumn Series
Balcony ESS Solution

Balcony ESS



SUN-BK100-2.0KWH-EU-AM2 & AE-F2.0 (EU)

Technical Data



Main Parameter

Model	SUN-BK100-2.0KWH-EU-AM2	AE-F2.0
Nominal input / Output Power / UPS Power	1000/1000W	/
AC Input / Output Frequency and Voltage	50Hz (45Hz~55Hz), 60Hz (55Hz~ 65Hz) L/N (PE), 220 / 230 Vac	/
Grid Type	Single phase	/
Rated Grid input / Output Current	4.6A / 4.4A	/
Max. Grid Input / Output Current	5.0A / 4.8A	/
Peak Power (off-grid)	2 times of rated power, 10s	/
Power Factor Adjustment Range	0.8 leading to 0.8 lagging	/
Max. bypass Grid to Load	10A	/
DC Injection Current	THD<3% (Linear load<1.5%) mA	/

DC Technical Specification

Model	SUN-BK100-2.0KWH-EU-AM2	AE-F2.0
Max. PV Access Power (W)	2200W	/
Max. PV Input Power	1600W	/
Max. PV Input Voltage (V)	60V	/
Start-up Voltage (V)	25	/
MPPT voltage range (V)	20 ~ 55	/
Full Load MPPT Voltage Range (V)	30 ~ 55	/
Rated PV Input Voltage (V)	42.5V	/
Max.Input Short-Circuit Current (A)	27+27A	/
Max. Operating PV Input Current (A)	18+18A	/
No.of MPP Trackers / No.of Strings per MPP Tracker	2 / 1	/
Battery Chemistry	LiFePO ₄	
Battery Nominal Voltage	51.2V	
Battery Nominal Energy	2000Wh	
Battery Operating Voltage	44.8V ~ 57.6V	
Battery Cycle Life	≥6000(@25°C ± 2°C, 0.5C/0.5C, 70%EOL)	
Parallel Capability	Supports up to 4 AE-F2.0 Smart Extra Batteries up to 10kWh	5pcs

Other Technical Specification

Model	SUN-BK100-2.0KWH-EU-AM2	AE-F2.0
Display	Colorful Touch LCD & APP & Battery LED (SOC, Alarm)	
Communication interfaces	Wi-Fi, Bluetooth	CAN2.0, LORa
Dimension (W x D x H)	450 x 210 x 321 mm	450 x 210 x 244 mm
Weight Approximate (kg)	26	20
Operating Temperature Range	-10°C ~ 50°C	
Max. Operating Altitude	2000m	
Relative Humidity	0% ~ 95% (No Condensing)	
Safety EMC / Standard	IEC 62619,UN38.3, IEC / EN 62109-1 IEC/EN 62109-2,IEC / EN 61000-6-1 IEC/EN 61000-6-2,IEC / EN 61000-6-3 IEC / EN 61000-6-4	/
Grid Regulation	VDE 4105,EC 61727 / 62116,VDE 0126, AS 4777.2,CEI 0-21,EN 50549-1, G98,G99,C10-11,UNE 217002, NBR 16149 / NBR 16150	/
Battery Certification	UN38.3,IEC 62619,VED	UN38.3,IEC 62619,VED
Installation Style	Floor-Mounted	
Warranty Period	10 years	10 years



Extreme Weather Adaptability

- Wide Operating
- Temperature: -10°C ~ 50°C



High Protection

- IP65
- Water & Dust Protection



Convenient Charge

- Portable Power with
- USB-A and Type C



Flexible Operation

- Support On-grid and Off-grid Operation



Long Lifespan

- 10-year Warranty
- 6000 Cycles to 70% Capacity



Smart Connection

- Bluetooth, Wi-Fi and Mobile APP

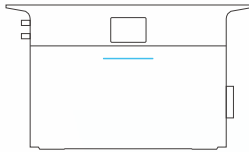
Autumn Series
Balcony ESS Solution

Balcony ESS



SUN-BK160/180/200-2.0KWH-EU-AM2(EU)

Technical Data



Main Parameters

Model	SUN-BK160-2.0KWH-EU-AM2	SUN-BK180-2.0KWH-EU-AM2	SUN-BK180-2.0KWH-EU-AM2
Nominal Input / Output Power / UPS Power	1600 / 1600W	1800 / 1800W	2000 / 2000W
AC Input / Output Frequency and Voltage	50Hz (45Hz~55Hz), 60Hz (55Hz~ 65Hz), L/N (PE), 220 / 230 Vac		
Grid Type	Single phase		
Rated Grid input / Output Current	7.3A / 7.0A	8.2A / 7.9A	9.1A / 8.7A
Max. Grid Input / Output Current	8.0A / 7.7A	9.0A / 8.7A	10.0A / 9.6A
Peak Power (off-grid)	2 times of rated power, 10s		
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Max. bypass Grid to Load	12A		
DC Injection Current	THD<3% (Linear load<1.5%) mA		

PV Technical Specification

Model	SUN-BK160-2.0KWH-EU-AM2	SUN-BK180-2.0KWH-EU-AM2	SUN-BK180-2.0KWH-EU-AM2
Max. PV Access Power (W)	3200W	3600W	4000W
Max. PV Input Power (W)	2560W	2880W	3200W
Max. PV Input Current	32A+32A		
Max. PV Short-Circuit Current	48A+48A		
Rated PV Input Voltage (V)	42.5V (20V ~ 55V)		
Start Up DC Voltage (V)	25Vdc		
MPPT Voltage Range (V)	20 ~ 55V		
Number of MPPT	2		
Battery Chemistry	LiFePO4		
Battery Nominal Voltage	51.2V		
Battery Nominal Energy	2000Wh		
Battery Operating Voltage	40V ~60V		
Battery Cycle Life	≥6000 (@25°C±2°C, 0.5C / 0.5C, 70%EOL)		

Other Technical Specification

Model	SUN-BK160-2.0KWH-EU-AM2	SUN-BK180-2.0KWH-EU-AM2	SUN-BK180-2.0KWH-EU-AM2
Display	Colorful Touch LCD & APP & Battery LED (SOC, Alarm)		
Communication Interfaces	Wi-Fi, Bluetooth, LoRa		
Dimension (W x D x H)	560 × 210 × 331mm		
Operating Temperature Range	-10°C ~ 50°C		
Max. Operating Altitude	2000m		
Relative Humidity	0% ~ 95% (No Condensing)		
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2 IEC 61727,IEC 62116,CEI 0-21,EN 50549,NRS 097,RD 140,UNE 217002, OVE-Richtlinie R25,G98,VDE-AR-N 4105		
Grid Regulation			
Battery Certification	UN38.3, IEC 62619		
Installation Style	Floor-Mounted		
Warranty Period	10 Years		



