

POWERING YOUR LIFE

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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

Version No.: Deye ESS Brochure_Global_20251027



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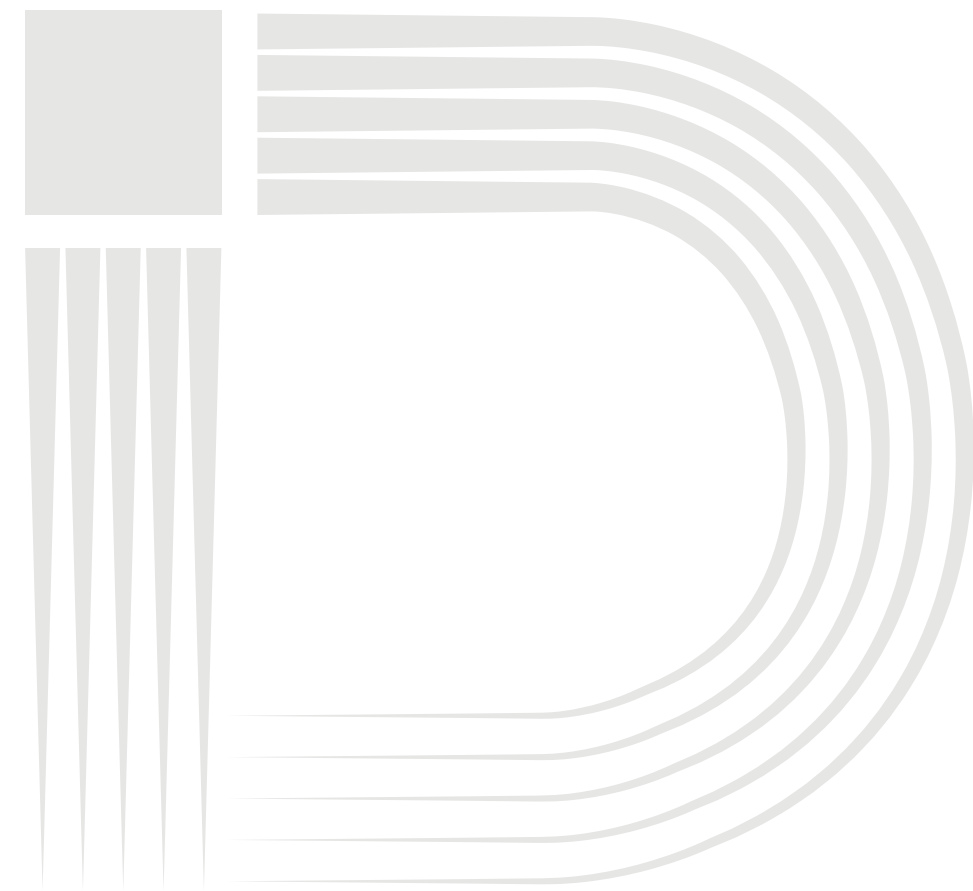
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DEYE ENERGY STORAGE
PRODUCT CATALOG
(GLOBAL)

Deye
Stock code:605117



WORLD LEADING

ENERGY STORAGE SYSTEM
SOLUTIONS PROVIDER

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





22
Overseas Service
Centers



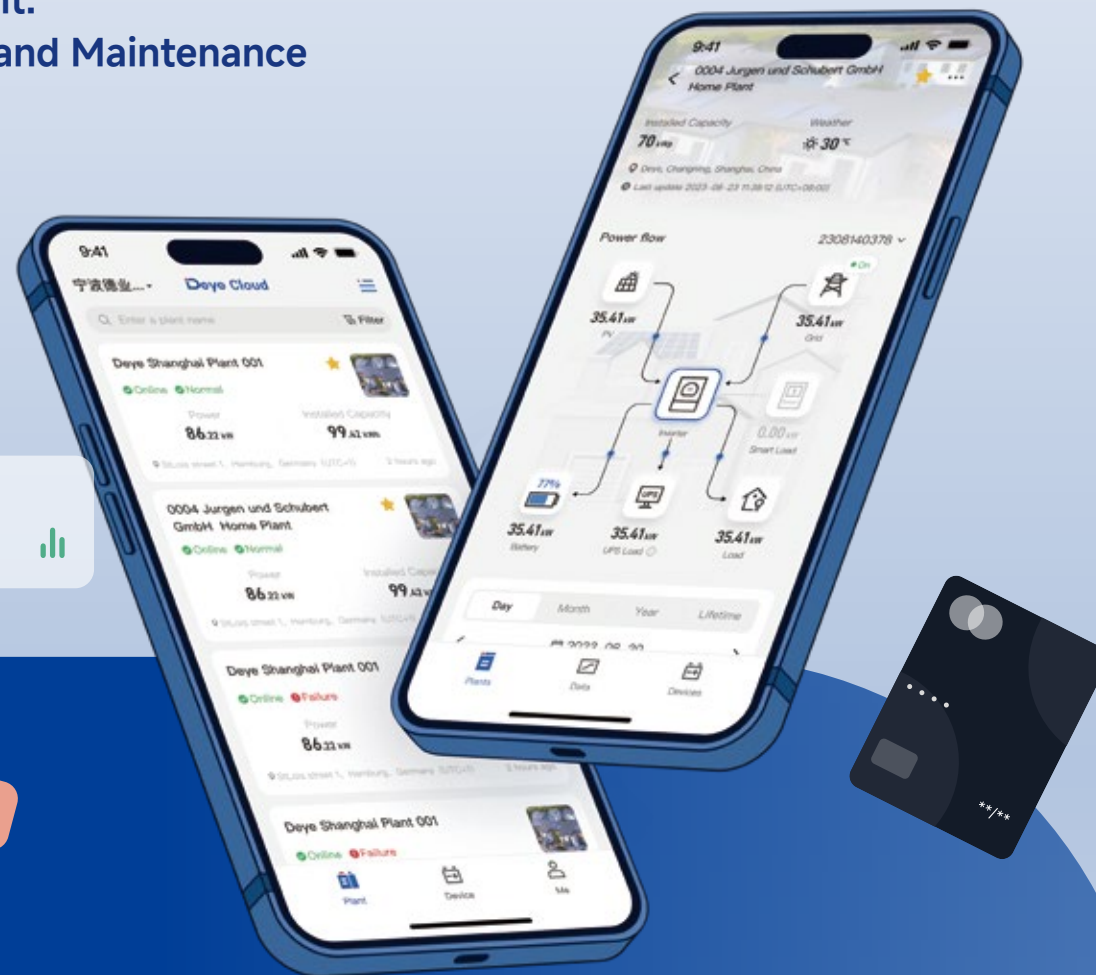
140+
Countries



5M+
Equipment in
Operation

DEYE CLOUD

Cloud Management: Online Operation and Maintenance



Total Income
\$245.00



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.

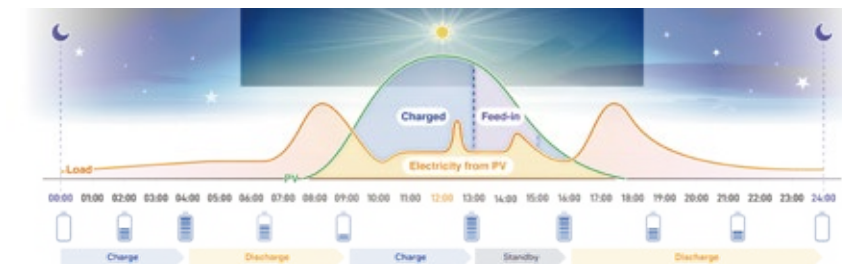
Deye Cloud utilizes two localized data centers in Europe and America to ensure data independence and security.

Customizable Charging and Discharging Function

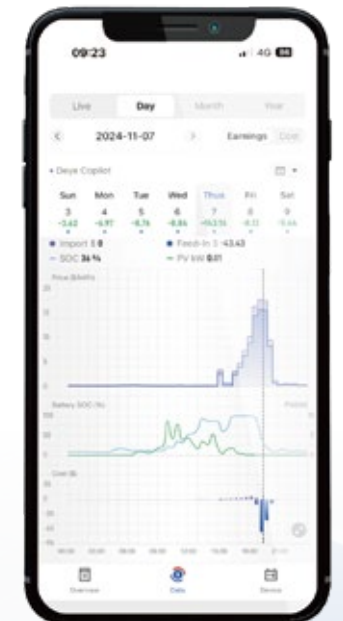
The inverter can be programmed with 6 different charging and discharging time slots to make the most of time-of-use electricity pricing and reduce costs.

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).

