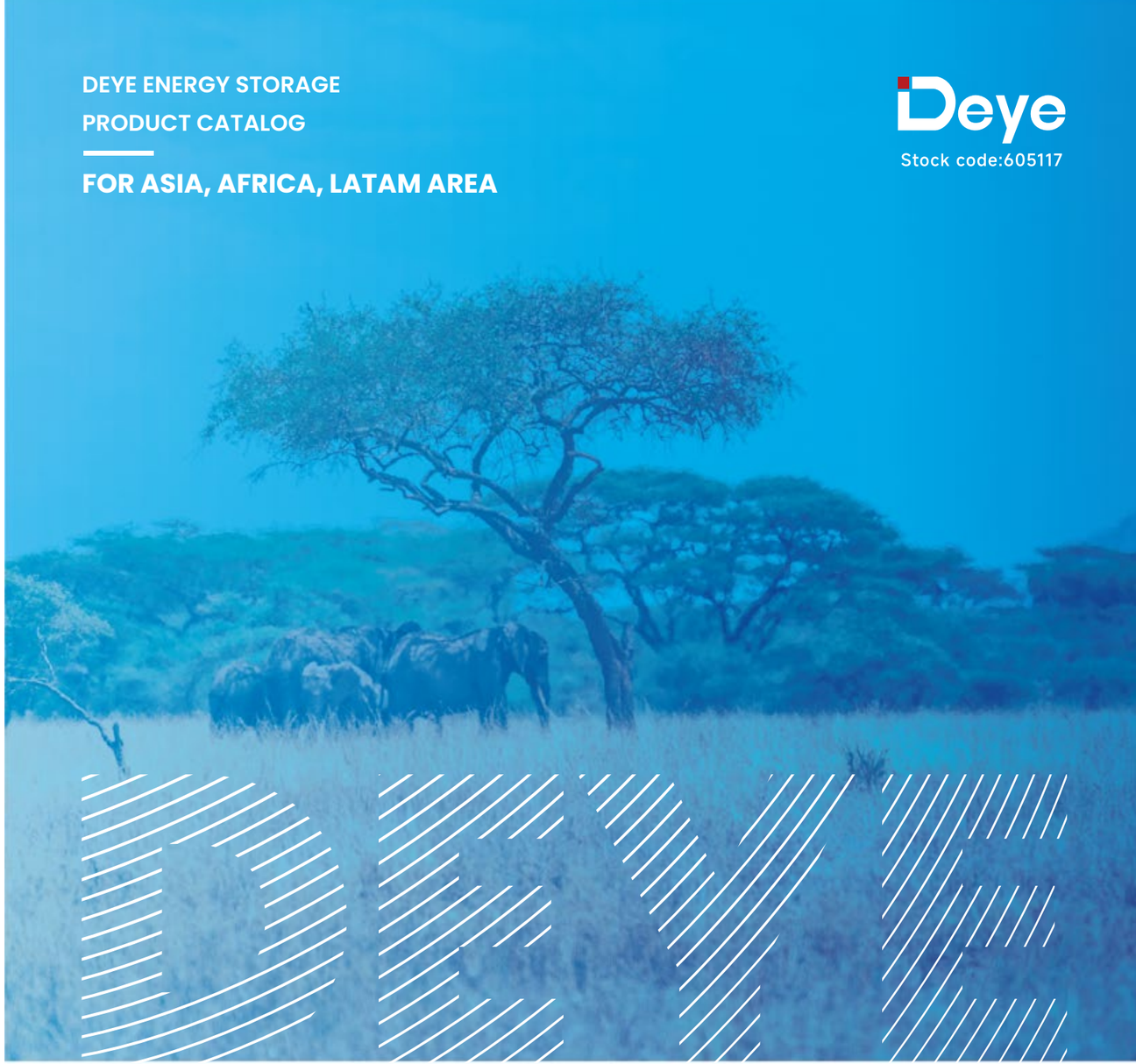
DEYE ENERGY STORAGE
PRODUCT CATALOG

FOR ASIA, AFRICA, LATAM AREA

Deye

Stock code:605117



POWERING YOUR LIFE

WORLD LEADING

ENERGY STORAGE SYSTEM SOLUTIONS PROVIDER

Web : www.deyeess.com

Add : Ningbo Deye ESS Technology Co., Ltd
No.568, South Rixian Road, Binhai Economic Development Zone.
Cixi, Ningbo, Zhejiang, P.R.China

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_AS-AF-LATAM_20260605

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Deye ESS Instagram

01 COM-PANY 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

800+	1000000+m^2	2021.4
R&D PERSONNEL	FLOOR SPACE	LISTED

4 CORE INDUSTRY CHAINS

- High-Efficiency Inverter Solution
- All-Scenario Humidity Solution
- Solar HVAC Solution
- Smart Energy Storage Solution

DEVELOPMENT HISTORY

2025
USD 1.4B New Energy Milestone
The new energy business surpassed USD 1.4 billion in revenue.

2024
Group Revenue Hits 1.5B USD
Diversified in inverters and energy storage, leading the global market share.

2023
Intelligent Energy
Deye established Deye Cloud and energy storage R&D center in Shanghai.

2021
Listed on SSE
In April, Deye listed on the main board of the Shanghai Stock Exchange.

2020
Energy Storage
Deye has been offering low-voltage, high-voltage batteries, and All-in-One ESS that work seamlessly with Deye's storage inverters.