High Conversion Efficiency

- DC-AC conversion efficiency of up to 96.5%
- 2000W rated power AC charge/discharge
- Supports up to 4000W for PV access and allows a maximum PV power input of 3200W



UPS-Grade Backup Power

- Grid-tie and off-grid switchover time is less than 4ms



Seamless Scalability

- Easily expand the system with additional battery capacity



Intelligent Control

- Local bluetooth communication, supports offline control via the Deye Cloud APP
- Supports Deye smart IoT system: smart plug, smart switch, wireless CT



Enhanced Reliability

- IP65 Protection Rating
- 10-year standard warranty



Quiet Operation

- Fanless design with natural cooling

SUN-BK160/180/200-2.0KWH-EU-AM2(EU)

Technical Data

Battery Technical Specification

Model	AE-F2.0
Battery Chemistry	LiFePO ₄
Battery Nominal Voltage	51.2V
Battery Nominal Energy	2000Wh
Max. Charging / Discharging Current	40A
Battery Operating Voltage	40V ~ 60V
Battery Cycle Life	≥6000 (@25°C±2°C, 0.5C / 0.5C, 70%EOL)
Parallel Capability	5 pcs*

Other Technical Specification

Model	AE-F2.0
Display	LED (SOC, Alarm)
Communication Interfaces	CAN2.0, LoRa
Dimension (W × D × H)	450 × 210 × 244mm
Weight Approximate (kg)	20
Operating Temperature Range	-10°C ~ 50°C
Max. Operating Altitude	2000m
Relative Humidity	0% ~ 95% (No Condensing)
Certification	UN38.3, IEC 62619, CE
Installation Style	Floor-Mounted
Warranty Period	10 years



Autumn Series
Residential ESS Solution

Stacked Battery (LV)



Reverse Polarity Protection

- Prevents battery or BMS damage from incorrect wiring

Thermal Protection

- Prevents thermal runaway with high-precision temperature sensor

Current-limiting Charging

- Supports parallel connection and auto-recharges after deep discharge

Flexible Expansion

- Max.4 packs in series and Max. 10 units in parallel

Automatic Recovery Function

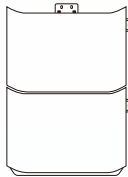
- Keeps battery stable at low-voltage, minimum cold-start capability of 5V

External Power Support

- Solar recharging, avoid battery standby, allow direct recharge

WD-G12100&WD-G12200&WD-G24100
(AS, AF, LATAM)

Technical Data



Main Parameters

Model		WD-G12100	WD-G12200	WD-G24100
Battery Chemistry		LiFePO ₄		
Nominal Capacity ^[1]		100 Ah	200 Ah	100 Ah
Nominal Voltage		12.8 V		25.6 V
Operating Voltage		11.2 V ~ 14.6 V		22.4 ~ 29.2 V
Nominal Energy ^[1]		1.28 kWh	2.56 kWh	2.56 kWh
Cell Configuration		Prismatic, 1P4S	Prismatic, 2P4S	Prismatic, 1P8S
Scalability		Max. 4 units in series (51.2V) and Max. 10 units in parallel		Max. 2 units in series (51.2V)
Charge Current ^[2]	Max. Continuous	100 A	200 A	100 A
	Peak	200 A (10 sec)	300 A (10 sec)	200 A (10 sec)
Discharge Current ^[2]	Max. Continuous	100 A	200 A	100 A
	Peak	200 A (10 sec)	300 A (10 sec)	200 A (10 sec)

Other Parameters

Recommend Depth of Discharge		80% DOD		
Dimension Approximate (W×D×H, mm)		310 × 160 × 298	471 × 160 × 348	471 × 160 × 348
Weight Approximate		13 kg	22 kg	21 kg
Case Material		ABS+PC		
LED Indicator		LED (SOC, working, protecting) & Buzzer		
Communication		RS485		
IP Rating of Enclosure		IP20		
Operating Temperature		Charge : 0 ~ 55°C, Discharge : -20°C ~ 55°C		
Storage Temperature		0 ~ 35°C		
Relative Humidity		95%		
Altitude		≤2000m		
Cycle Life		≥6000 (25°C±2°C, 0.2C charging and discharging, 80%DOD, 70%EOL)		
Warranty Period		5 years		
Installation		Floor-Mounted, Stacked		
Certification		UN38.3, CB, MSDS		

[1] Test conditions : 25°C±2°C, at beginning of life and calibration mode, 0.2C charge & 0.2C discharge, 100% DOD.

[2] The current is affected by temperature and SOC.

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WINTER

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Utility-Scale ESS Solution

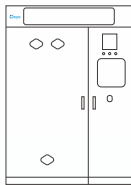
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Winter Series
C&I ESS Solution

C&I Air-Cooled ESS



MS-G215 (CHN)
Technical Data



System Technical Specification

Nominal Output Power (kW)	100
AC Output Frequency and Voltage	50 / 60Hz; 380 / 400Vac
Grid Type	3L / PE
Energy (kWh)	215
Dimension (Wx D x H,mm)	1765 x 1000 x 2500
Weight Appr. (kg)	2695
Battery Operating Voltage (V)	660 ~ 876
MaX. RTE	88.5%
System Communication	ETH / 4G
System Operating temperature range (°C)	-20 ~ 45
Max. working altitude (m)	≤3000
IP Rating of Enclosure	IP54
Anti-corrosion grade	C4
Installation Style	Floor-Mounted
Warranty Period	10 years

Converter Technical Specification

AC Output Rated Current (A)	152
MAX. AC Output Current (A)	167
MAX.number of parallel	12 PCS
Peak Power (off-grid)	1.1 times of rated power
Power Factor	-1 ~ 1
THD	<3%
DC injection current	<0.5In
Operating Temperature Range (°C)	-20~60 (>45°C derating)
Relative Humidity	15%-85% (No Condensing)
Dimension (W x D x H,mm)	485x780x220
Communication	CAN, RS485, ETH
Overvoltage protection	Dc Type II / Ac Type II
Protection level	Class 1
Max. Efficiency	98.5%



Safer

- 1 hour flame retardant protection
- C4 shell protection
- Rated power operation, the maximum temperature of the battery < 38 °C