Self Consumption - conservative

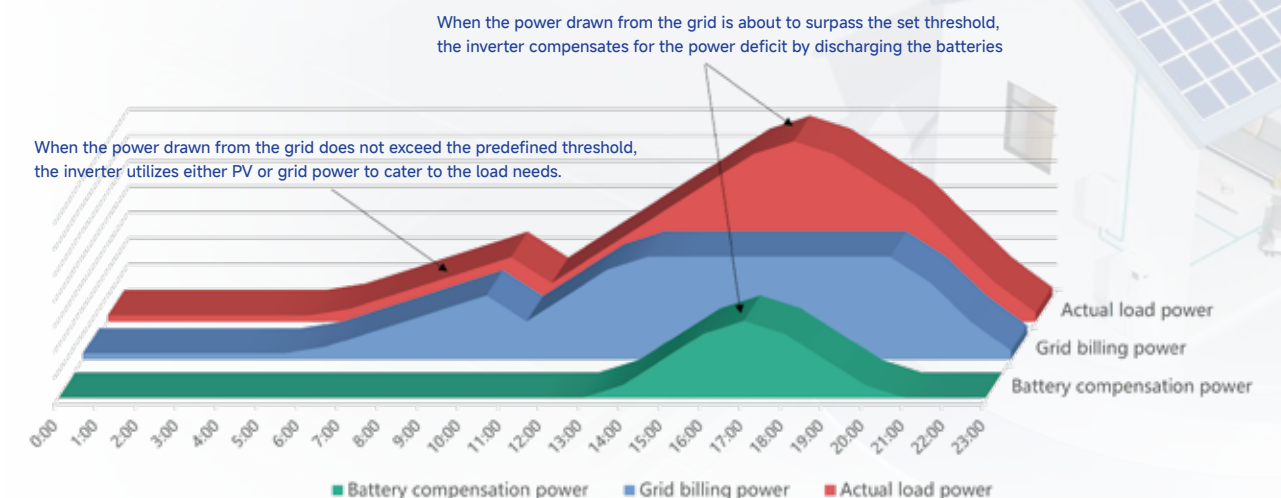


Maximum Earning - radical



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-F5/F5 Plus



SE-F5 Pro



SE-F12



SE-F16



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 & GB-SL Pro



GB-A



SS-F5 & SS-F10



BOS-B



BOS-B Pro-A3



BOS-A



BOS-GH/BOS-GL



BOS-G Pro



BOS-W



GE-F60



GE-F120-2H2/4/6

Autumn Series /



SUN-BK80/160/200/250
-2.56KWH-EU-AM4-18L



WD-G12200 & WD-G12100
& WD-G24100

Winter Series /



MS-G215



MS-G215-2H3
& MS-GS215-2H3



C&I PV-BESS Solution
MC-L Series



C&I PV-BESS-EV Charging Integrated Solution
MS-L & MC-LC Series



WS-G2000-2H3
& WS-GS2000-2H3



WS-L4300-BC-3 & WS-PCS2250-2

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SPRING

Series

Residential ESS Solution

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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

- Support Max. 1C charge & 1.2C discharge (SE-F5 & F5 Plus), GaN MOSFETs: 50% loss reduction, high-temp resistance

Flexible Expansion

- Max. 32 units in parallel

Reliable Durability

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

SE-F5 & SE-F5 Plus & SE-F12 & SE-F16 (EU, AS, AF, LATAM)

SE-F5 Pro (Global)

Technical Data

Main Parameters						
		SE-F5	SE-F5 Plus	SE-F5 Pro	SE-F12	SE-F16
Battery Chemistry		LiFePO ₄				
Capacity		100 Ah	100 Ah	100 Ah	230 Ah	314 Ah
Scalability ^[1]		Max. 32 pcs in parallel				
Nominal Voltage		51.2V				
Operating Voltage		44.8 V ~ 57.6 V				
Nominal Energy		5.12 kWh	5.12 kWh	5.12 kWh	11.8 kWh	16 kWh
Charge Current ^[2]	Max. Continuous	100 A	100 A	100 A	230 A	160 A
	Peak	120 A (10 sec)	120 A (10 sec)	150 A (120 sec)	280 A (10 sec)	280 A (10 sec)
Discharge Current ^[2]	Max. Continuous	120 A	120 A	100 A	230 A	230 A
	Peak	150 A (10 sec)	150 A (10 sec)	150 A (120 sec)	280 A (10 sec)	280 A (10 sec)

Other Parameters					
Model	SE-F5	SE-F5 Plus	SE-F5 Pro	SE-F12	SE-F16
Recommend Depth of Discharge	80% DoD	90% DoD			
Dimension (W × D × H, mm) (Without hanging board)	370 × 548 × 140	370 × 548 × 140	404 × 547 × 141	400 × 559 × 233	400 × 708 × 233
Weight Approximate	41 kg	41 kg	44 kg	84 kg	109 kg
LED Indicator	LED (SOC, working, protecting) & Buzzer				
IP Rating of Enclosure	IP21				
Operating Temperature	Charge: 0~55°C / Discharge: -20~55°C	Charge / Discharge: -20~55°C	Charge: 0~55°C / Discharge: -20~55°C		
Storage Temperature	0~35°C				
Relative Humidity	95% (non-condensing)				
Altitude	≤3000m				
Cycle Life	≥6000(25°C±2°C,70%EOL)				
Installation	Wall-Mounted, Floor-Mounted, Stack-Mounted				
Communication	CAN2.0, RS485, Bluetooth+APP				
Warranty Period ^[3]	5 years	10 years	10 years	5 years / 10 years (extended warranty)	
Energy Throughput ^[3]	8 MWh	16 MWh	18 MWh	18 MWh	25 MWh
Certification	UN38.3, MSDS, CE, CB		UN38.3, MSDS, CE, CB, VDE2510-50,FCC, UL1973, UL9540A, CEC		UN38.3, MSDS, CE, CB

[1] Max. 64 pcs can parallel with CAN-Box.

[2] Operating current is affected by temperature and SOC. This max. continuous current is only supported in lithium battery mode; for lead-acid mode, please refer to the manual for the max. continuous current.

[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)	96kg	
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, MSDS	

[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.
[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



Ultimate Safety

- Safest LFP battery & Intelligent BMS



External Power Support

- External power activation, prevents battery suspension



Flexible Expansion

- Max. 32 units in parallel



Superior Output

- Max. 8kW output power



Flexible Expansion

- Built-in 10A constant current limited charging
Compatible with many inverter brands

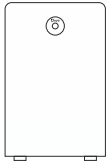


Easy Maintenance

- Allow over-discharge direct recharge

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

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	Max.	160 / 160
Current (A) ^[2]	Peak (25°C)	300 / 300 (10 sec)

Other Parameters

Recommend Depth of Discharge	90%
Dimension (W × H × D, mm)	480×830×235 (Without hanging board and base)
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 / 10 years
Energy Throughput	26.25 / 52.5MWh (25°C, 0.5C / 0.5C, 70%EOL)
Certification	UN38.3, MSDS

[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.

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 (EU, 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, MSDS		

[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.



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 : -20°C ~ 55°C (with heating)



Flexible Expansion

- Max.16 units in parallel (80kW/84.8kWh)
Support expansion of Deye 5.1kWh LV battery,allowing up to 31 batteries for a Max. capacity of 163.2kWh



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

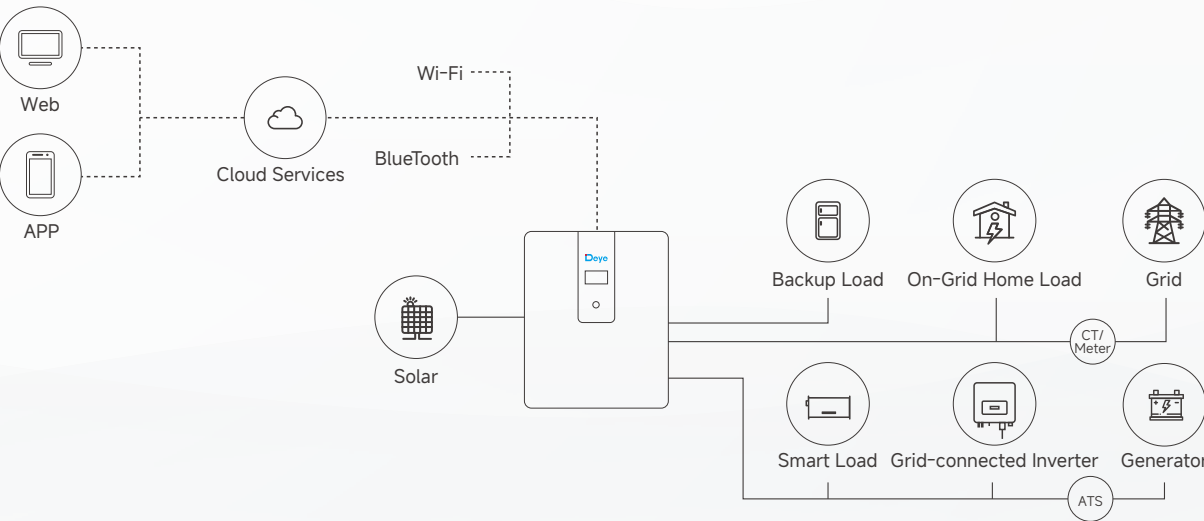
- Integrated 5kW hybrid inverter and 5.3kWh LFP battery



