



WORLD LEADING
ENERGY STORAGE SYSTEM SOLUTIONS PROVIDER

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

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JJ-LAPP

01

COMPANY PROFILE



LEADING PROVIDER OF ENERGY STORAGE SYSTEM SOLUTIONS

DEYE TECHNOLOGY CO., LTD.

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

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

Listed on the Shanghai Stock Exchange in April 2021

500+

R&D PERSONNEL

600000+m²

FLOOR SPACE

2021.4

LISTED

4

CORE INDUSTRY CHAINS



The solar & hybrid inverter



The environmental electrical appliance series



The heat exchanger series



The lithium battery energy storage system

DEVELOPMENT HISTORY



2023

Shanghai Office Established

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

2020

Energy Storage Business Started

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

2007

Inverter Business Started

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

2021

Listed on SSE

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

2016

Inverter Business Booms

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

2000

Environmental Appliances

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

1990

Mold Injection

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

2024

Revenue hits 10 billion RMB

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

OUR FACTORY

50B Annual Planned Output
Before 2030

1 Innovation Center



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

4 Production Bases



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



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



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



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

ULTIMATE SAFETY

LEADING PROVIDER OF ENERGY STORAGE
SYSTEM SOLUTIONS



CONTINUOUS INNOVATION

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



6GWH+

Capacity 2025



180,000+

Sqm



600,000+

Packs Capacity



300+

R&D Engineers

GLOBAL CERTIFICATIONS

Ensure compliance with regional standards



GLOBAL LAYOUT





8
Overseas Service
Centers



120+
Countries



4M+
Equipment in
Operation

Spring Series /



SE-G5.1



SE-G10.2



SE-F5 & SE-F12



RW-G10.6



RW-F16



RW-L2.5A



RW-L5.1



RW-L10.2



RW-F5.3-1H3

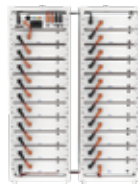


SE-G5.1 Pro-B

Summer Series /



BOS-B



BOS-A



BOS-W



GE-F60

Autumn Series /



WD-G12200&WD-G12100&WD-G24100

Winter Series /



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



MS-L430-2H3



MS-L430-BC-3



MS-DC420-2



MS-DCC180-2



MS-MPPT400-2



WS-G2000-2H3/WS-GS2000-2H3



WS-L4300-2H3



WS-PCS2250-2

CONTENTS

SPRING

Series

Residential ESS Solution

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Spring Series
Residential ESS Solution

Rack-Mounted Battery(LV)



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



Easy Maintenance

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



Safer

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



Exceptional Performance

- Support Max. 0.5C continuous charging and discharging



More Flexible

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

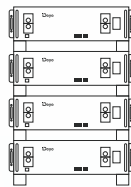


Enhanced Reliability

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

SE-G5.1 & SE-G10.2

Technical Data



Main Parameters

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

Other Parameters

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

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



- [1] Test conditions : 25°C±2°C, at beginning of life, 0.2C charge & 0.2C discharge,100% DOD.
[2] The current is affected by temperature and SOC.
[3] Max. 32 pcs without external CAN-Box.



Spring Series

Off-Grid ESS Solution

Wall-Mounted Battery(LV)