Enhanced Reliability

- LFP Battery : safety, long lifespan and high-energy density
- Aerosol fire suppression systems for battery packs and systems
- Intelligent BMS active balancing provides complete protection
- Wide temperature range: -20°C ~ 45°C



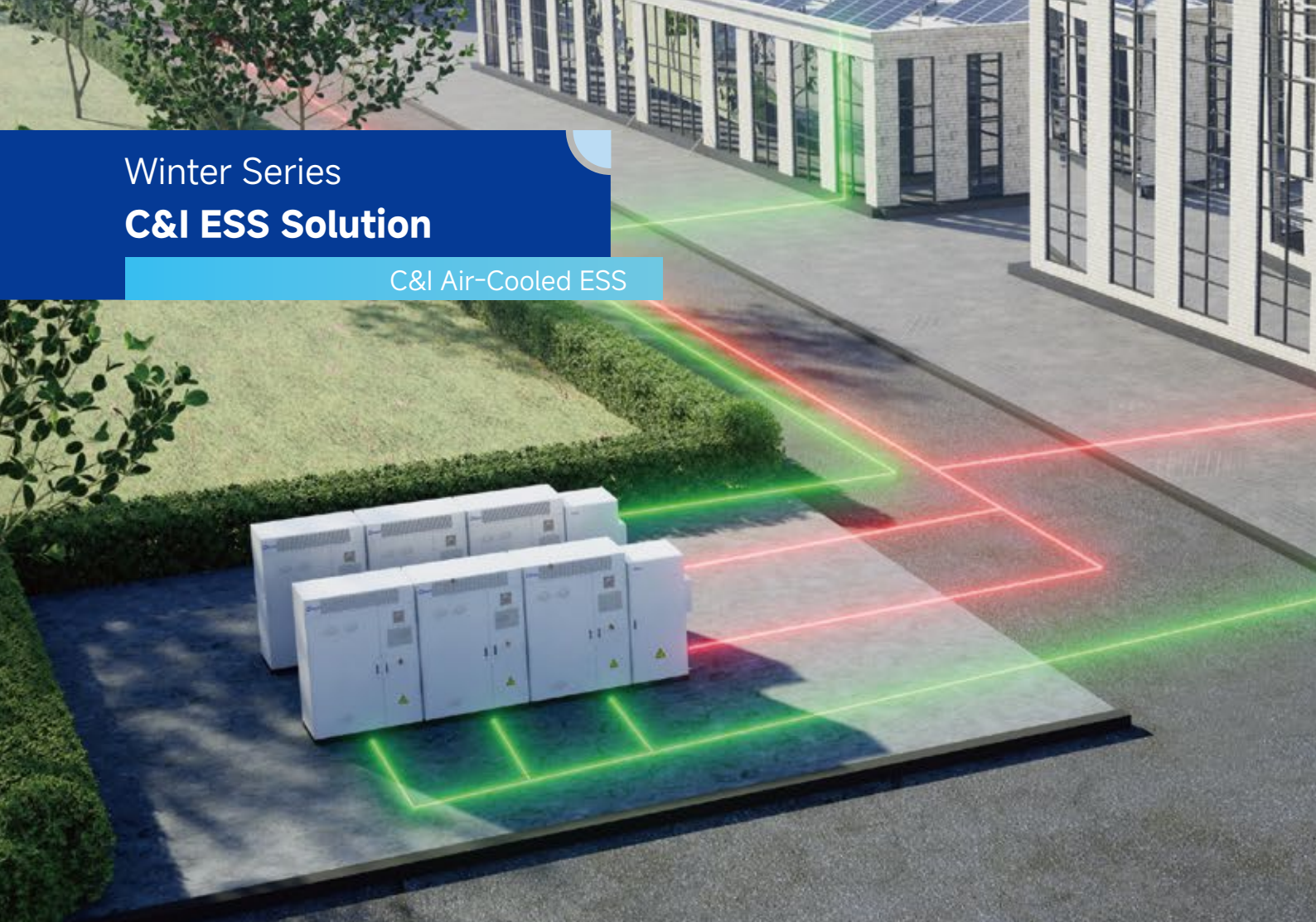
Multi-Fusion

- All-in-One design
- Integrated EMS, PCS, and BMS
- Power supply redundancy design
- Support black start function



More Flexible

- Support expansion of MPPT modules, charging modules, and diesel generator connections



Winter Series
C&I ESS Solution

C&I Air-Cooled ESS

MS-G215-2H2/3/6 & MS-GS215-2H2/3/6 (EU, AU, AS, AF, LATAM)

Technical Data

PV Specification	MS-GS215-2H2
Out Rated Power (kW)	150 (dc)
Max. Input Voltage (V)	1000
Start Voltage (V)	200
MPPT Voltage Range (V)	180 ~ 880
Full Load Voltage Range (V)	450 ~ 850
Number of MPPT	8 pcs
MPPT Max.Current/Short Current (A)	40 / 60
Dimension (WxDxH,mm)	440 x 610 x 178
Weight Appr.(kg)	32

System Specification	MS-G215-2H2 / MS-GS215-2H2
AC Output Power (kW)	100
AC Output Frequency and Voltage	50/60Hz;380 / 400Vac
Grid Type	3L / N / PE
Battery OperatingVoltage (Vd.c.)	660 ~ 864
Energy (kWh)	215
Dimension (Wx D x H,mm)	1865 x 1000 x 2500
Weight Appr. (kg)	2700
Max. RTE	88%
System Communication	ETH / 4G
System Operating Temperature Range (°C)	-20~50 (>45 Derating)
Max. Working Altitude (m)	≤3000
IP Rating of Enclosure	IP54
Anti-Corrosion Grade	≤C5
System Certification	UN38.3, IEC, CEC, VED, CEI
Warranty Period	10 years

Converter Specification	MS-G215-2H2 / MS-GS215-2H2
AC Output Rated Current (A)	152
Max.AC Output Current (A)	167
Max.Number of Parallel (off-grid)	10 pcs (off-grid)
Peak Power	1.1 times of rated power
Power Factor	-1~1
THD	<3%
DC Injection Current	<0.5In
Display	LCD
Relative Humidity	15%-85% (No Condensing)
Dimension (W x D x H,mm)	506 x 772 x 310
Communication	CAN,RS485,ETH
Overvoltage Protection	DC Type II / AC Type II
Protection Level	Class 1
Grid Regulation	EN50549,AS4777.2,CEI0-21,CEI-016,NRS097
Max. Efficiency	97.6%