Intelligent Control

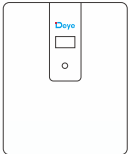
- Comfortable and easy control via App, PC or Touch-Display

System Application Topology Diagram



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

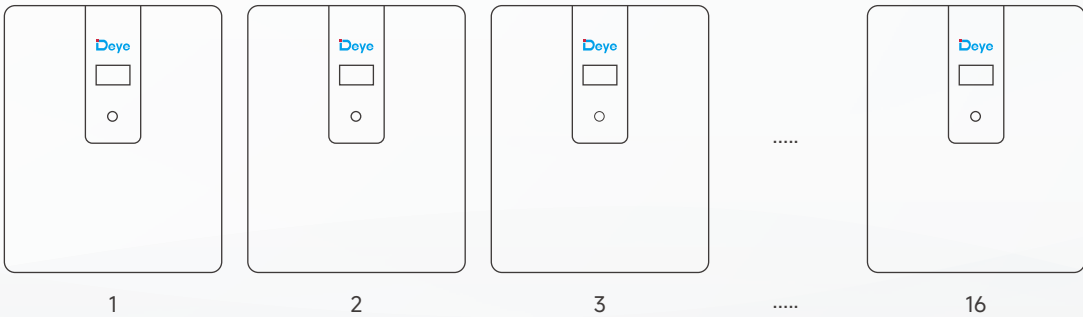
Max. PV Access Power (W)	10000
Max. PV Input Power (W)	8000
Max. PV Input Voltage (Vdc)	500
Start Up PV Voltage (Vdc)	125
MPPT Voltage Range (Vdc)	150 ~ 425
Full Load MPPT Voltage Range (Vdc)	300 ~ 425
Rated PV Input Voltage (Vdc)	370
Max. Operating PV Input Current (A)	18+18
Max. PV Input Short-circuit 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, 80%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)	-20°C ~ 55°C (with heating)
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

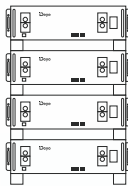
- Cobalt Free Lithium Iron Phosphate LFP Battery : safety and long lifespan, high efficiency and high power
- Intelligent BMS, providing complete protection



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)
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]		5.12
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: 100% 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.

[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



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



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(2mins,25°C)	Charge:100/Discharge: 100 Charge:198/Discharge: 240 300

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

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



Reliable

- High discharge power, IP65
- Natural cooling, wide temp: -20°C to 55°C



Quick Installation

- Flat, stackable design
- Floor-mounted, no wiring



Convenient

- Auto networking, easy maintenance
- Remote monitoring, firmware upgrades



Eco-Friendly

- Non-toxic materials
- Pollution-free



Flexible

- Modular, Max. 6 clusters in parallel (36pcs)
- Max capacity 184kWh
- Residential/commercial use

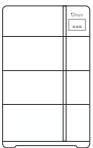


Safer

- Cobalt-free LFP battery
- Intelligent BMS, long lifespan, high efficiency

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

Technical Data



Main Parameters

Battery Model Number		AI-W5.1-B	AI-W10.2-B	AI-W15.3-B	AI-W20.4-B	AI-W25.6-B	AI-W30.7-B
Number of battery units in parallel (Optional)		1	2	3	4	5	6
Battery Chemistry		LiFePO ₄					
Built-in Circuit Breaker		125A 2P, 60Vdc					
Battery Module Energy (kWh)		5.12					
Battery Module Voltage (V)		51.2					
Battery Module Capacity (Ah)		100					
Nominal Voltage (V)		51.2					
Operating Voltage (V)		44.8~57.6					
Nominal Energy (kWh)		5.12	10.24	15.36	20.48	25.6	30.72
Usable Energy (kWh) ^[1]		4.6	9.2	13.8	18.4	23	27.6
Rated DC Power (KW)		2.5	5	7.5	10	12	12
Charge / Discharge Current (A)	Recommend	50	100	150	200	250	250
	Max.	100	200	250	250	250	250
	Peak (10s, 25°C)	150	270	360	360	360	360

Other Parameters

Recommend Depth of Discharge		90%					
System Dimension (W × D × H, mm)		720×255×569	720×255×850	720×255×1131	720×255×1412	720×255×1693	720×255×1974
System Weight (kg)		74.5	127.5	180.5	233.5	286.5	339.5
Battery Module Dimension (W × D × H, mm)		720±3×254±1.5×300±1.5					
Battery Module Weight (kg)		55					
MasterLED Indicator		Battery module : 3LED (working, alarming, protecting) , PDU module : 5LED (SOC : 20% ~ 100%) & 3LED (working, alarming, protecting)					
IP Rating of Enclosure		IP65 (after stacking)					
Operating Temperature		Charge : -20°C ~ 55°C / Discharge : -20°C ~ 55°C					
Standard charging method by manufacturer		Charge at 25±2°C at constant current 50A until the voltage reaches 57.6V.					
Standard discharging method by manufacturer		Discharge at 25±2°C at constant current 50A until the voltage reaches 44.8v.					
Storage Temperature		0°C ~ 35°C					
Humidity		5% ~ 95%, non-condensing					
Altitude		≤3000m					
Installation		Floor-Mounted					
Communication Port		CAN2.0, RS485					
Cycle Life		≥6000 (25°C±2°C , 0.5C / 0.5C, 90%DOD, 70%EOL)					
Energy Throughput		16MWh (Battery Module @70%EOL)					
Warranty Period ^[3]		10 years					
Certification		UN38.3, IEC62619, CE, UK, VDE2510-50, CEI0-21,CE-LVD, CEC, FCC, UL1973, 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.

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

[4]Made in China.