2016
Photovoltaic Inverter
Deye's residential and C&I inverters have been rapidly evolving to provide customized solutions.

2007
Heat-exchange Field
Expanded into heat-exchange technologies and became a key supplier to Midea.

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.

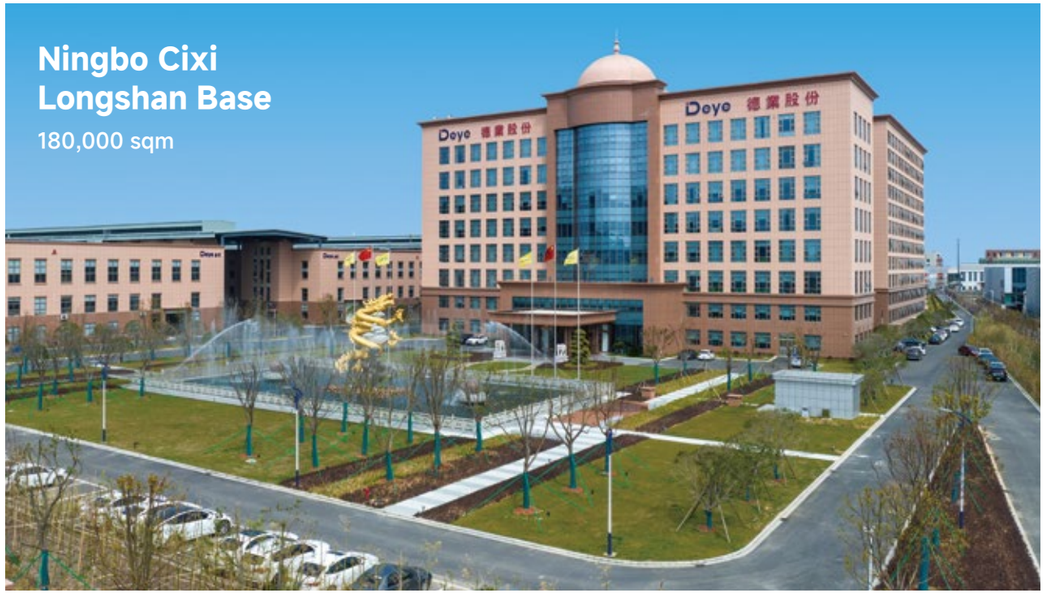


OUR FACTORY

50B Annual Planned Output Before 2030



Ningbo Beilun Headquarters
130,000 sqm



Ningbo Cixi Longshan Base
180,000 sqm



Shanghai Innovation Center
7,000 sqm



Haiyan Base
200,000 sqm



Ningbo Cixi Latest Base
179,195 sqm



Ningbo Beilun 246 Base
100,000 sqm



Ningbo Beilun 246 Phase II Base
40,713 sqm



Malaysia Johor Base
133,546 sqm

ULTIMATE SAFETY

LEADING PROVIDER OF ENERGY STORAGE
SYSTEM SOLUTIONS


Energy Storage Factory



Energy Storage Factory


Energy Storage Factory

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



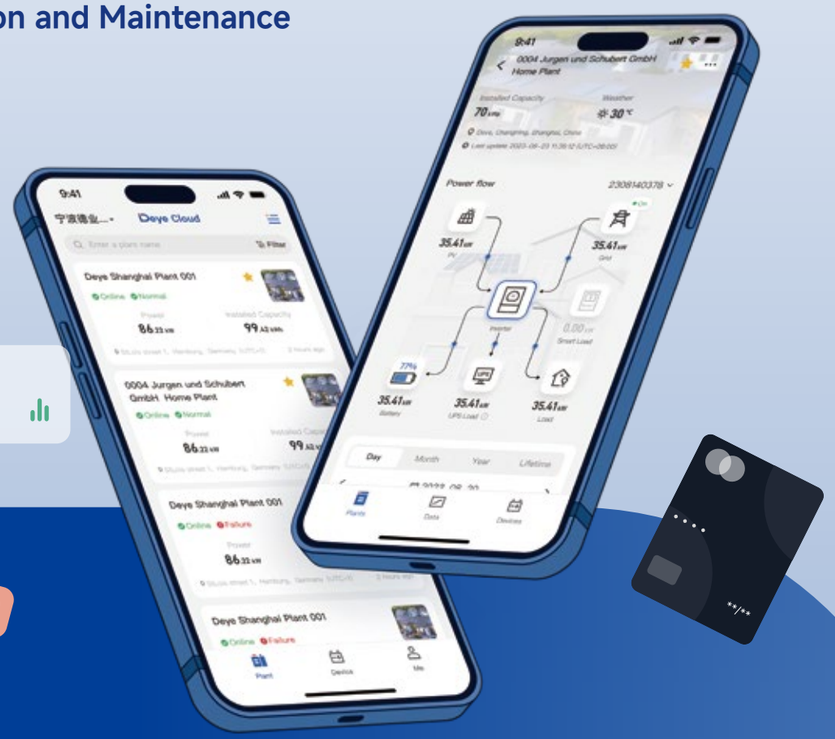
22 Overseas Service Centers

160+ Countries

6M+ Equipment in Operation

DEYE CLOUD

Cloud Management:
Online Operation and Maintenance



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

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

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

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

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

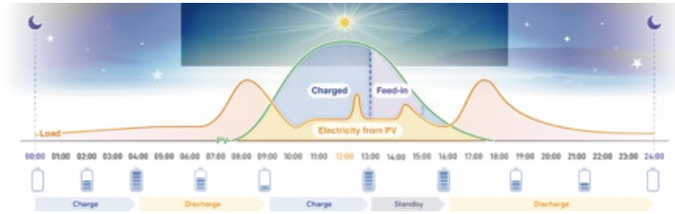
Deye Cloud utilizes two localized data centers in Europe and America to ensure data independence and security.

Customizable Charging and Discharging Function