Safer

- LFP batteries
- System supports aerosol fire extinguishing
- Battery compartment with auto venting & explosion-proof



Multi-Fusion

- Integrated EMS, PCS, and BMS
- Support expansion of MPPT module
- support off-grid backup



Reliable

- Operating temp :-20°C to 50°C
- IP54 & C5 protection rating
- Operate up to 3000m altitude
- 1.1x overload capacity
- Balancing solutions extend battery life
- Triple auxiliary power design for stable supply



Intelligent Control

- Thermal management keeps battery < 35°C
- Peak-valley management, anti-backflow overload protection
- Load tracking, demand control backup power, phase separation



Scalable

- Support up to 5 units off-grid backup maximum 500kW/1MWh
- Support up to 20 units on-grid in parallel maximum 2MW/4.3MWh
- Support up to 10 units off-grid in parallel maximum 1MW/2.15MWh

Winter Series
C&I ESS Solution



Intelligent Cloud Platform

- Customizable load algorithmic modules
- 24-hour online O&M
- Battery life and safety warning
- Device cloud interconnection



Ultimate Safety

- Self-contained fire protection system
- Explosion-proof safety protection system
- Five-level electrical safety protection
- High-voltage interlocking, preventing loaded arc operation



Versatile Expansion

- PCS/BMS/EMS All-in-one modular design
- Support up to 8 cabinets in parallel
- Support 2-hour, 4-hour energy storage applications
- Higher energy density to reduce footprint



Multiple Application Scenarios

- New energy vehicle charging capacity expansion
- Peak-to-Valley arbitrage/Peak-to-Valley shifting
- Virtual power plant ready
- Off-grid operation (Islands, communication base stations, etc.)

MS-L430-2H2 & MC-L430-2H2 (EU)
MS-L430-BC-2 & MC-L430-BC-2 (EU)
MS-MPPT400-2 (EU)

Technical Data

Model	MS-L430-2H2 (AC BESS)	MC-L430-2H2 (AC BESS)
System Parameters		
Operating Temperature	-25℃ ~ +55℃	
Storage Temperature	-30℃ ~ +60℃	
Humidity	0 ~ 95% (No condensation)	
Type of cooling	Liquid cooling	
Fire Suppression	Aerosol, Water	
Ingress Protection	IP54	
Anticorrosion grade	≥C4	
Altitude	≤2000m	
Communication	RS485, Modbus TCP, DIDO	
Weight	≤4600kg	
Dimensions (W × D × H)	2000 × 1300 × 2480mm	
Active Balancing Function	Yes	No

DC Data		
Battery	LiFePO ₄	
Nominal Capacity	280Ah	
Nominal Energy	430.08kWh	
Nominal DC Voltage	768Vd.c.	
DC Voltage Range	636Vd.c ~ 876Vd.c.	
Charge and discharge rate	0.5P	

AC Data		
Nominal AC Voltage	380/400V 3L+N+PE	
Rated Frequency	50 / 60Hz	
Rated Power	200kW	
Maximum Power	220kW (1.1 times of rated power)	
Power Factor	-0.8 ~ +0.8	

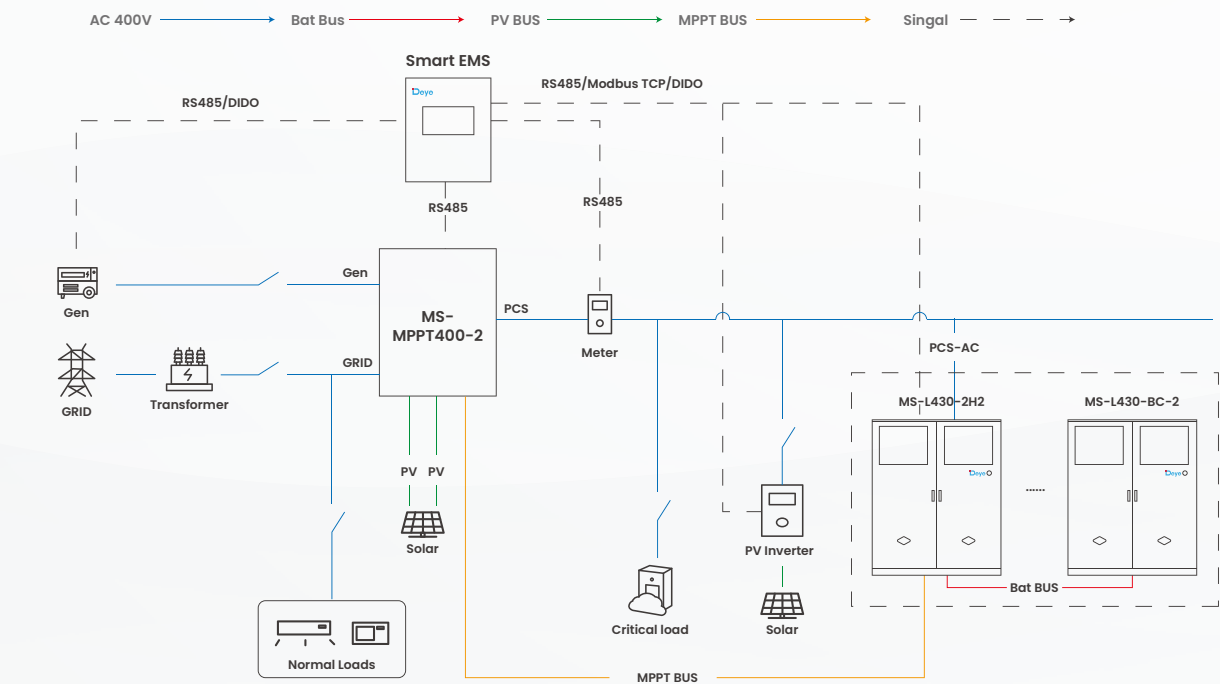
Model	MS-L430-BC-2 (DC BESS)	MC-L430-BC-2 (DC BESS)
System Parameters		
Operating Temperature	-30℃ ~ +55℃	
Storage Temperature	-30℃ ~ +60℃	
Humidity	0 ~ 95% (No condensation)	
Type of cooling	Liquid cooling	
Fire Suppression	Aerosol, Water	
Ingress Protection	IP54	
Anticorrosion grade	≥C4	
Altitude	≤2000m	
Communication	RS485, Modbus TCP, DIDO	
Weight	≤4300kg	
Dimensions (W × D × H)	2000 × 1300 × 2480mm	
Active Balancing Function	Yes	No