Comprehensive Protection

- Advanced BMS with active fuse

Optimized Energy Density

- Integrated PACK: reduced line loss, enhanced energy density

Easy Maintenance

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

Superior Performance

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

Flexible Expansion

- Max. 32 units in parallel

Reliable Durability

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

SE-F5 & SE-F12

Technical Data



Main Parameters				
Model		SE-F5		SE-F12
Battery Chemistry		LiFePO ₄		
Capacity ^[1]		100 Ah		230 Ah
Scalability		Max. 32 pcs in parallel		
Nominal Voltage		51.2V		
Operating Voltage		44.8 V ~ 57.6 V		
Nominal Energy ^[1]		5.12 kWh		11.8 kWh
Charge Current ^[2]	Max. Continuous	50 A		115 A
	Peak	75 A (10 sec)		175 A (10 sec)
Discharge Current ^[2]	Max. Continuous	120 A		230 A
	Peak	150 A (10 sec)		280 A (10 sec)
Other Parameters				
Recommend Depth of Discharge		80% DoD		
Dimension (W × D × H, mm)		370 × 548 × 140 mm (Without hanging board)		400 × 583 × 232 mm (Without hanging board)
Weight Approximate		39 kg		78 kg
LED Indicator		LED (SOC, working, protecting) & Buzzer		
IP Rating of Enclosure		IP21		
Operating Temperature		Charge: 0 ~ 55°C / Discharge: -20°C ~ 55°C		
Storage Temperature		0 ~ 35°C		
Relative Humidity		95% (non-condensing)		
Altitude		≤3000m		
Cycle Life		≥6000(25°C±2°C,0.2C/0.2C,80%DOD,70%EOL)		
Installation		Wall-Mounted, Stack-Mounted		
Communication		CAN2.0, RS485, Bluetooth, APP		
Warranty Period		5 years		
Energy Throughput ^[3]		8 MWh		18 MWh
Certification		UN38.3, MSDS		

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



Spring Series
Residential ESS Solution

Wall-Mounted Battery(LV)

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



Safer

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



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



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



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

Technical Data



Main Parameters

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

Other Parameters

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

[1] Test conditions : 25°C±2°C, at beginning of life, 0.3C charge & 0.3C discharge,100% DOD.

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

*Wall-Mounted, Floor-Mounted

Spring Series
Residential ESS Solution

Wall-Mounted Battery(LV)



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



Safer

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



Easy Operation & Maintenance

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



Reliable

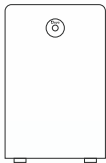
- Built-in circuit breaker, Support 160A charge and 160A discharge
- Charge from 0°C to 55°C, discharge from -20°C to 55°C



Flexible Application

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

RW-F16
Technical Data



Main Parameters

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

Other Parameters

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

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

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

*Wall-Mounted, Floor-Mounted

Spring Series
Residential ESS Solution

Wall-Mounted Battery(LV)



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



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

RW-L2.5A & RW-L5.1 & RW-L10.2

Technical Data

③

Main Parameters

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

Other Parameters

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

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

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

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

Spring Series
Residential ESS Solution

All-in-One ESS (LV)



RW-F5.3-1H3



Enhanced Reliability

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



Flexible Expansion

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



Easy Installation

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



Smart Application

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



All-in-One Design

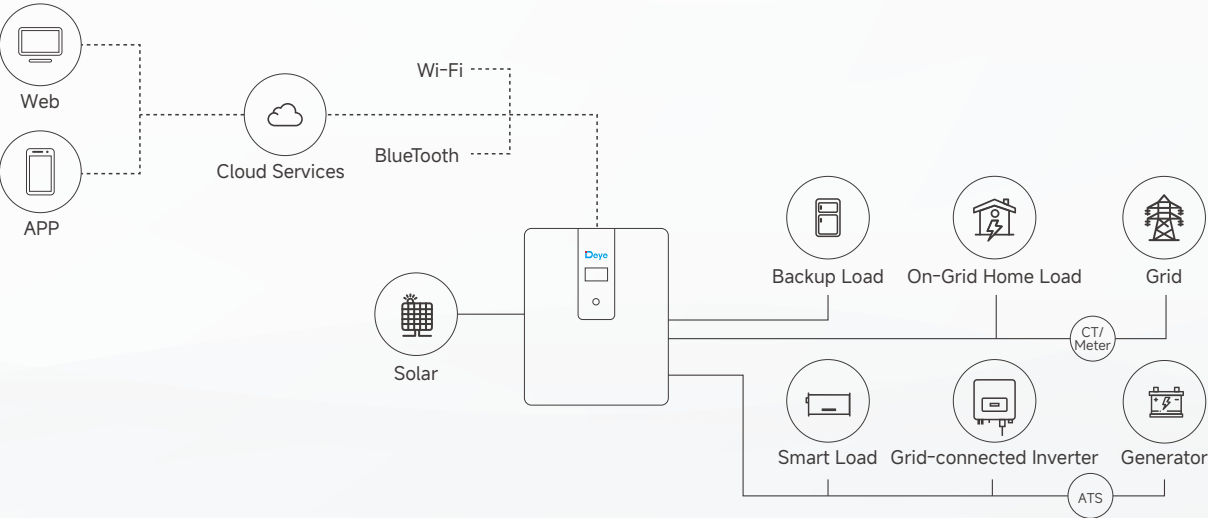
- Integrated 5kW hybrid inverter and 5.3kWh LFP battery