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

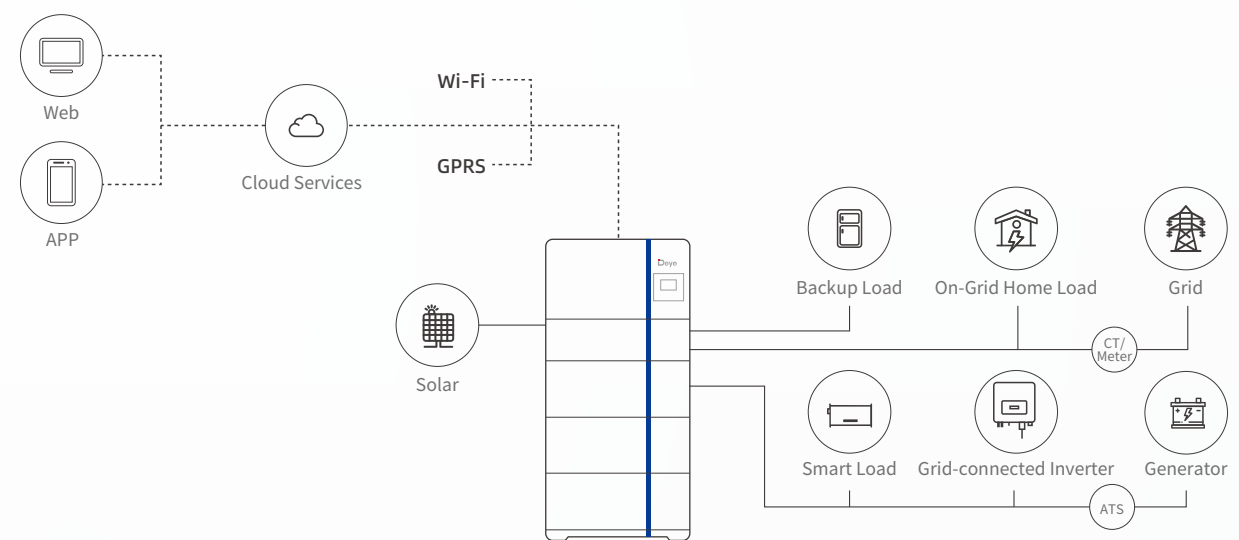
Warranty for long-term peace of mind

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- 7P1-EU-B	AI-W5.1- 7.6P1-EU-B	AI-W5.1- 8P1-EU-B	AI-W5.1- 10P1-EU-B
Battery Input Data							
Battery Type	Lithium-ion						
Battery Voltage	40-60						
Max. Charging Current(A)	90	120	135	175	190	190	210
Max. Discharging Current(A)	90	120	135	175	190	190	210
Charging Strategy for Li-Ion Battery	Self-adaption to BMS						
Number of Battery Input	1						
PV String Input Data							
Max. PV access power(W)	7200	10000	12000	14000	15200	16000	20000
Max. PV Input Power(W)	5760	8000	9600	11200	12160	12800	16000
Max. PV Input Voltage(V)	500						
Start-up Voltage(V)	125						
PV Input Voltage Range(V)	125-500						
MPPT Voltage Range(V)	125-425						
Full Load MPPT Voltage Range(V)	300-425			200-425			250-425
Rated PV Input Voltage(V)	370						
Max. Operating PV Input Current(A)	18+18			32+32			
Max. Input Short-Circuit Current(A)	27+27			48+48			
No.of MPPT Trackers/No.of String MPPT Tracker	2/1+1			2/2+2			
Max. Inverter Backfeed Current to The Array	0						
AC Input/Output Data							
Rated AC Input/Output Active Power(W)	3600	5000	6000	7000	7600	8000	10000
Max. AC Input/Output Apparent Power(VA)	3960	5500	6600	7700	8360	8800	11000
Peak Power (off-grid)(W)	2 times of rated power, 10s						
Rated AC Input/Output Current(A)	15.78	21.8	26.1	30.5	33.1	34.8	43.5
Max. AC Input/Output Current(A)	17.2	23.9	28.7	33.5	36.3	38.3	47.9
Max. Continuous AC Passthrough (grid to load)(A)	35		40		50		
Max. Output Fault Current(A)	31.4	43.4	52.2	61	69.6	66	100
Max. Output Overcurrent Protection(A)	80		140				
Rated Input/Output Voltage/Range(V)	230V/240V 0.85Un-1.1Un						
Grid Connection Form	L+N+PE						
Rated Input/Output Grid Frequency/Range	50Hz/45Hz-55Hz						
Power Factor Adjustment Range	0.8 leading-0.8 lagging						
Total Current Harmonic Distortion THDi	<3% (of nominal power)						
DC Injection Current	<0.5%In						
Efficiency							
Max. Efficiency	97.6%						
Euro Efficiency	96.5%						
MPPT Efficiency	>99%						
General Data							
Operating Temperature Range	-40 to +60°C, >45°C Derating						
Permissible Ambient Humidity	0-100%						
Permissible Altitude	2000m						
Noise	<30 dB(A)						
Ingress Protection(IP) Rating	IP 65						
Inverter Topology	Non-Isolated						
Over Voltage Category	OVC III(DC), OVC III(AC)						
Cabinet size(W*H*D) [mm]	720W×399.2H×256D (Excluding connectors and brackets)						
Weight(kg)	31.6						
Warranty	10 Years						
Type of Cooling	Intelligent Air Cooling						
Grid Regulation	AS/NZS 4777.2						
Safety EMC/Standard	IEC 61727, IEC 62116, CEI 0-21, EN 50549, NRS 097, RD 140, UNE 217002, OVE-Richtlinie R25, G99, G98, VDE-AR-N 4105						

System Application Topology Diagram



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Summer Series
Residential ESS Solution

Stacked Battery(HV)



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)

GB-L Pro (EU, AU)

Technical Data

Main Parameters

Model	GB-L Pro				
Cell chemistry	LiFePO ₄				
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

All-in-One ESS(HV)



GB-SL (EU, AU) & GB-SL Pro (EU)

1

Exceptional Performance

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

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

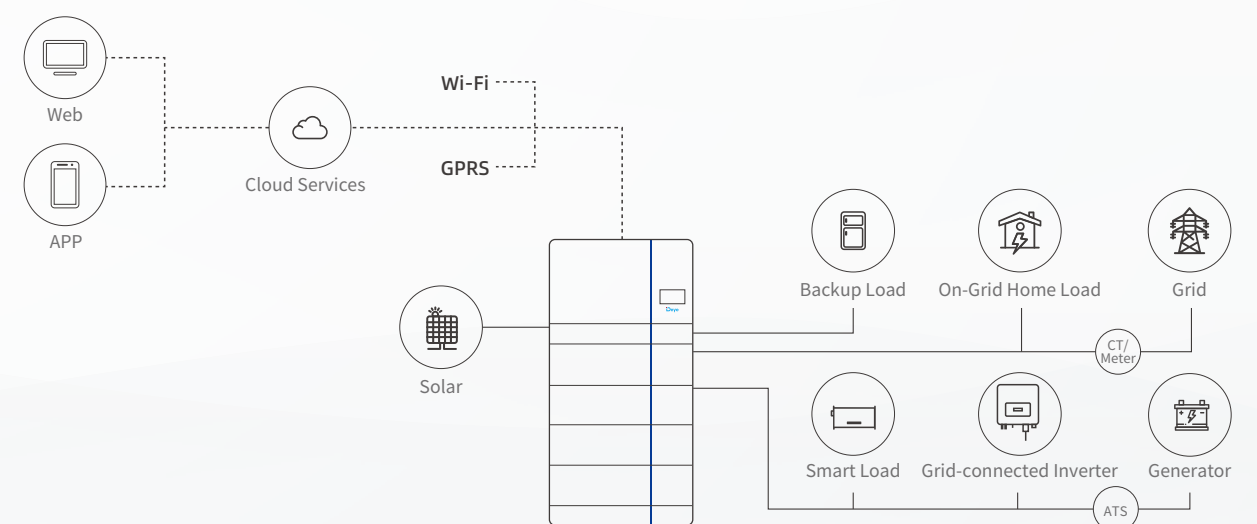
Smarter

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

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

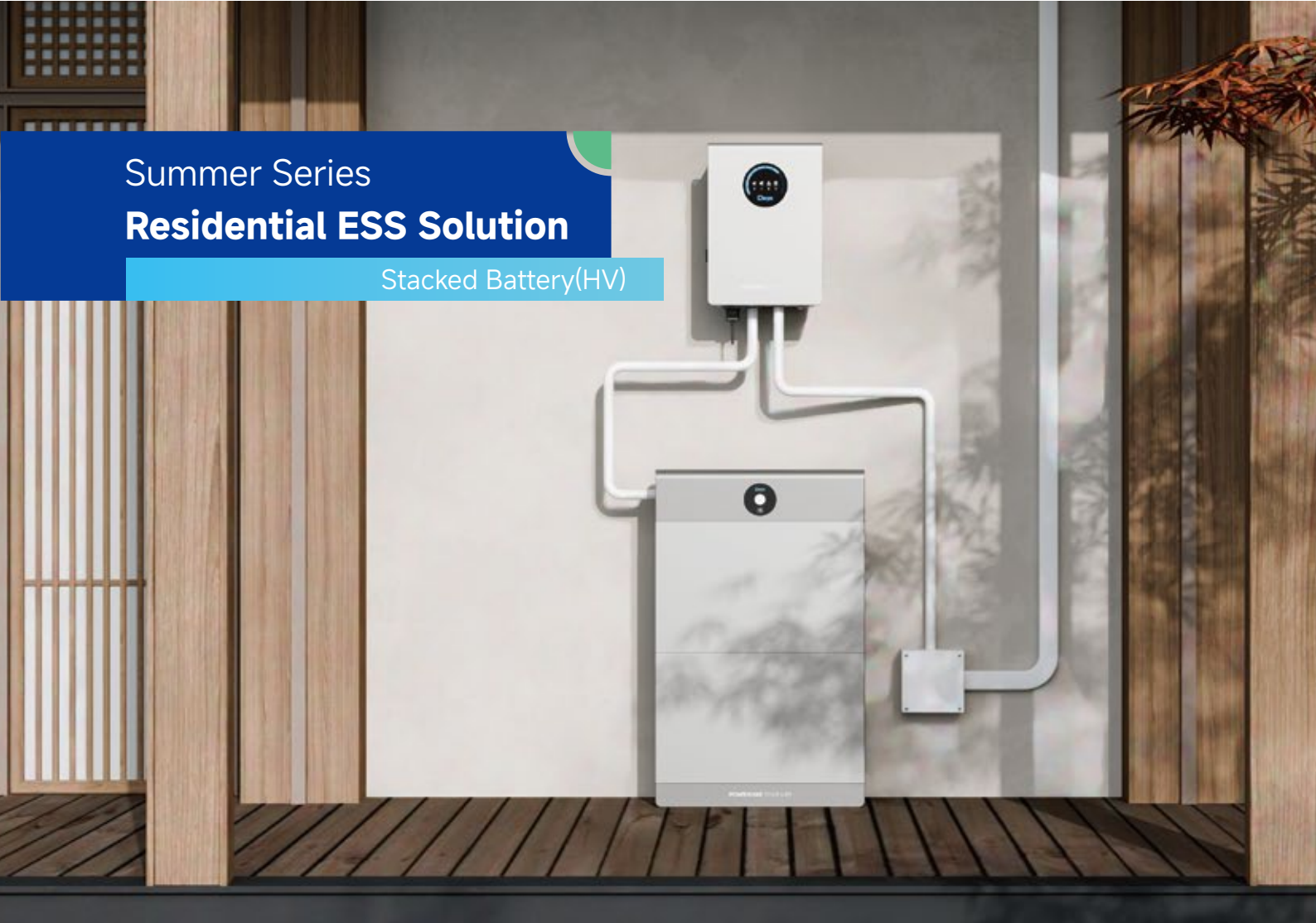
GB-SL (EU, AU) & GB-SL Pro (EU)

Technical Data



Battery Technical Specification							
Battery Model		GB-SL & GB-SL Pro					
Main Parameters							
Battery Type		LiFePO ₄					
Battery Module Energy (kWh)		4					
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	12	16	20	24	
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@2min					
Other Parameters							
Operating Temperature (°C)		GB-SL: Charge : 0~55 / Discharge : ~20~60 GB-SL Pro: Charge : ~20~55 / Discharge : ~20~55					
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 × 1100	540 × 385 × 1320	540 × 385 × 1540	540 × 385 × 1760	540 × 385 × 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		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						



Summer Series
Residential ESS Solution

Stacked Battery(HV)



Self-Sufficient and
Grid-Connected Operation

- Seamlessly switch between self-sufficient power and grid power.