DC Data		
Battery	LiFePO ₄	
Nominal Capacity	280Ah	
Nominal Energy	430.08kWh	
Nominal DC Voltage	768Vd.c.	
DC Voltage Range	636Vd.c ~ 876Vd.c.	
Charge and discharge rate	0.5P	

MS-L430-2H2 & MC-L430-2H2 (EU)
MS-L430-BC-2 & MC-L430-BC-2 (EU)
MS-MPPT400-2 (EU)

Technical Data

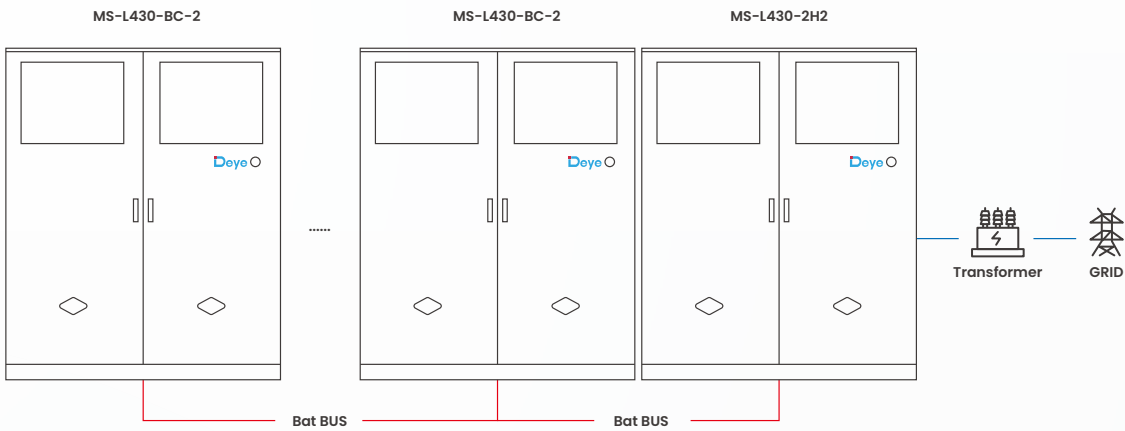
Model	MS-MPPT400-2
System Parameters	
Dimension (W × D × H, mm)	1000 × 1000 × 2480
Weight Appr. (kg)	≤700kg
System Operating temperature range	-30°C ~ 50°C
Max. working altitude (m)	≤2000m
IP Rating of Enclosure	IP54
ATS Parameters	
Rated insulation voltage (V)	DC1000
Rated working voltage (V)	AC400
Auxiliary equipment operating voltage (V)	AC220, DC24
Frequency	50/60Hz
Rated power of load (kW)	250
Rated power of the power grid (kW)	500
Rated power of oil engine (kW)	500
Switching Time	≤15ms
MPPT Parameters	
Max. PV Input Power (kW)	200
Max. PV Input Voltage (V)	1000
Start-up Voltage (V)	200
MPPT Voltage Range (V)	180 ~ 850
Full Load MPPT Voltage Range (V)	450 ~ 850
Rated PV Input Voltage (V)	600
Max. Operating PV Input Current (A)	40+40+40+40+40+40+40+40
Max. Input Short-Circuit Current (A)	60+60+60+60+60+60+60+60
No.of MPP Trackers	8
Max. Efficiency	>99%
MPPT Efficiency	>99.9%



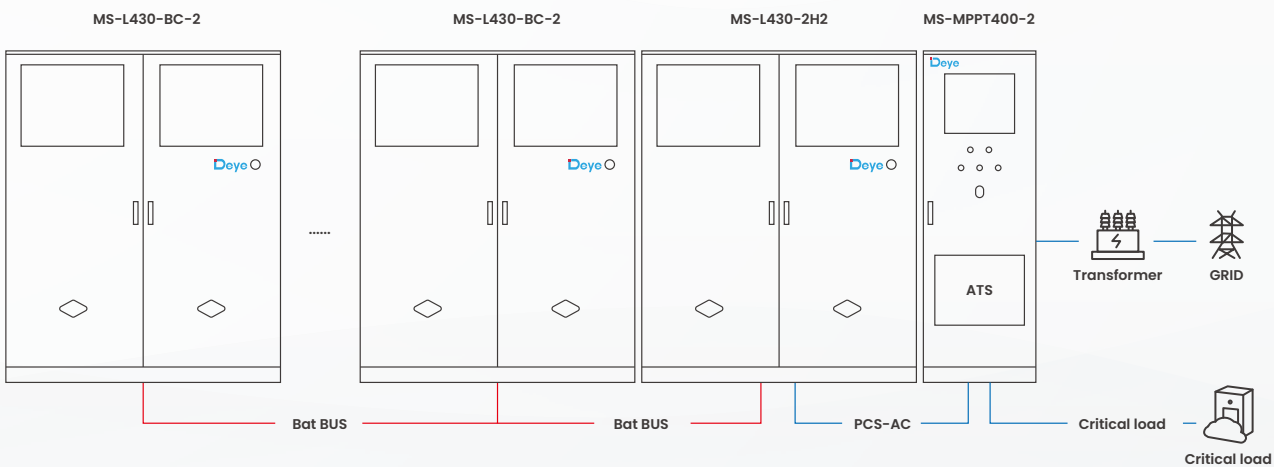
NOTE: MAX 3 battery cabinets (without PCS) parallel

AC 400V Bat Bus PV BUS MPPT BUS

For ESS on-grid application



For backup power application



Winter Series
C&I ESS Solution



Intelligent Cloud Platform

- Customizable load algorithmic modules
- 24-hour online O&M
- Battery life and safety warning
- Device cloud interconnection



Ultimate Safety

- Self-contained fire protection system
- Explosion-proof safety protection system
- Five-level electrical safety protection
- High-voltage interlocking, preventing loaded arc operation



Versatile Expansion

- PCS/BMS/EMS All-in-one modular design
- Support up to 8 cabinets in parallel
- Support 2-hour, 4-hour energy storage applications
- Higher energy density to reduce footprint



Multiple Application Scenarios

- New energy vehicle charging capacity expansion
- Peak-to-Valley arbitrage/Peak-to-Valley shifting
- Virtual power plant ready
- Off-grid operation (Islands, communication base stations, etc.)