Intelligent Control

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

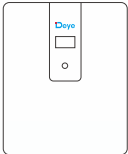
System Application Topology Diagram



*Wall-Mounted, Floor-Mounted

RW-F5.3-1H3

Technical Data



AC Technical Specification

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

DC Technical Specification

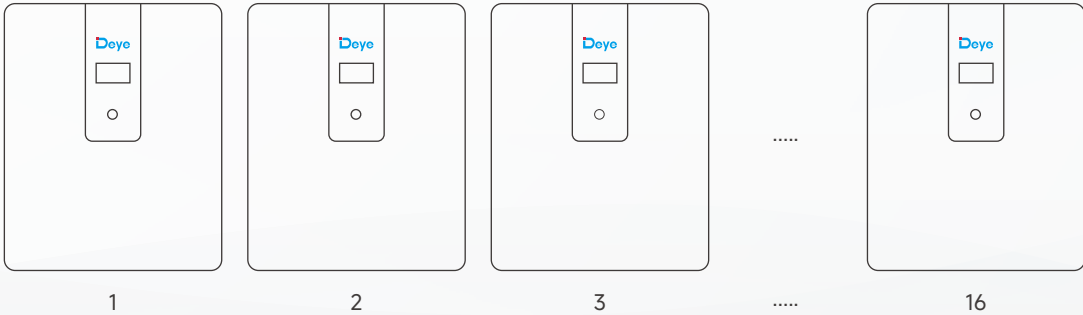
Max. PV Access Power (W)	10000
Max. PV Input Power (W)	8000
Max. PV Input Voltage (Vdc)	500
Start Up PV Voltage (Vdc)	125
MPPT Voltage Range (Vdc)	150 ~ 425
Full Load MPPT Voltage Range (Vdc)	300 ~ 425
Rated PV Input Voltage (Vdc)	370
Max. Operating PV Input Current (A)	18+18
Max. PV Input Short-circuit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

Other Technical Specification

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

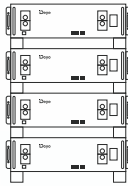
- Cobalt Free Lithium Iron Phosphate LFP Battery : safety and long lifespan, high efficiency and high power
- Intelligent BMS, providing complete protection



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
Technical Data



Main Parameters

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

Other Parameters

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

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

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

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

CONTENTS

SUMMER

Series

Small-Scale C&I ESS Solution

BOS-B	33
BOS-A	35
BOS-W	37
GE-F60	39

Summer Series
Indoor C&I ESS Solution

Rack-Mounted Battery (HV)



Intelligent Control

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



Scalable

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



Multi-Fusion

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



Reliable

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



Easy Maintenance

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

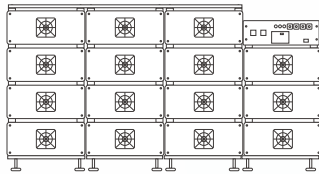


Safer

- LFP batteries
- Support aerosol fire extinguishing

BOS-B

Technical Data



Main Parameters

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

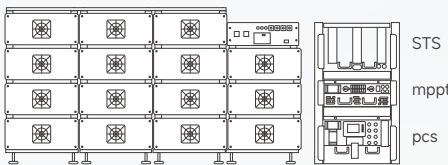
Other Parameters

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

Backup Power Duration Plan

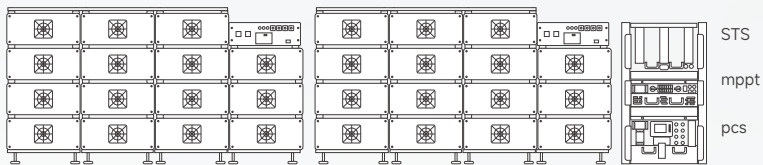
	2 hours	4 hours
Hybrid inverter power	100kW	100kW
Battery model	BOS-B 215kWh	BOS-B 215kWh × 2