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

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

- **Self Consumption - conservative**



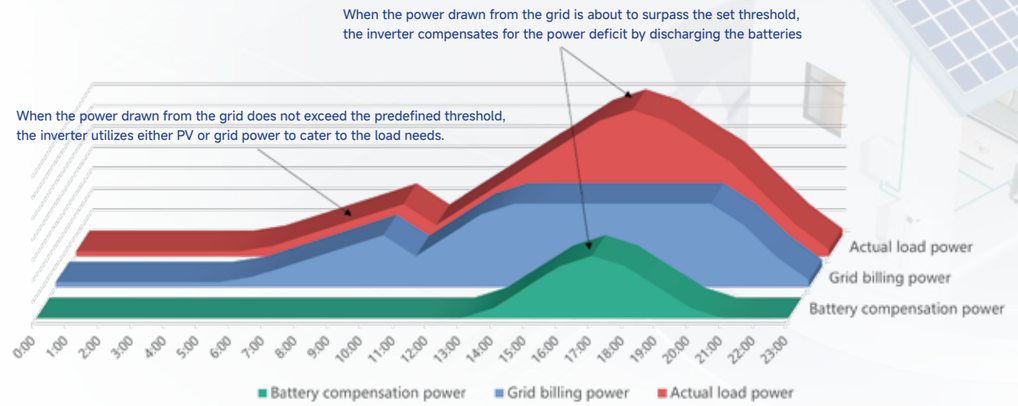
- **Maximum Earning - radical**





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

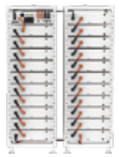

SE-F16


RW-F5.3-1H3

Summer Series


GB-W


BOS-B Pro-A3


BOS-A


BOS-W


BOS-G Pro

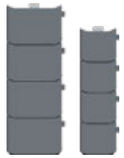

GE-F60


GE-F120-2H2


GE-F128 & F240 & F256

Autumn Series


SUN-BK80/160/200/250
-2.56KWH-EU-AM4-18/32L


WD-G12200&WD-G12100&WD-G24100

Winter Series


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


C&I PV-BESS Solution MC-L Series


WS-G(S)2000-2H3 & WS-G(S)2000-4H3


WS-L4300-BC-3-A & WS-PCS2250-2
& WS-PCS1125-2-A & WS-TS1000-2-A


WS-L5000-BC-2 & WS-MV5000-2

CONTENTS

SPRING

Series

Residential ESS Solution

SE-F5 & F5 Plus & F5 Pro 17

SE-F12 & F16 19

RW-F5.3-1H3 21



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℃ to 55 ℃, natural cooling

SE-F5 & SE-F5 Plus
SE-F5 Pro

Technical Data



Main Parameters

		SE-F5	SE-F5 Plus	SE-F5 Pro
Battery Chemistry			$LiFePO_4$	
Capacity			100 Ah	
Scalability[1]			Max. 32 pcs in parallel	
Nominal Voltage			51.2 V	
Operating Voltage			44.8 V ~ 57.6 V	
Nominal Energy			5.12 kWh	
Charge Current[2]	Recommend	50 A		50 A
	Max. Continuous	100 A		100 A
	Peak	120 A (10 sec)		150 A (120 sec)
Discharge Current[2]	Recommend	50 A		50 A
	Max. Continuous	120 A		100 A
	Peak	150 A (10 sec)		150 A (120 sec)