MC-L430-2H3 (AS, AF, LATAM)
MC-L430-BC-3 (AS, AF, LATAM)

Technical Data

Model	MC-L430-2H3 (AC BESS)
System Parameters	
Operating Temperature	-25°C ~ +55°C
Storage Temperature	-30°C ~ +60°C
Humidity	0 ~ 95% (No condensation)
Type of cooling	Liquid cooling
Fire Suppression	Aerosol, Water
Ingress Protection	IP54
Anticorrosion grade	≥C4
Altitude	≤2000m
Communication	RS485, Modbus TCP, DIDO
Weight	≤4600kg
Dimensions (W × D × H)	2000 × 1300 × 2480mm
Active Balancing Function	No
DC Data	
Battery	LiFePO ₄
Nominal Capacity	280Ah
Nominal Energy	430.08kWh
Nominal DC Voltage	768Vd.c.
DC Voltage Range	636Vd.c ~ 876Vd.c.
Charge and discharge rate	0.5P
AC Data	
Nominal AC Voltage	380/400V 3L+N+PE
Rated Frequency	50 / 60Hz
Rated Power	200kW
Maximum Power	220kW (1.1 times of rated power)
Power Factor	-0.8 ~ +0.8

Model	MC-L430-BC-3 (DC BESS)
System Parameters	
Operating Temperature	-30°C ~ +55°C
Storage Temperature	-30°C ~ +60°C
Humidity	0 ~ 95% (No condensation)
Type of cooling	Liquid cooling
Fire Suppression	Aerosol, Water
Ingress Protection	IP54
Anticorrosion grade	≥C4
Altitude	≤2000m
Communication	RS485, Modbus TCP, DIDO
Weight	≤4300kg
Dimensions (W × D × H)	2000 × 1300 × 2480mm
Active Balancing Function	No
DC Data	
Battery	LiFePO ₄
Nominal Capacity	280Ah
Nominal Energy	430.08kWh
Nominal DC Voltage	768Vd.c.
DC Voltage Range	636Vd.c ~ 876Vd.c.
Charge and discharge rate	0.5P

Winter Series
C&I PV-BESS-EV Charging
Integrated Solution



Intelligent Cloud Platform

- Customizable load algorithmic modules
- 24-hour online O&M
- Battery life and safety warning
- Device cloud interconnection



Ultimate Safety

- Self-contained fire protection system
- Explosion-proof safety protection system
- Five-level electrical safety protection
- High-voltage interlocking, preventing loaded arc operation



Versatile Expansion

- PCS/BMS/EMS All-in-one modular design
- Support up to 8 cabinets in parallel
- Support 2-hour, 4-hour energy storage applications
- Higher energy density to reduce footprint



Multiple Application Scenarios

- New energy vehicle charging capacity expansion
- Peak-to-Valley arbitrage/Peak-to-Valley shifting
- Virtual power plant ready
- Off-grid operation (Islands, communication base stations, etc.)

MS-LC430-2H2 (EU)
MS-LC430-BC-2 (EU)
MS-DC420-2 & MS-DCC180-2 (EU)

Technical Data

Model	MS-LC430-2H2 (AC BESS)
System Parameters	
Operating Temperature	-25℃ ~ +55℃
Storage Temperature	-30℃ ~ +60℃
Humidity	0 ~ 95% (No condensation)
Type of cooling	Liquid cooling
Fire Suppression	Aerosol, Water
Ingress Protection	IP54
Anticorrosion grade	≥C4
Altitude	≤2000m
Communication	RS485, Modbus TCP, DIDO
Weight	≤4600kg
Dimensions (W × D × H)	2000 × 1300 × 2480mm
Active Balancing Function	No
DC Data	
Battery	LiFePO ₄
Nominal Capacity	280Ah
Nominal Energy	430.08kWh
Nominal DC Voltage	768Vd.c.
DC Voltage Range	636Vd.c ~ 876Vd.c.
Charge and discharge rate	charge 0.5P, discharge 1P
AC Data	
Nominal AC Voltage	380/400V 3L+N+PE
Rated Frequency	50 / 60Hz
Rated Power	200kW
Maximum Power	220kW (1.1 times of rated power)
Power Factor	-0.8 ~ +0.8

Model	MS-LC430-BC-2 (DC BESS)
System Parameters	
Operating Temperature	-30℃ ~ +55℃
Storage Temperature	-30℃ ~ +60℃
Humidity	0 ~ 95% (No condensation)
Type of cooling	Liquid cooling
Fire Suppression	Aerosol, Water
Ingress Protection	IP54
Anticorrosion grade	≥C4
Altitude	≤2000m
Communication	RS485, Modbus TCP, DIDO
Weight	≤4300kg
Dimensions (W × D × H)	2000 × 1300 × 2480mm
Active Balancing Function	No
DC Data	
Battery	LiFePO ₄
Nominal Capacity	280Ah
Nominal Energy	430.08kWh
Nominal DC Voltage	768Vd.c.
DC Voltage Range	636Vd.c ~ 876Vd.c.
Charge and discharge rate	charge 0.5P, discharge 1P

MS-LC430-2H2 (EU)

MS-LC430-BC-2 (EU)

MS-DC420-2 & MS-DCC180-2 (EU)

Technical Data

Model	MS-DC420-2 (420kW DC charge power cabinet)
DC Input Data	
Input standard	DC+ / DC- / PE
DC input voltage range	200Vdc ~ 850Vdc
DC input current range	≤640A
DC rated input power	420kW @400Vdc≤Vin≤850Vdc
DC Output Data	
Dc output voltage range	50Vdc ~ 1000Vdc
Dc output current range	8 branches, max 250A each
Environmental Conditions	
Operating Temperature Range (°C)	-30°C to +55°C (derating above 55°C)
Storage Temperature (°C)	-40°C to +60°C
Humidity	≤ 95%RH, no condensation
Cooling	Forced air cooling
Altitude	≤2000m (Derated when higher than 2000m)
IP Rating of Enclosure	≥IP54
Other Parameters	
Efficiency	≥ 97.5%, @full load
Dimension (W × H × D, mm)	1250 × 2450 × 1000mm
Approximate Weight (kg)	600kg

Model	MS-DCC180-2 (DC charging terminal)
DC Input Data	
DC Input Voltage Range (V)	50Vdc ~ 1000Vdc
Input number	2 DC inputs
DC Output Data	
Output interface	1 pile 2 guns, each gun 180kW charging power, support the CCS2 charging standard interface
DC Output range	50Vdc ~ 1000Vdc
Max. Output Power (W)	Single gun Max 180kW @300 ~ 1000Vdc (conventional terminal)
Max. Output Current	Single gun Max. 250A
Environmental Conditions	
Operating Temperature Range (°C)	-30°C to +55°C (derating above 55°C)
Storage Temperature (°C)	-40°C to +60°C
Humidity	≤ 95%RH, no condensation
Cooling	Natural cooling
Altitude	≤2000m
IP Rating of Enclosure	≥IP54
Other Parameters	
Dimension (W × H × D, mm)	1100 × 2200 × 400mm
Approximate Weight (kg)	100kg