Backflow Prevention

- Equipped with backflow prevention measures to protect the grid.



Single-Function and
Full Load Support

- Can handle both single appliances and full household loads.



101V/202V Load Support

- Compatible with both 101V and 202V electrical systems.

GB-A (JP)

Technical Data



Main Parameters

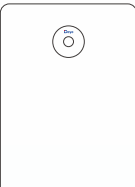
Model	GB-A4		GB-A10	GB-A16
Cell chemistry			LiFePO ₄	
Module Energy (kWh)			2	
Module Nominal Voltage (V)			51.2	
Module Capacity (Ah)			39.1	
System Nominal Voltage (V)	102.4		256	409.6
System Energy (kWh)	4		10	16
Charge Power (kW)	2.5		6.25	10
Discharge power (kW)	3.3		8.2	10
Max.charge current (A)			28	
Discharge Current (A)	Recommend		30	
	Max.		37	
Ambient operating Temperature (°C)			Charge/Discharge: -15~55	
Status Indicator			Yellow: Battery High Voltage Power On Red: Battery System Alarm	
Communication Port			CAN2.0/ RS485	
Humidity			5%-95%RH	
Altitude			3000m	
IP Rating of Enclosure			IP65	
Dimension (W/D/H,mm)	700 × 200 × 695		700 × 200 × 1135	700 × 200 × 1575
Weight Approximate (kg)	59		116	173
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			10 years	
Certification			JET	



Summer Series
Residential ESS Solution

Wall-Mounted Battery (HV)

SS-F5 & SS-F10 (EU)
Technical Data



Main Parameters

Model	SS-F5	SS-F10
Cell Chemistry	LiFePO ₄	
Battery System Energy (KWh)	5	10
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 Max.	10 20

Other Parameters

Ambient operating Temperature (°C)	Charge / Discharge : -20 ~ 55	
Status Indicator	SOC, fault code	
Communication Port	Fault Code	
Humidity	CAN2.0 / RS485	
Altitude	0% ~ 100%RH	
IP Rating of Enclosure	3000m	
Dimension (W × D × H, mm)	470 × 170 × 650	850 × 170 × 650
Weight Approximate (kg)	45	85
Installation Location	IP65	
Recommend storage Temperature (°C)	Wall Mounted, Floor-Mounted	
Recommend Depth of Discharge	0 ~ 35	
Cycle Life	90%	
Warranty Period	25±2°C, 0.5C / 0.5C, EOL70%≥6000	
Certification	10 years	
	Europe, Germany	



Intelligent Management

- Integrated master-slave BMS board with power circuitry (Max output: 20A / 256DC / 512DC)
- Max. passive balancing current of 0.15A, tripling equalization efficiency



Enhanced Scalability & Safety

- Up to 6 units in parallel, max. capacity of 60kWh
- Intelligent arc detection on DC side (Optional)



Advanced Structural Design

- Direct Cell-to-Pack integration with welded assembly
- Plastic enclosure replaces metal casing, increasing energy density by 14%
- Sleek brushed metal finish with integrated LCD screen



Easy Operation & Maintenance

- MC4 quick connectors for simplified installation
- Visual fault codes for local diagnostics and remote real-time monitoring



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



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



Multi-Fusion

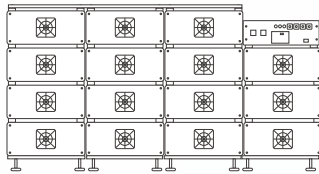
- Integrated EMS, PCS, and BMS
- Support expansion of MPPT module
- Support off-grid backup



Safer

- LFP batteries
- Support aerosol fire extinguishing

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



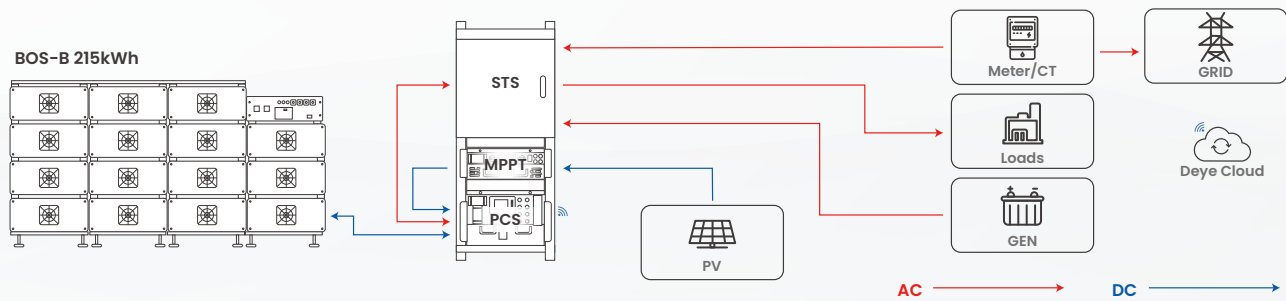
Main Parameters

Battery Module Energy (kWh)	14.3
Battery Module Nominal Voltage (V)	51.2
Battery Module Capacity (Ah)	280
Module Weight Approximate (kg)	123
Battery Module Qty In Series (Optional)	15
Scalability	14-15 units for PCS on-grid applications, 15 units for PCS off-grid applications, 5-15 units for hybrid inverter systems
System Nominal Voltage (V)	768
System Energy (kWh)	214.5
System Usable Energy (kWh)	193.05
Charge / Discharge	Recommend
Current (A)	Max.
	140
	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)	1944	
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	

Typical Application Scenario



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 2.9MW/5.1MWh



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

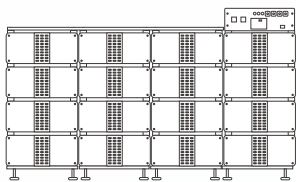


Safer

- LFP batteries
- Support aerosol fire extinguishing

BOS-B Pro-A3 (EU)

Technical Data



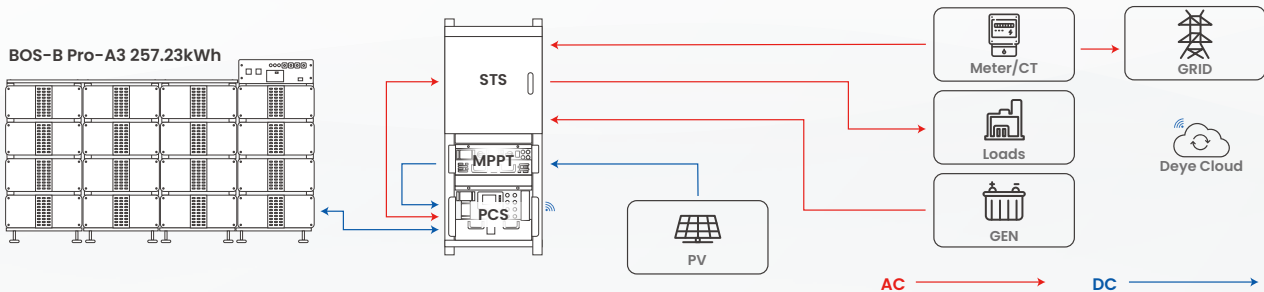
Main Parameters

Battery Module Energy (kWh)	16.08
Battery Module Nominal Voltage (V)	51.2
Battery Module Capacity (Ah)	314
Module Weight Approximate (kg)	123
Battery Module Qty In Series (Optional)	16
Scalability	14-16 units for PCS on-grid applications, 15-16 units for PCS off-grid applications, 5-15 units for hybrid inverter systems
System Nominal Voltage (V)	819.2
System Energy (kWh)	257.23
System Usable Energy (kWh)	231.51
Charge / Discharge	Recommend
Current (A)	Max.
	157
	180

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 × 1305 × 800	
System Weight Approximate (kg)	1980	
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	

Typical Application Scenario



Summer Series
Small-Scale C&I ESS Solution

Rack-Mounted Battery (HV)



Safe and Reliable

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



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



Flexible Expansion

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



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



Smart Operation

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

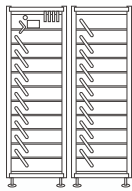


Long Service Life

- 10-year warranty
- 6000 cycles

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	CE / IEC 62619 / IEC 62040 / UN38.3 / VDE-2510		

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.