BOS-B 215kWh



2 hours

BOS-B 215kWh



4 hours

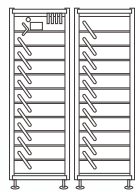
Summer Series
Small-Scale C&I ESS Solution

Rack-Mounted Battery (HV)



BOS-A

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	UN38.3, IEC, VDE		

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

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



Safe and Reliable

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



Flexible Expansion

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



Smart Operation

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



Intelligent Control

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



Easy Installation

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



Long Service Life

- 10-year warranty
- 6000 cycles

Summer Series
Small-Scale C&I ESS Solution

Rack-Mounted Battery (HV)



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

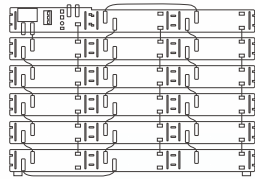


Flexible

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

BOS-W

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(Max)
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			
Dimension (W × D × H, mm)	530 × 602 × 1629		530 × 602 × 2219	1060 × 602 × 1629
Weight Approximate (kg)	290	428	622	837
Installation Location	Rack Mounting			
Storage Temperature (°C)	0 ~ 35			
Recommend Depth of Discharge	90%			
Cycle Life	25±2°C, 0.5C / 0.5C, EOL70%≥6000			
Warranty Period	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

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	

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.

CONTENTS

AUTUMN

Series

Residential ESS Solution

WD-G12100 & WD-G12200 & WD-G24100	43
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Winter Series
Residential ESS Solution

Stacked Battery (LV)



Reverse Polarity Protection

- Prevents battery or BMS damage from incorrect wiring



Current-limiting Charging

- Supports parallel connection and auto-recharges after deep discharge



Automatic Recovery Function

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



Thermal Protection

- Prevents thermal runaway with high-precision temperature sensor



Flexible Expansion

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

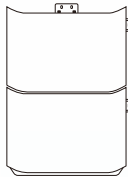


External Power Support

- Solar recharging, avoid battery standby, allow direct recharge

WD-G12100&WD-G12200&WD-G24100

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.

CONTENTS

WINTER

Series

C&I ESS Solution

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C&I PV-BESS-EV Charging Integrated Solution