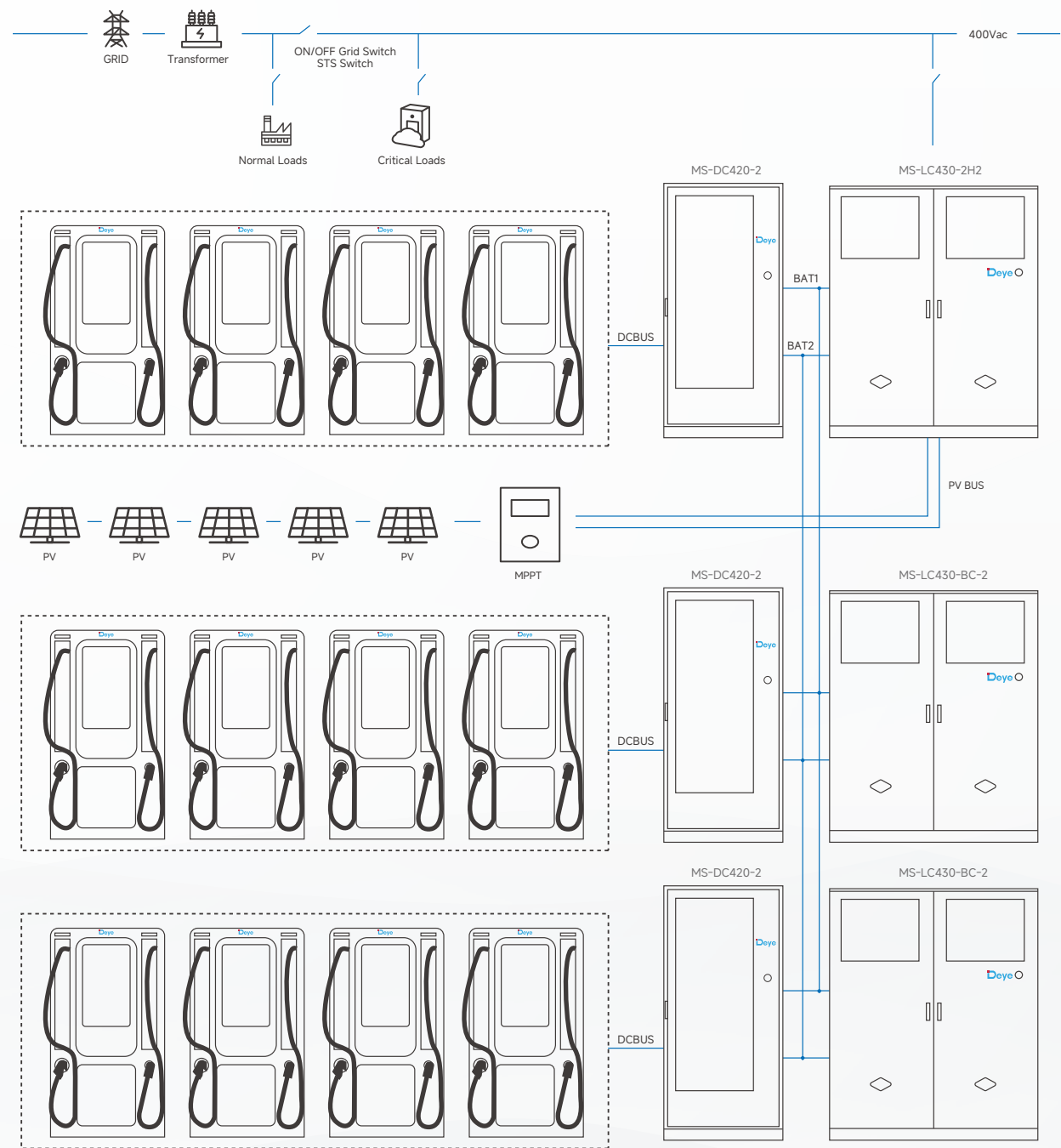
Integrated energy storage and charging application

Support up to four sets of double-gun charging terminals

Split type DC fast charging, With a maximum DC charging power of up to 180kW for a single gun

Supports flexible charging power distribution Adaptable to CCS2 charging interfaces

To solve the problem of insufficient capacity of new energy vehicles to access the distribution grid



Winter Series

Utility-Scale ESS Solution

Air-Cooled ESS



Advanced Safety

- 2-hour fire resistance
- Combustible gas detection, smoke evacuation, aerosol extinguishers, water sprinklers



Integrated Technology

- LC, PCS, MPPT, and battery integrated
- EMS for system management
- ATS for on/off-grid switching
- 1 MW PCS output, 1.6 MWp solar input
- System energy capacity: 2057 kWh
- System size and weight: 20ft, 25,000 kg



Applications

- Support black start function
- Support off-grid operation & back up
- Support peak shaving
- Transformer capacity control



Performance

- Supports 1.1x continuous overload, and 1.5x overload for up to 10s
- Max RTE: 88.5%
- System Operating Conditions :
 - -20°C ~ -50°C | IP54 | C4-M
- Supports 2 PCS & 2 MW off-grid

WS-G2000-2H3/WS-GS2000-2H3 (AS, AF, LATAM)

Technical Data

AC Parameters

Rated power	1000kW
Max. Apparent Power	1100kVA
Rated Voltage/Range	400V/0.85Un-1.1Un
Grid Connection Form	3L+N+PE
Frequency/Range	50Hz/45Hz-55Hz
Power Factor Adjustment Range	0.8 leading-0.8lagging
Total Current Harmonic Distortion (THDi)	<3% (of Rated power)
DC Injection Current	<0.5% In
Max.RTE	88.50%

PV Parameters

Max. PV Input Power	1600kW(200kW*8)
Max. PV Input Voltage	1000Vdc
Start-up Voltage	200Vdc
MPPT Voltage Range	180-850Vdc
Full Load MPPT Voltage Range	450-850Vdc
Rated PV Input Voltage	600Vdc
Max. Operating PV Input Current	40A
Max. Input Short-Circuit Current	60A
No. of MPP Trackers	8*8
MPP Trackers of String PV panel	2*20A or 3*13A
Max. Efficiency	>88.5%