Other Parameters

Model	SE-F5	SE-F5 Plus	SE-F5 Pro
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
Weight Approximate	41 kg	41 kg	44 kg
LED Indicator	LED (SOC, working, protecting) & Buzzer		
IP Rating of Enclosure	IP21		
Operating Temperature	Charge: 0~55℃ / Discharge: -20~55℃	Charge: -10~55℃ / Discharge: -20~55℃	Charge: 0~55℃ / Discharge: -20~55℃
Storage Temperature	0~35℃		
Relative Humidity	95% (non-condensing)		
Altitude	≤3000m		
Cycle Life	≥6000(25℃±2℃,70%EOL)		
Installation	Wall-Mounted, Floor-Mounted, Stack-Mounted		
Communication	CAN2.0, RS485, Bluetooth+APP		CAN2.0, RS485, Optional module, (WiFi+Bluetooth+APP)
Warranty Period [3]	5 years	10 years	
Energy Throughput [3]	8 MWh	16 MWh	
Certification	UN38.3, MSDS, CE, CB		UN38.3, MSDS, CE, CB, VDE2510-50, CEC

[1] Max. 64 pcs can parallel with CAN-Bridge.
[2] Operating current is affected by temperature and SOC.
[3] Conditions apply, refer to Deye Warranty Letter.

SE-F12 & SE-F16

Technical Data



Main Parameters

		SE-F12	SE-F16
Battery Chemistry		$LiFePO_4$	
Capacity		230 Ah	314 Ah
Scalability[1]		Max. 32 pcs in parallel	
Nominal Voltage		51.2 V	
Operating Voltage		44.8 V ~ 57.6 V	
Nominal Energy		11.8 kWh	16 kWh
Charge Current[2]	Recommend	115 A	157 A
	Max. Continuous	230 A	160 A
	Peak	280 A (10 sec)	
Discharge Current[2]	Recommend	115 A	157 A
	Max. Continuous	230 A	
	Peak	280 A (10 sec)	

Other Parameters

Model	SE-F12	SE-F16
Recommend Depth of Discharge	90% DoD	
Dimension (W × D × H, mm) (Without hanging board)	400 × 559 × 233	400 × 708 × 233
Weight Approximate	84 kg	109 kg
LED Indicator	LED (SOC, working, protecting) & Buzzer	LED (SOC, working, protecting) & Buzzer
IP Rating of Enclosure	IP21	IP21
Operating Temperature	Charge: 0～55℃（-20~55℃，12 Max/16 Max with Optional heating） Discharge: -20～55℃	
Storage Temperature	0℃~35℃	
Relative Humidity	95% (non-condensing)	
Altitude	≤3000m	
Cycle Life	≥6000(25℃±2℃ ,70%EOL)	
Installation	Wall-Mounted, Floor-Mounted, Stack-Mounted	
Communication	CAN2.0, RS485, Bluetooth+APP	CAN2.0, RS485, Bluetooth+APP
Warranty Period [3]	10 years	10 years
Energy Throughput [3]	37 MWh	50 MWh
Certification	UN38.3, CE, CB	UN38.3, CE, CB

[1] Max. 64 pcs can parallel with CAN-Bridge.
[2] Operating current is affected by temperature and SOC.
[3] Conditions apply, refer to Deye Warranty Letter.

Product Comparison

Model	Nominal Energy	Charge / Discharge Rate	DoD	Warranty	Size
SE-F5	5.12kWh, 51.2V, 100Ah	1C/1.2C	80%	5years	370 x 548 x 140 mm
SE-F5 Plus	5.12kWh, 51.2V, 100Ah	1C/1.2C	90%	10years	370 x 548 x 140 mm
SE-F5 Pro	5.12kWh, 51.2V, 100Ah	1C/1C	90%	10years	404 × 547 × 141 mm
SE-F12	11.8kWh, 51.2V, 230Ah	1C/1C	90%	10years	400 x 583 x 233 mm
SE-F16	16kWh, 51.2V, 314Ah	0.5C/0.7C	90%	10years	400 x 708 x 233 mm

SE-F Series Model Selection and Appearance Reference



Model	Config Version	Reference
SE-F5/F5 Plus/F5 Pro/F12/F16	L	
SE-F5/F5 Plus/F5 Pro/F12/F16	E	
SE-F5/F5 Plus/F5 Pro/F12/F16	C	