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



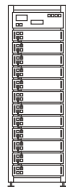
Safe and Reliable

- 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)	12 (2P6S)	8 (1P8S)	12 (1P12S)
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 Current (A)	Recommend	100	50
	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		

Backup Power Duration Plan

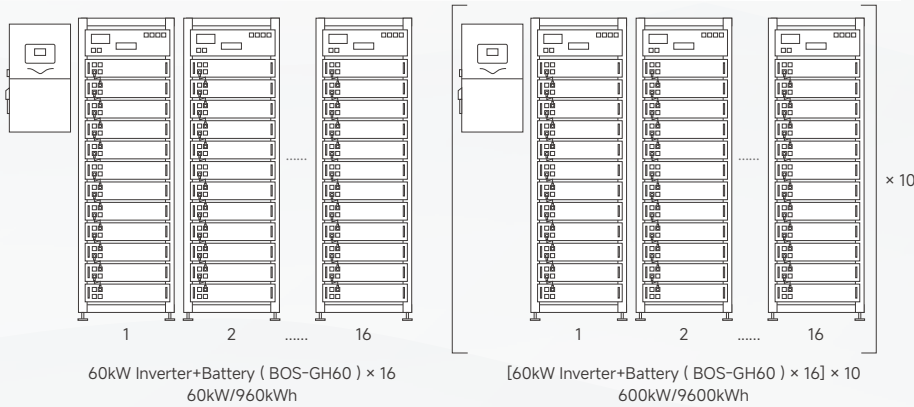
	1 hour		2 hours	
Hybrid inverter power	30kW	60kW	60kW	30kW
Battery model	BOS-GH40	BOS-GH60	BOS-GH60	BOS-GL60
Number of batteries	1 pc	1 pc	2 pcs	1 pcs

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)



Convenient

- Quick installation standard of 19-inch embedded designed module is comfortable for installation and maintenance.



Intelligent BMS

- It has protection functions including over-discharge, over-charge, over-current and over-high or low temperature. The system can automatically manage charge and discharge state and balance current and voltage of each cell.



Eco-friendly

- The whole module is non-toxic, non-polluting and environmentally friendly.



Safe and Reliable

- Cathode material is made from LiFePO4 with safety performance and long cycle life. The module has less self-discharge, up to 6 months without charging it on shelf, no memory effect, excellent performance of shallow charge and discharge.
- Support Aerosol fire extinguishing.



Flexible Configuration

- Multiple battery modules can be in parallel for expanding capacity and power. Support USB upgrade, remote up grade (Compatible with Deye inverter).

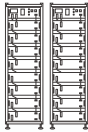


Wide Temperature

- Working temperature range is from -20°C to 55°C, with excellent discharge performance and cycle life.

BOS-G Pro (EU, SA, 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-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
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 / CE / CE-EMC / IEC62040 / CEC / VDE		

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

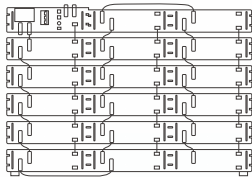


Flexible

- 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

SUN-BK80/160/200/250-2.56KWH-EU-AM4-18L 69
(EU, AS, AF, LATAM)

Residential ESS Solution

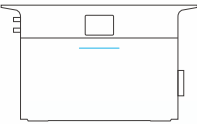
WD-G12100 & WD-G12200 & WD-G24100 (AS, AF, LATAM) 71

Autumn Series
Balcony ESS Solution

Balcony ESS



SUN-BK80/160/200/250-2.56KWH-EU-AM4-18L
(EU, AS, AF, LATAM)



Technical Data

Model	SUN-BK80-2.56KWH -EU-AM4-18L	SUN-BK160-2.56KWH -EU-AM4-18L	SUN-BK200-2.56KWH -EU-AM4-18L	SUN-BK250-2.56KWH -EU-AM4-18L
Rated AC Input/Output Active Power	800W	1600W	2000W	2500W
Max. AC Input/Output Active Power	880W	1760W	2200W	2750W
Max. off grid power	2500W			
AC Input / Output Frequency and Voltage	50Hz (45Hz ~ 55Hz) , 60Hz (55Hz ~ 65Hz) , L + N + PE , 220 / 230 Vac			
Grid Type	Single phase			
Rated AC Input/Output Current	3.7A / 3.5A	7.3A / 7.0A	9.1A / 8.7A	11.4A / 10.9A
Max. AC Input/Output Current	4A / 3.9A	8A / 7.7A	10A / 9.6A	12.5A / 12A
Peak Power (off-grid)	2 time of rated power, 10s			
Power Factor Adjustment Range	0.8 leading to 0.8 lagging			
Max. Bypass (Grid to Load)	30A			
DC Injection Current	<0.5%In			

PV Technical Specification

Max. PV Access Power (W)	4400W
Max. Operating PV Input Current	18+18+18+18A
Max. Input Short-Circuit Current	27+27+27+27A
Rated PV Input Voltage	42.5V
Start-up Voltage	25Vdc
MPPT Voltage Range	20 ~ 55V
No. of MPP Trackers/No. of Strings MPP Tracker	4/1+1+1+1
Battery Chemistry	LiFePO ₄
Battery Nominal Voltage	51.2V
Battery Nominal Energy	2560Wh
Max.Charging/Discharging Current	55A
Battery Cycle Life	≥6,000 (@25°C±2°C, 70%EOL)

Other Technical Specification

Display	Colorful Touch LCD & APP & Battery LED (SOC, Alarm)
Communication Interfaces	Wi-Fi, Bluetooth, LoRa
Operating Temperature Range	-10°C ~ 55°C, >45°C Derating, (-20°C~55°C with heating, optional)
Permissible Altitude	3000m
Ingress Protection(IP) Rating	IP 65
Dimension(W X D X H)	560 × 210 × 330mm
Relative Humidity	0% ~ 95% (No Condensing)
Safety EMC / Standard	IEC 62619, UN38.3, IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1/2/3/4
Grid Regulation	VDE 4105, IEC 61727/62116, VDE 0126, AS 4777.2, CEI 0-21, EN 50549-1, G98, C10-11, UNE 217002
Battery Certification	UN38.3, IEC 62619
Installation Style	Floor-Mounted, Stacked-Mounted
Warranty	10 years

Battery Technical Specification

	AE-F2.6
Battery Chemistry	LiFePO ₄
Battery Nominal Voltage	51.2V
Battery Nominal Energy	2560Wh
Max. Charging / Discharging Current	55A
Battery Operating Voltage	44.8V ~ 57.6V
Battery Cycle Life	≥6,000 (@25°C±2°C, 70%EOL)
Max. Stack NO.	5 pcs (up to 12.8kWh)
Parallel Capability	40 pcs*
Display	LED (SOC, Alarm)
Communication Interfaces	LoRa
Dimension (W × D × H)	450 × 210 × 244 (without terminal)
Ingress Protection(IP) Rating	IP 65
Weight Approximate (kg)	24kg
Operating Temperature Range	-10°C~55°C (-20°C~55°C with heating, optional)
Max. Operating Altitude	3000m
Relative Humidity	0% ~ 95% (No Condensing)
Certification	UN38.3, IEC 62619, CE
Installation Style	Floor-Mounted, Stacked-Mounted
Warranty Period	10 years



High Conversion Efficiency

- DC-AC conversion efficiency of up to 96.5%
- 2500W rated power AC charge/discharge
- Supports 18A high-current PV modules



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

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

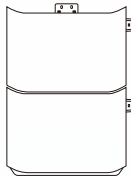
- Keeps battery stable at low-voltage, minimum cold-start capability of 5V

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

Series

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C&I PV-BESS-EV Charging Integrated Solution

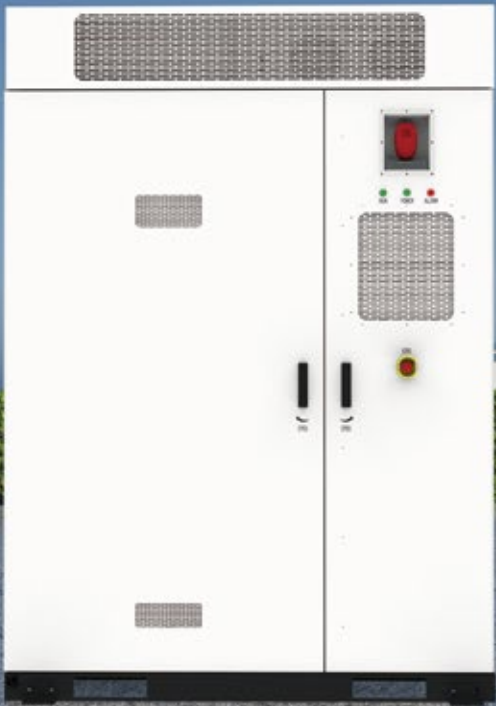
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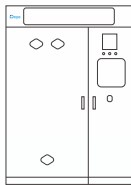
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Winter Series
C&I ESS Solution