MS-L430-2H3 49

MS-L430-BC-3 49

MS-DC420-2 49

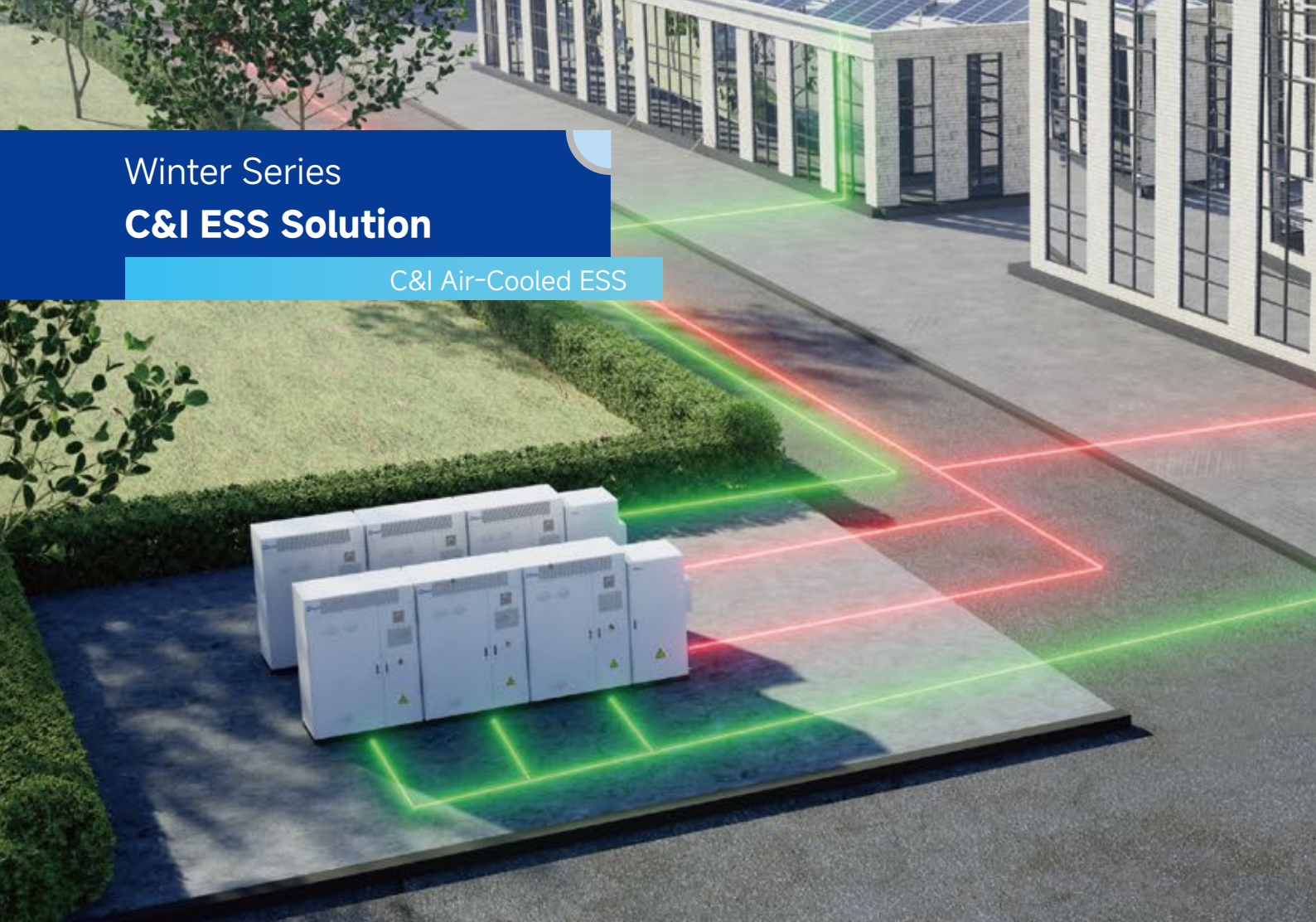
MS-DCC180-2 49

MS-MPPT400-2 49

Utility-Scale ESS Solution

WS-G2000-2H3/WS-GS2000-2H3 53

WS-L4300-2H3 & WS-PCS1800-2 55



Winter Series
C&I ESS Solution

C&I Air-Cooled ESS

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

Technical Data

PV Specification	MS-GS215-2H3
Out Rated Power (kW)	200 (dc)
Max. Input Voltage (V)	1000
Start Voltage (V)	200
MPPT Voltage Range (V)	180 ~ 880
Full Load Voltage Range (V)	450 ~ 850
Number of MPPT	8 pcs
MPPT Max.Current/Short Current (A)	40 / 60
Dimension (WxDxH,mm)	440 x 610 x 178
Weight Appr.(kg)	32

System Specification	MS-G215-2H3 / 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
Max. RTE	88%
System Communication	ETH / 4G
System Operating Temperature Range (°C)	-20~50 (>45 Derating)
Max. Working Altitude (m)	≤3000
IP Rating of Enclosure	IP54
Anti-Corrosion Grade	≤C5
System Certification	UN38.3, IEC
Warranty Period	10 years