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 : -20℃ ~ 55℃ (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

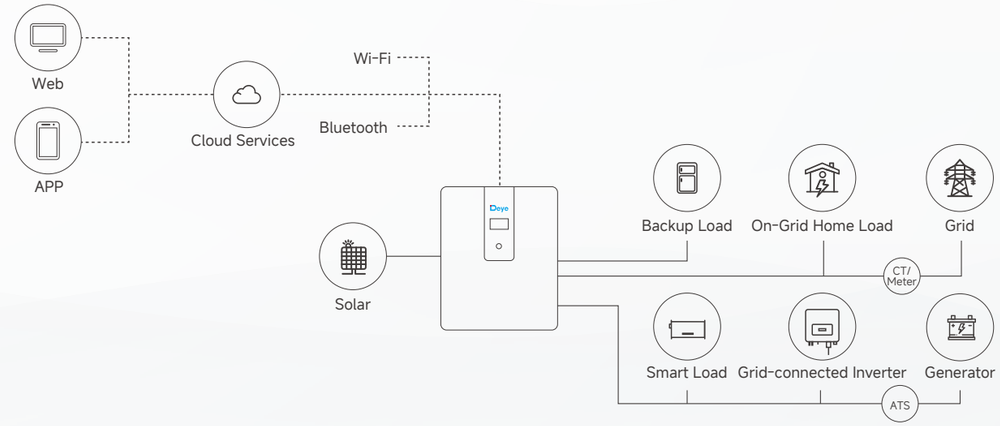
All-in-One Design

- Integrated 5kW hybrid inverter and 5.3kWh LFP battery

Intelligent Control

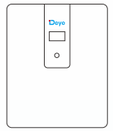
- Comfortable and easy control via App, PC or Touch-Display

System Application Topology Diagram



RW-F5.3-1H3

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

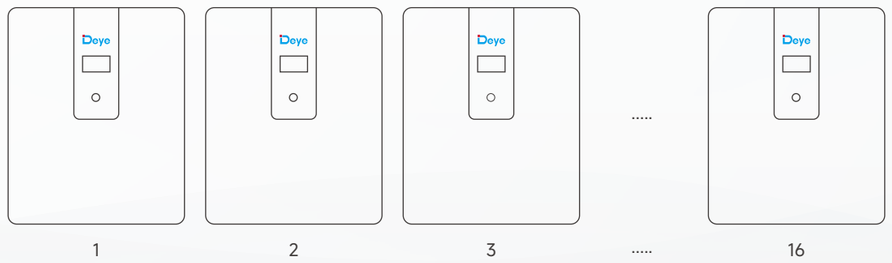
Max. PV Access Power (W)	10000
Max. PV Input Power (W)	8000
Max. PV Input Voltage (Vdc)	500
Start Up PV Voltage (Vdc)	125
MPPT Voltage Range (Vdc)	150 ~ 425
Full Load MPPT Voltage Range (Vdc)	300 ~ 425
Rated PV Input Voltage (Vdc)	370
Max. Operating PV Input Current (A)	18+18
Max. PV Input Short-circuit 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



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SUMMER Series

Small-Scale C&I ESS Solution

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GE-F60 ····· 37

GE-F120-2/3/4H2 ····· 39

GE-F128 & GE-F240 & GE-F256 ····· 41



Summer Series

Indoor C&I ESS Solution

Stacked Battery(HV)

User-friendly Structural Design

- Cable-free stackable design enables fast, tool-free installation
- Millimeter-grade filtered airflow ensures efficient dust removal
- Detachable maintenance cover allows direct on-cluster service

Wide Compatibility

- Advanced cluster-level, pack-level, and cell-level balancing algorithms ensure seamless battery replacement and parallel operation.
- Compatible with 30-125 kW power units

Flexible Expansion

- Modular design, scalable from 5~16 packs (60-192 kWh) per cluster.
- Up to 16 clusters in parallel, reaching 3MWh

Intelligent Thermal Management

- Independent fan control at pack level
- Optimized airflow design keeps cell temperature difference within 4 °C

High Power Output

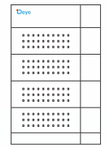
- 230A continuous charge/discharge for high-load and fast-charge scenarios