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



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



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



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

MS-G215-2H3 & MS-GS215-2H3 (AS, AF, LATAM, EU)

Technical Data

PV Specification

MS-GS215-2H3

Out Rated Power (kW)	150 (dc)
Max. Input Voltage (V)	1000
Start Voltage (V)	200
MPPT Voltage Range (V)	180 ~ 650
Full Load Voltage Range (V)	450 ~ 650
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-G215-2H3 / MS-GS215-2H3

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 2732
Battery Operating Voltage (Vd.c.)	DC: 600~935 (grid on) / DC: 700~935 (grid off)
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	UN3536, IEC61000,IEC62477,IEC60730
Warranty Period	10 years or Cycle Life ≥6000 (@25°C±2°C,0.5C/0.5C, 70% EOL)

Converter Specification

MS-G215-2H3 / MS-GS215-2H3

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%

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

- 3+3 Fire Protection System
- 3+3 Electrical Safety Safeguards
- AC Leakage & DC Insulation Detection
- High-voltage interlocking, preventing loaded arc operation



Versatile Expansion

- PCS/BMS/EMS All-in-one modular design
- Support up to 10 cabinets in parallel
- Support 2/4/6/8-hour energy storage applications
- Higher energy density to reduce footprint
- PV and BESS DC Coupling



Multiple Application Scenarios

- Peak-to-Valley arbitrage/Peak-to-Valley shifting
- Virtual power plant ready
- Off-grid operation (Islands, communication base stations, etc.)

MC-L430-2H2 (EU)
MC-L430-BC-2 (EU)

Technical Data

Model	MC-L430-2H2 (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	≤5000kg
Dimensions (W × D × H)	2000 × 1300 × 2480mm
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-2 (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	≤4900kg
Dimensions (W × D × H)	2000 × 1300 × 2480mm
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 ESS Solution



Intelligent Cloud Platform

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



Ultimate Safety

- 3+3 Fire Protection System
- 3+3 Electrical Safety Safeguards
- AC Leakage & DC Insulation Detection
- High-voltage interlocking, preventing loaded arc operation



Versatile Expansion

- PCS/BMS/EMS All-in-one modular design
- Support up to 10 cabinets in parallel
- Support 2/4/6/8-hour energy storage applications
- Higher energy density to reduce footprint
- PV and BESS DC Coupling



Multiple Application Scenarios

- 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, EU)
MC-L430-BC-3 (AS, AF, LATAM, EU)

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	≤5000kg
Dimensions (W × D × H)	2000 × 1300 × 2480mm
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-2 (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	≤4900kg
Dimensions (W × D × H)	2000 × 1300 × 2480mm
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

- 3+3 Fire Protection System
- 3+2 Electrical Safety Safeguards
- AC Leakage & DC Insulation Detection
- High-voltage interlocking, preventing loaded arc operation



Versatile Expansion

- PCS/BMS/EMS All-in-one modular design
- Support up to 10 cabinets in parallel
- Support 2/4/6/8-hour energy storage applications
- Higher energy density to reduce footprint
- PV and BESS DC Coupling



Multiple Application Scenarios

- Peak-to-Valley arbitrage/Peak-to-Valley shifting
- Virtual power plant ready
- Off-grid operation (Islands, communication base stations, etc.)

MC-LC430-2H2 & MC-LC430-BC-2 (EU)
MS-DC480-2 & MS-DCC180-2 (EU)
MS-MPPT-400/200-2 (EU)

Technical Data

Model	MC-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-M (Optional C5)
Altitude	≤2000m
Communication	RS485, Modbus TCP, DIDO
Weight	≤5000kg
Dimensions (W × D × H)	2000 × 1350 × 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	-1~+1

Model	MC-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-M (Optional C5)
Altitude	≤2000m
Communication	RS485, Modbus TCP, DIDO
Weight	≤4800kg
Dimensions (W × D × H)	2000 × 1350 × 2480mm
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

MC-LC430-2H2 & MC-LC430-BC-2 (EU)
MS-DC480-2 & MS-DCC180-2 (EU)
MS-MPPT-400/200-2 (EU)

Technical Data

ModelMS-DC480-2 (480kW DC charge power cabinet)	
DC Input Data	
Input standard	DC+ / DC- / PE
DC input voltage range	200Vdc ~ 850Vdc
DC input current range	≤667A
DC rated input power	480kW @400Vdc≤Vin≤850Vdc
DC Output Data	
DC output voltage range	150Vdc ~ 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)	1150kg

ModelMS-DCC180-2 (DC charging terminal)	
DC Input Data	
DC Input Voltage Range (V)	150Vdc ~ 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)	280kg

ModelMS-MPPT400-2	
System Parameters	
Dimension (W × D × H, mm)	1000 × 1000 × 2480
Weight Appr. (kg)	≤950kg
System Operating temperature range	-30°C ~ 50°C
Max. working altitude (m)	≤2000m
IP Rating of Enclosure	IP54
STS 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	
No. of MPPT	2
Max. PV Input Power (kW)	400(2*200)
Max. PV Input Voltage (V)	800
Start-up Voltage (V)	200
MPPT Voltage Range (V)	180 ~ 750
Full Load MPPT Voltage Range (V)	450 ~ 750
Rated PV Input Voltage (V)	600
Max. Operating PV Input Current (A)	2*(40+40+40+40+40+40+40+40)
Max. Input Short-Circuit Current (A)	2*(60+60+60+60+60+60+60+60)
No.of MPP Trackers	16 (2*8)
Max. Efficiency	>99%
MPPT Efficiency	>99.9%
ModelMS-MPPT200-2	
PV String Input Data	
Max. PV Input Power (kW)	200
Max. PV Input Voltage (V)	800
Start-up Voltage (V)	200
MPPT Voltage Range (V)	180-750
Full Load MPPT Voltage Range (V)	450-750
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
Efficiency	
Max. Efficiency	>99%
MPPT Efficiency	>99.9%
Equipment Protection	
DC input reverse protection	YES
DC ARC protection	Optional
Anti-PID(Potential Induced Degradation)	Optional
DC Switch	YES
Surge Protection Level	TYPE II
General Data	
Ingress Protection(IP) Rating	IP65
Over Voltage Category	OVC I
Cabinet Size[W×H×D] (mm)	543x198x700
Weight (kg)	70
Type Of Cooling	Intelligent air cooling
Safety EMC/Standard	IEC/EN 62109-1
DC Output Data	
DC Output Voltage Range(V)	630-1000
Max. DC Output Current(A)	200



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

- 3+3 Fire Protection System
- 3+3 Electrical Safety Safeguards
- AC Leakage & DC Insulation Detection
- High-voltage interlocking, preventing loaded arc operation



Versatile Expansion

- PCS/BMS/EMS All-in-one modular design
- Support up to 10 cabinets in parallel
- Support 2/4/6/8-hour energy storage applications
- Higher energy density to reduce footprint
- PV and BESS DC Coupling



Multiple Application Scenarios

- Peak-to-Valley arbitrage/Peak-to-Valley shifting
- Virtual power plant ready
- Off-grid operation (Islands, communication base stations, etc.)