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%



Safer

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



Multi-Fusion

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



Reliable

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



Intelligent Control

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



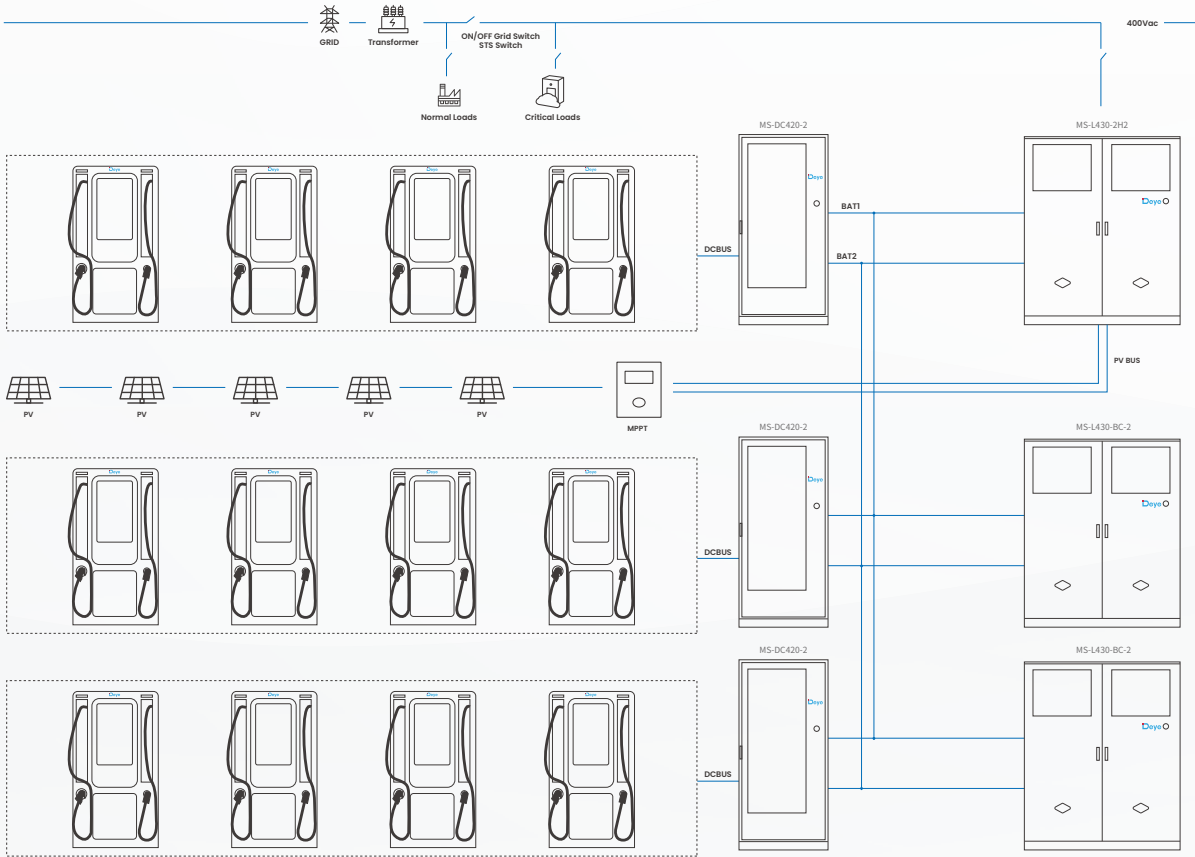
Scalable

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

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



Versatile C&I Energy Storage Solutions



MS-L430 Series



Intelligent Cloud Platform

- Customizable load algorithmic modules
 - 24-hour online O&M
 - Battery life and safety warning
 - Device cloud interconnection
-
- New energy vehicle charging capacity expansion
 - Peak-to-Valley arbitrage/Peak-to-Valley shifting
 - Virtual power plant ready
 - Off-grid operation (Islands, communication base stations, etc.)