Robust Protection

- C4 anti-corrosion coating ensures superior environmental resistance

GB-W

Technical Data



Main Parameters

Cell Chemistry	$LiFePO_4$												
Module Energy (kWh)	12.03												
Module Capacity (Ah)	235												
Nominal Voltage (V)	51.2												
Battery Module Qty in series (Optional)	5	6	7	8	9	10	11	12	13	14	15	16	
Battery Model Number	GB-W60	GB-W72	GB-W84	GB-W96	GB-W108	GB-W120	GB-W132	GB-W144	GB-W156	GB-W168	GB-W180	GB-W192	
System Nominal Voltage (Vdc)	256	307.2	358.4	409.6	460.8	512	563.2	614.4	665.6	716.8	768	819.2	
System Operating Voltage (Vdc)	208 ~292	249.6 ~350.4	291.2 ~408.8	332.8 ~467.2	374.4 ~525.6	416 ~584	457.6 ~642.4	499.2 ~700.8	540.8 ~759.2	582.4 ~817.6	624 ~876	665.6 ~934.4	
System Energy (kWh)	60.1	72.1	82.4	96.2	108.2	120.3	132.3	144.3	156.4	168.4	180.4	192.5	
System Usable Energy (kWh)	54.1	64.9	74.1	86.6	97.4	108.2	119.1	129.9	140.7	151.6	162.4	173.2	
System Nomianal Charge/Discharge Power (kW)	58.8	70.6	82.4	94.2	105.9	117.7	129.5	141.3	153	164.8	176.6	188.4	
Charge / Discharge Current	Max.Continuous	230											
	Peak	322 (1s)											
Working Temperature (°C)	Charge:0~55 / Discharge:-20~55												
Communication Port	CAN / RS485												
Thermal Management	Natural air cooling												
Recommend Depth of Discharge	90%												
Cycle Life	25±2°C,0.5C/0.5C,70%EOL≥6000												
Warranty	10 years												

Other Parameters

Humidity	0~85%
Altitude (m)	≤3000
IP Rating of Enclosure	IP20
Noise (dB)	≤60@25°C, 1m
Storage Temperature (°C)	-30~60
Installation Location	Floor Mount
Model	**GB-W-PDU-2**
Operating Voltage	200~1000Vdc
Nominal Charge/DischargeCurrent	230A
Operating Temperature	-20~55°C
Ingress Protection	IP20
Details	690 x 436 x 151.2(W x D x H)，20.8kg
Model	**GB-W-Pack12-2-A3**
Nominal Capacity	235Ah
Nominal Energy	12.03kWh
Nominal Voltage	51.2Vdc
Max Charge/Discharge Current	230A
Ingress Protection	IP20
Operating Temperature (Charge)	0~55°C
Operating Temperature (Discharge)	-20~55°C
StorageTemperature	-30~60°C
Details	690 x 436 x 270.5(W x D x H)，93kg
Model	**GB-W-Base**
Details	690 x 436 x 107(W x D x H),14kg
Model	**Telescopic Slide Rail**
Details	Stroke: 200~300 mm
Model	**Top Cover**
Details	690 x 436 x 107 (W x D x H, 6kg)



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 16 units in parallel, maximum 2.3MW/4.1MWh

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
- 1.1x overload capacity
- Balancing solutions extend battery life
- Triple auxiliary power design for stable supply

Easy Maintenance

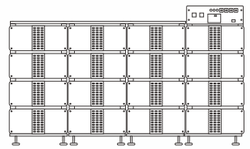
- 5U Standard Chassis
- User Interface & Bluetooth App
- USB & Cloud Upgrades
- TCP Protocol for EMS
- Fault Signal Input Support