MS-L430-2/4H4 (US)
MS-L430-BC-4 (US)
MS-DC480-4 & MS-DCC180-4 (US)

Technical Data

Model	MS-L430-2H4 (AC BESS)		MS-L430-4H4 (AC 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	≤5050kg		≤4900kg
Dimensions (W × D × H)	2000 × 1350 × 2480mm		
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		charge 0.25P, discharge 1P
AC Data			
Nominal AC Voltage	3480V (-10%~+5%)		
Rated Frequency	60Hz (±3Hz)		
Rated Power	250kW		125kW
Maximum Power	275kW (1.1 times of rated power)		137.5kW (1.1 times of rated power)
Power Factor	-1 ~ +1		

Model	MS-L430-BC-4 (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	≤4760kg	
Dimensions (W × D × H)	2000 × 1350 × 2480mm	
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-L430-2/4H4 (US)

MS-L430-BC-4 (US)

MS-DC480-4 & MS-DCC180-4 (US)

Technical Data

Model	MS-DC480-4 (480kW DC charge power cabinet)	
DC Input Data		
Input standard	DC+ / DC- / PE	
DC input voltage range	200Vdc ~ 850Vdc	
DC input current range	≤667A	
DC rated input power	420kW @400Vdc≤Vin≤850Vdc	
DC Output Data		
DC output voltage range	150Vdc ~ 1000Vdc	
DC output current range	8 branches, max 250A each	
Environmental Conditions		
Operating Temperature Range (°C)	-30°C ~ + 55°C (derating above 50°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		
Certification	UL2202, UL2231, UL991, UL1998	
Efficiency	≥ 97.5%, @full load	
Dimension (W × H × D, mm)	1250 × 2450 × 1000mm	
Approximate Weight (kg)	600kg	

Model	MS-DCC180-4 (DC charging terminal)	
DC Input Data		
DC Input Voltage Range (V)	150Vdc ~ 1000Vdc	
Input number	2 DC inputs	
DC Output Data		
Output interface	1 pile 2 guns, each gun 180kW charging power, support the US standard CCS1 and Tesla charging standard interface	
DC Output range	150Vdc ~ 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 ~ + 55°C (derating above 50°C)	
Storage Temperature (°C)	-40°C ~ + 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)	280kg	

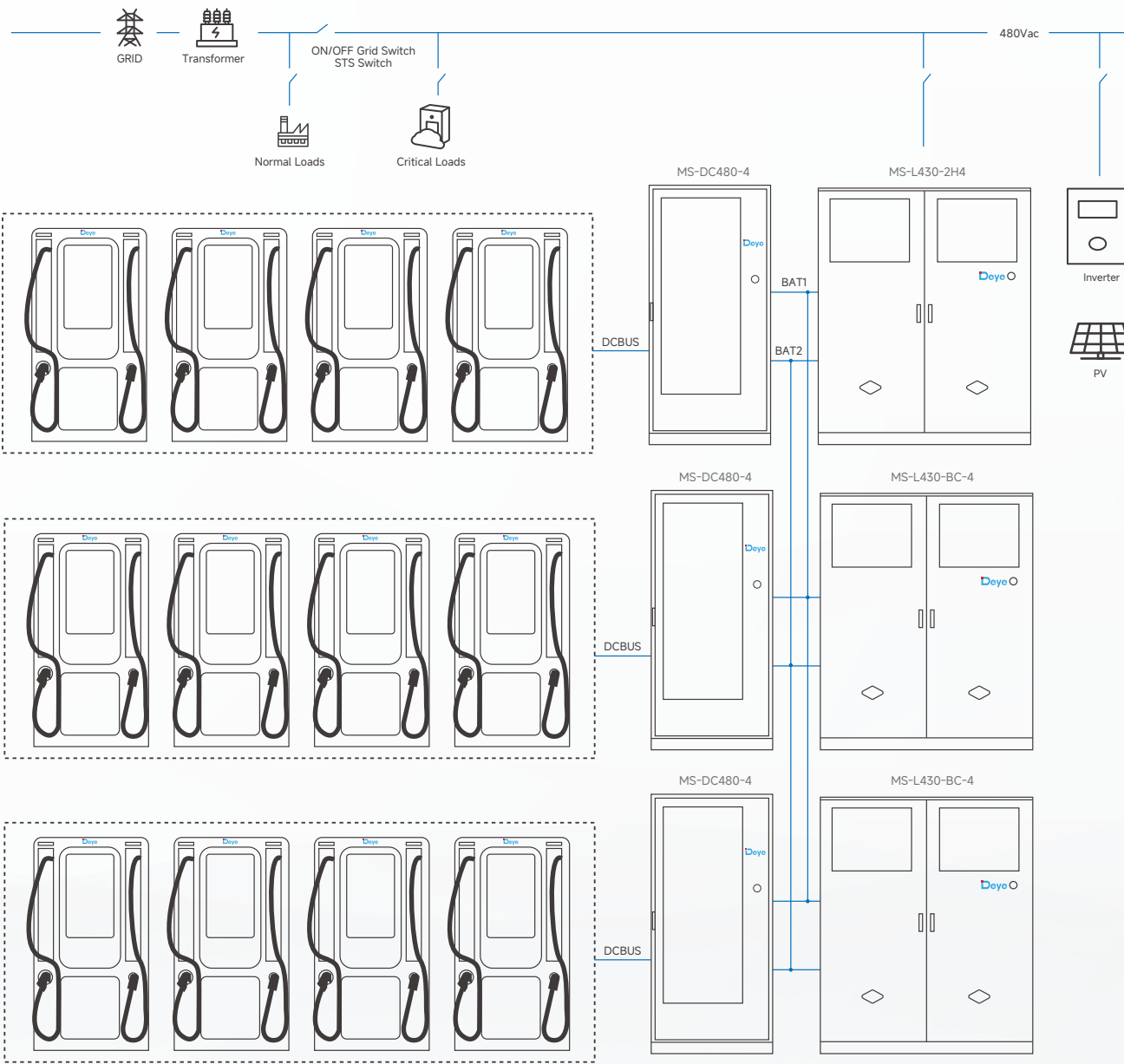
Integrated energy storage and charging application

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 both TESLA and CCS1 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

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



Integrated Technology

- LC, PCS, and battery integrated
- EMS for system management
- ATS for on/off-grid switching
- 1 MW PCS output
- 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

- 1.1x overload, 1.5x overload
- 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, EU)

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%

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	10 years

Winter Series
Utility-Scale ESS Solution

Liquid - Cooled ESS

WS-L4300-BC-3 (AS, AF, LATAM, EU)
WS-PCS2250-2 (AS, AF, LATAM, EU)



Ultimate Safety

- 3+3 Fire Protection System
- 3+3 Electrical Safety Safeguards
- AC Leakage & DC Insulation detection
- High-Voltage Interlock



Seamless Scalability

- Modular Architecture
- Flexible 2/4/6h Energy Storage Solutions
- Compact Design, High Energy Density



Versatile Applications

- Peak Shaving & Energy Arbitrage
- Virtual Power Plant (VPP) Ready
- Off-Grid & Microgrid Capable
- PV and BESS DC Coupling
- Hybrid Solar-BESS-Diesel Systems



Smart Cloud Management

- AI-Powered Load Optimization
- 24/7 Remote Monitoring & O&M
- Real-Time Battery Health & Safety Alerts
- Cloud-Connected Ecosystem



High Energy Density

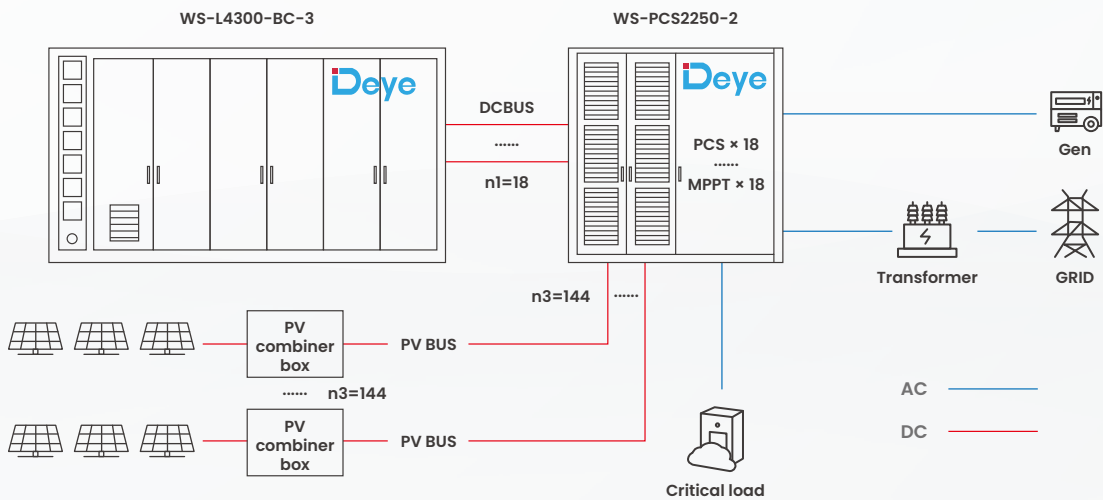
- 4300kWh in 20' BESS container
- 2250kW PCS, 2880kW PV in 10' container



Cluster Management

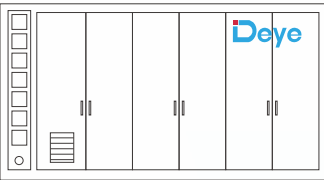
- One cluster management, high availability, more friendly to the cell

UTILITY-SCALE ESS Solution



WS-L4300-BC-3 (AS, AF, LATAM, EU)
WS-PCS2250-2 (AS, AF, LATAM, EU)

Technical Data



Liquid-Cooled ESS	
Model	WS-L4300-BC-3
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	38000kg
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	-1~+1
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	800Vdc
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-M (Optional C5)
Altitude	≤2000m
Weight	11500kg
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.