Multiple Application Scenarios



Ultimate Safety

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



Versatile Expansion

- PCS/BMS/EMS All-in-one modular design
- Support up to 10 cabinets in parallel
- Support 2-hour, 4-hour energy storage applications
- Higher energy density to reduce footprint

C&I ESS Solution

Model	MS-L430-2H3 (AC BESS)		MS-L430-2H3 (AC BESS)	
System Parameters				
Operating Temperature	-25°C ~ +55°C			
Storage Temperature	-30°C ~ +60°C			
Humidity	0 ~ 95% (No condensation)			
Type of cooling	Liquid cooling			
Fire Suppression	Aerosol, Water			
Ingress Protection	IP54			
Anticorrosion grade	≥C4			
Altitude	≤2000m			
Communication	RS485, Modbus TCP, DIDO			
Weight	≤4600kg			
Dimensions (W × D × H)	2000 × 1300 × 2480mm		2000 × 1219× 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			
AC Data				
Nominal AC Voltage	380/400V 3L+N+PE			
Rated Frequency	50 / 60Hz			
Rated Power	200kW			
Maximun Power	220kW (1.1 times of rated power)			
Power Factor	-0.8 ~ +0.8			

MS-L430-2H3
MS-L430-BC-3

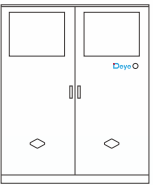
Technical Data

C&I ESS Solution	
Model	MS-L430-BC-3 (DC BESS)
System Parameters	
Operating Temperature	-30℃ ~ +55℃
Storage Temperature	-30℃ ~ +60℃
Humidity	0 ~ 95% (No condensation)
Type of cooling	Liquid cooling
Fire Suppression	Aerosol, Water
Ingress Protection	IP54
Anticorrosion grade	≥C4
Altitude	≤2000m
Communication	RS485, Modbus TCP, DIDO
Weight	≤4300kg
Dimensions (W × D × H)	2000 × 1300 × 2480mm
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
C&I ESS Solution	
Model	MS-DC420-2 (420kW DC Charge Power Cabinet)
Dc Input Data	
Input standard	DC+ / DC- / PE
DC input voltage range	200Vdc ~ 850Vdc
DC input current range	≤640A
DC rated input power	420kW @400Vdc≤Vin≤850Vdc
DC Output Data	
Dc output voltage range	50Vdc ~ 1000Vdc
Dc output current range	8 branches, max 250A each
Environmental Conditions	
Operating Temperature Range (°C)	-30℃ to +55℃ (derating above 50℃)
Storage Temperature (°C)	-40℃ to +60℃
Humidity	≤ 95%RH, no condensation
Cooling	Forced air cooling
Altitude	≤2000m (Derated when higher than 2000m)
IP Rating of Enclosure	≥IP54
Other Parameters	
Efficiency	≥ 97.5%, @full load
Dimension (W × H × D, mm)	1250 × 2450 × 1000mm
Approximate Weight (kg)	600kg

MS-DC420-2 & MS-DCC180-2
MS-MPPT400-2

Technical Data

C&I ESS Solution	
Model	MS-DCC180-2 (DC Charging Terminal)
DC Input Data	
DC Input Voltage Range (V)	50Vdc ~ 1000Vdc
Input number	2 DC inputs
DC Output Data	
Output interface	1 pile 2 guns, each gun 180kW charging power, support the CCS2 charging standard interface
DC Output range	50Vdc ~ 1000Vdc
Max. Output Power (W)	Single gun Max 180kW @300 ~ 1000Vdc (conventional terminal)
Max. Output Current	Single gun Max. 250A
Environmental Conditions	
Operating Temperature Range (°C)	-30℃ to +55℃ (derating above 50℃)
Storage Temperature (°C)	-40℃ to +60℃
Humidity	≤ 95%RH, no condensation
Cooling	Natural cooling
Altitude	≤2000m
IP Rating of Enclosure	≥IP54
Other Parameters	
Dimension (W × H × D, mm)	1100 × 2200 × 400mm
Approximate Weight (kg)	100kg
C&I ESS Solution	
Model	MS-MPPT400-2
System Parameters	
Dimension (W × D × H, mm)	1000 × 1000 × 2480
Weight Appr. (kg)	≤700kg
System Operating temperature range	-30℃ ~ 50℃
Max. working altitude (m)	≤2000m
IP Rating of Enclosure	IP54
ATS Parameters	
Rated insulation voltage (V)	DC1000
Rated working voltage (V)	AC400
Auxiliary equipment operating voltage (V)	AC220, DC24
Frequency	50/60Hz
Rated power of load (kW)	500
Rated power of the power grid (kW)	500
Rated power of oil Generator (kW)	500
MPPT Parameters	
Max. PV Input Power (kW)	200
Max. PV Input Voltage (V)	1000
Start-up Voltage (V)	200
MPPT Voltage Range (V)	180 ~ 850
Full Load MPPT Voltage Range (V)	450 ~ 850
Rated PV Input Voltage (V)	600
Max. Operating PV Input Current (A)	40+40+40+40+40+40+40+40
Max. Input Short-Circuit Current (A)	60+60+60+60+60+60+60+60
No.of MPP Trackers	8
Max. Efficiency	>99%