Safer

- LFP batteries
- Support aerosol fire extinguishing

BOS-B Pro-A3

Technical Data



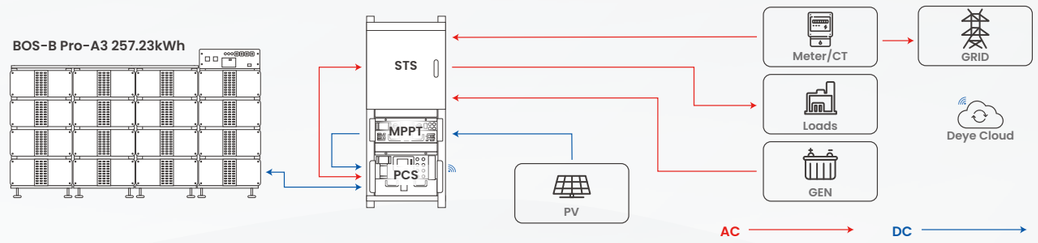
Main Parameters

Battery Module Energy (kWh)	16.08											
Battery Module Nominal Voltage (V)	51.2											
Battery Module Capacity (Ah)	314											
Module Weight Approximate (kg)	126											
Battery Module Qty In Series (Optional)	5~16											
Matching Mode	PCS or Hybrid Inverter	14~15 units for PCS on-grid applications, 15~16 units for PCS off-grid applications, 5~15 units for hybrid inverter systems										
	PCS + MPPT	16 units (on/off-grid) for MPPT Open-Circuit Voltage ≤800V 15 units (on/off-grid) for MPPT Open-Circuit Voltage ≤ 750V 14 units (on-grid) for MPPT Open-Circuit Voltage ≤ 700V										
Battery Model Number	BOS-B80 Pro-A3	BOS-B96 Pro-A3	BOS-B112 Pro-A3	BOS-B128 Pro-A3	BOS-B144 Pro-A3	BOS-B160 Pro-A3	BOS-B176 Pro-A3	BOS-B192 Pro-A3	BOS-B208 Pro-A3	BOS-B224 Pro-A3	BOS-B240 Pro-A3	BOS-B256 Pro-A3
Battery Module Qty In Series (Optional)	5	6	7	8	9	10	11	12	13	14	15	16
System Nominal Voltage (V)	256	307.2	358.4	409.6	460.8	512	563.2	614.4	665.6	716.8	768	819.2
System Operating Voltage (V)	208~292	249.6~350.4	291.2~408.8	332.8~467.2	374.4~525.6	416~584	457.6~642.4	499.2~700.8	540.8~759.2	582.4~817.6	624~876	665.6~934.4
System Energy (kWh)	80.3	96.4	112.5	128.6	144.6	160.7	176.8	192.9	208.9	225	241.1	257.2
System Usable Energy (kWh)	72.27	86.76	101.25	115.74	130.14	144.63	159.12	173.61	188.01	202.5	216.99	231.48
Max DC Power(kW)	46.08	55.296	64.512	73.728	82.944	92.16	101.376	110.592	119.808	129.024	138.24	147.456
Max.Charge/Discharge Current (A)	180											

Other Parameters

Operating Temperature (℃)	Charge： 0 ~ 55 Discharge： -20 ~ 55											
Storage Temperature (℃)	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)	1067 × 1305 × 800			1608 × 1305 × 800				2150 × 1305× 800				
System Weight Approximate (kg)	758	884	1010	1136	1310	1436	1562	1688	1862	1988	2114	2240
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

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

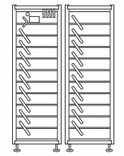
- 3U rack embedded design
- A concise data display interface
- Multiple battery modules can be in parallel for expanding
- Dual power output plugins, each supports 100A
- Connectable to two inverter DC interfaces
- USB, Bluetooth connection

Long Service Life

- 10-year warranty
- 6000 cycles

BOS-A

Technical Data



Main Parameters

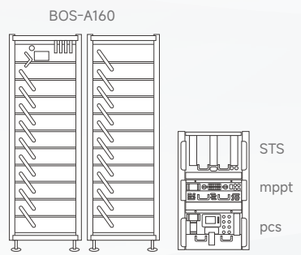
Cell Chemistry			$LiFePO_4$	
Module Energy (kWh)			7.68	
Module Nominal Voltage (V)			38.4	
Module Capacity (Ah)			200	
Module Dimension (W × D × H, mm)			601.5 × 520 × 135	
Module Weight Approximate (kg)			70	
Battery Module Qty In Series (Optional)		7	13	21
System Nominal Voltage (V)		268.8	499.2	806.4
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 Current (A) [2]	Recommend		100	
	Max.		160	

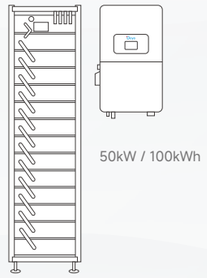
Other Parameters

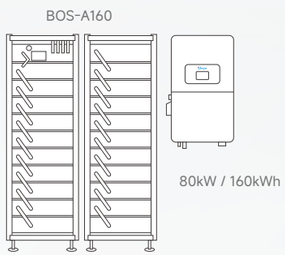
Working Temperature (°C)	Charge : 0 ~ 55 / Discharge : -20 ~ 55		
Status Indicator	Yellow : Battery High Voltage Power On Red : Battery System Alarm		
Communication Port	CAN2.0		
Humidity	5% ~ 85%RH		
Altitude	≤3000m		
IP Rating of Enclosure	IP20		
Dimension (W × D × H, mm)	610 × 610 × 1900	610 × 610 × 2350	(610 × 610 × 1900) × 2
Weight Approximate (kg)	525	934	1501
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		

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. The warranty is due whichever reached first of warranty period or life cycle power.

Backup Power Duration Plan	1 hours	2 hours		4 hours	
Hybrid inverter power	100kW	50kW	80kW	50kW	80kW
Battery model	BOS-A160	BOS-A100	BOS-A160	BOS-A100	BOS-A160
Number of batteries	1 pc	1 pc	1 pc	2 pcs	2 pcs









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.

Flexible Configuration

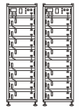
- Multiple battery modules can be in parallel for expanding capacity and power. Support USB upgrade, remote up grade (Compatible with Deye inverter).