Battery Parameters

Cell type	LiFePO ₄
Battery configuration	256S1P*8
Battery energy	2057kWh
Battery voltage range	691.2-921.6Vdc

Other Parameters

Fire protect system	Gas fire protection+Water fire protection
cooling type	Smart Air Cooling
Communication port	RJ45
Communication protocol	Modbus TCP, IEC104, IEC61850
Operating ambient	-20~50 °C
Humidity	0%~90%RH
Altitude	3000m
IP rating of enclosure	IP54
anti-corrosion level	C4-M
seismic grade	Moderate performance level (0.5g)
Dimension (W/D/H,mm)	20ft (HC)
Weight approximate (kg)	25000kg
Installation Location	Floor-mounted
Recommend storage temperature (°C)	0~35
Cycle Life	25±2°C,0.5P, EOL70%≥8000
Warranty Period	10years

Winter Series
Utility-Scale ESS Solution

Liquid - Cooled ESS

WS-L4300-2H3 (AS, AF, LATAM) / WS-L4300-2H2 (EU)
WS-PCS2250-2 (AS, AF, LATAM, EU)



Cluster Management

- One cluster management, high availability, more friendly to the cell



Extreme Safety

- 5 Levels of fire protection (Fire detection, early warning, exhaust, fire fighting, explosion)
- 2 levels of electrical active protection and 3 levels of electrical passive protection



High Energy Density

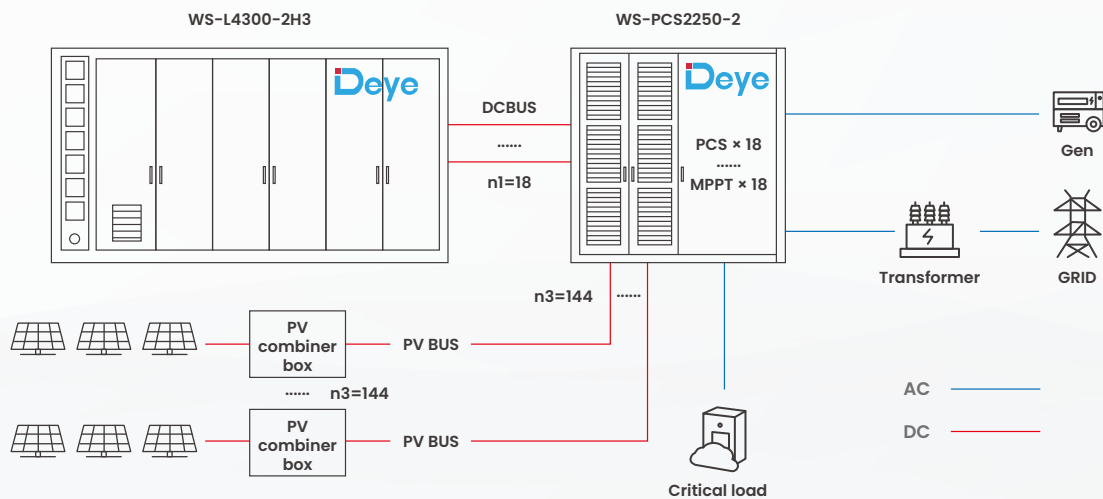
- 4300kWh in 20 ' BESS container
- 2250kW PCS, 3600kW Pv input in 10 ' container



Highly Integrated

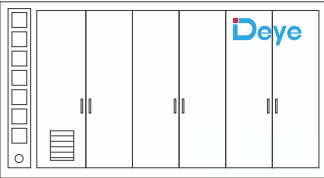
- BESS, PV DC coupling
- EMS, PCS, MPPT All in one container
- Black start function, on-grid and off-grid application

UTILITY-SCALE ESS Solution



WS-L4300-2H3 (AS, AF, LATAM) / WS-L4300-2H2 (EU)
WS-PCS2250-2 (EU)

Technical Data



Liquid-Cooled ESS	
Model	WS-L4300-2H3
DC Battery	
Battery Type	LiFePO ₄
Nominal Capacity (Cell)	314Ah
Nominal Energy	4340kWh
PACK Configuration	1P48S
RACK Configuration	18 × 1P240S
Nominal DC Voltage	768Vdc
DC Voltage Range	648Vdc ~ 876Vdc
Charge and discharge rate	≤0.5P
Max. Charging / Discharging Current	3150A (18 × 175A)
No. of DC Output	18
System	
Operating Temperature	-30°C ~ +55°C
Storage Temperature	-30°C ~ +60°C
Humidity	0 ~ 95% (No condensation)
Type of cooling	Liquid cooling
Fire Suppression	Aerosol、Water
Ingress Protection	IP55
Anticorrosion grade	≥C4
Altitude	≤2000m
Communication	CAN、RS485、TCP、DIDO
Weight	40000kg
Dimensions (W × D × H)	6058 × 2438 × 2896mm



Liquid-Cooled ESS	
Model	WS-PCS2250-2
PCS Data	
AC Rated Power	2250kW (18 × 125kW)
AC Rated Voltage / Frequency	400Vac / 50Hz (3L+N+PE)
AC Rated Current	3248A (18 × 180.4A)
Max Power	2475kW (18 × 137.5kW)
Power Factor	-0.8 ~ +0.8
Battery Input Voltage Range	630Vdc ~ 1000Vdc
Max. Charging / Discharging Current	3420A (18 × 190A)
MPPT Data	
Max. PV Input Power	3600kW (18 × 200kW)
Max. PV Input Voltage	1000Vdc
Start-up Voltage	200Vdc
Max Operating PV Input Current	18 × (40+40+40+40+40+40+40+40) A
No. of MPP Trackers	144 (18 × 8)
System Data	
Grid Side Data	
AC Rated Voltage / Frequency	400Vac / 50Hz (3L+N+PE)
AC Max Current	5400A
Gen Side Data	
AC Rated Voltage / Frequency	400Vac / 50Hz (3L+N+PE)
AC Max Current	3600A
Load Side Data	
AC Rated Voltage / Frequency	400Vac / 50Hz (3L+N+PE)
AC Max Current	2700A
General Data	
Operating Temperature	-25°C ~ +55°C
Humidity	0 ~ 95% (No condensation)
Ingress Protection	IP54
Anticorrosion grade	≥C4
Altitude	≤2000m
Weight	6000kg
Dimensions (W × D × H)	2991 × 2438 × 2896mm

* The warranty will be based on the warranty period or the minimum throughput of each model, whichever comes first.