Winter Series

Utility-Scale ESS Solution

Air-Cooled ESS



Advanced Safety

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



Integrated Technology

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



Applications

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



Performance

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

WS-G2000-2H3/WS-GS2000-2H3

Technical Data

AC Parameters

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

PV Parameters

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

Battery Parameters

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

Other Parameters

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

Winter Series
Utility-Scale ESS Solution

Liquid - Cooled ESS

WS-L4300-2H3
WS-PCS2250-2



Cluster Management

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



Extreme Safety

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



High Energy Density

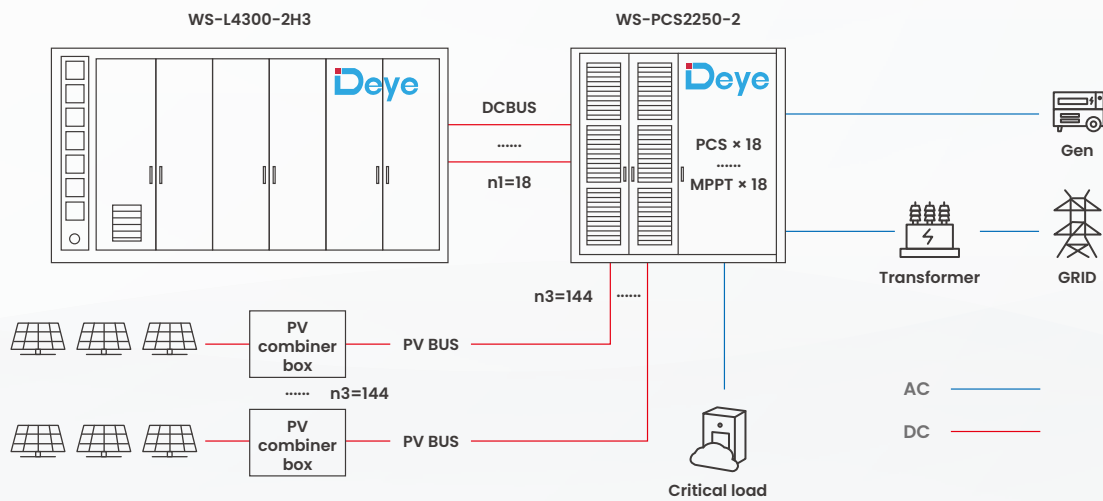
- 4300kWh in 20 ' BESS container
- 2250kW PCS, 3600kW Pv input in 10 ' container



Highly Integrated

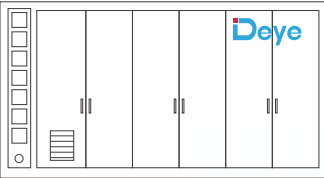
- BESS, PV DC coupling
- EMS, PCS, MPPT All in one container
- Black start function, on-grid and off-grid application

UTILITY-SCALE ESS Solution



WS-L4300-2H3
WS-PCS2250-2

Technical Data



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



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

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