Wide Temperature

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

BOS-G Pro

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 (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)	23.04	36.86	55.3	73.72
Rated DC Power	25.6	40.96	61.44	81.92
Charge / Discharge Current (A)	Recommend	50		
	Max.	100		
	Peak Discharge (2 mins, 25℃)	125		

Other Parameters

Operating Temperature (℃)	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	883
Installation Location	Rack Mounting			
Storage Temperature(℃)	0 ~ 35			
Recommend Depth of Discharge	90%			
Cycle Life	25±2℃, 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

Smarter

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

Excellent Performance

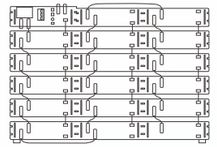
- Working temperature range : -20°C ~ 55°C
- Excellent discharge performance and cycle life

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
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

Total Protection

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

Integrated Technology

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

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] Current (A)	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%)	
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

Enhanced Reliability

- Maximum battery temperature ≤ 35℃ at rated power
- IP55-rated for outdoor use
- Wide temperature range: -20℃ ~ 55℃

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

Flexible

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

GE-F120-2/3/4H2

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	58	75.8
Battery Operating Voltage (V)		500 ~ 700	
Max. RTE		89%	
Battery Chemistry		LiFePO4	
IP Rating of Enclosure		IP55	
Installation Method		Floor-Mounted	
Storage Temperature (℃)		0 ~ 35	
Operating Temperature (℃)		-20 ~ 55 (>43 derating)	
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 (℃)		-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	



Summer Series

C&I ESS Solution

C&I Outdoor Battery Cabinet

Ultimate Protection

- Six-dimensional safety design, eliminating the risk of fire and explosion
- High-intensity cabinet, unique patented door latch design, eliminates structural weak points
- Hour-level fire resistance, prevent heat spread

Stable Efficient

- Long-life lithium iron phosphate battery, ≥ 8000 cycles
- High-efficiency thermal management, no derating at 45°C, cell temperature difference ≤6°C
- Full-range 0.5P charge and discharge, efficient recharging, stable load-bearing

Highly Integrated

- Outer cabinet wall preset inverter bracket installation position, no wall bearing concerns, no need to drill
- Single cabinet can easily deploy PV+BESS, PV+BESS+DG
- Can be installed side by side or back to back, reducing the footprint

Intelligent Management

- Leading rack-level + pack-level + cell-level energy balancing algorithm, non-inductive pack change and cabinet expansion
- Single cabinet can be configured with a 2/3/4h system of 30~125kW, up to 10 units battery cabinet parallel
- Integrated energy platform, 24/7 AI smart customization of optimal power usage strategies

GE-F128 & GE-F240 & GE-F256

Technical Data

Main Parameters

Model		GE-F128 Series		GE-F240 Series			GE-F256
		GE-F112 -BC-2-A3	GE-F128 -BC-2-A3	GE-F176 -BC-2-A	GE-F208 -BC-2-A3	GE-F240 -BC-2-A3	GE-F256 -BC-2-A3
Cell Type		$LiFePO_4$					
Module Capcity (Ah)		314					
Module Nominal Voltage (Vdc)		51.2					
Module Energy (kWh)		16.08					
Module Qty In Series		7	8	11	13	15	16
System Nominal Energy (kWh)		112.53	128.61	176.84	208.99	241.15	257.23
System Usable Energy (kWh)[1]		112.53	128.61	176.84	208.99	241.15	257.23
System Nominal Voltage (Vdc)		358.4	409.6	563.2	665.6	768	819.2
System Operating Voltage (Vdc)		280~408.8	320~467.2	440~642.4	520~759.2	600~876	640~934.4
Rated DC Power (kW)		56	64	88	104	121	129
Charge/Discharge Current(A)[2]	Recommend	157					
	Max. Continuous	180					
	Peak Discharge@15s/20~45°C	285					

Other Parameters

Fire Protection System	Aerosol and Water fire interface CO gas detection, Active exhaust and Explosion venting						
Cooling Method	Smart Air Cooling						
Communication Port	CAN, RS485						
Communication protocol	CAN2.0, Modbus485						
Operating Temperature (°C)[3]	-30~55						
Recommend Storage Temperature (°C)	0~35						
Humidity	5% ~ 95%RH (No Condensing)						
Altitude	3000m						
IP Protection	IP55						
Anti Corrosion Level	Standard: C4-M, customizable up to C5						
Dimension (W x D x H,mm)	998 x 1240 x 2405.5		1303 x 1240 x 2405.5			1303 x 1240 x 2510	
Weight (kg)	1575	1690	2150	2380	2610	2770	
Installation Location	Floor Mount						
Cycle Life	≥8000 (25±2°C,0.5P,EOL70%)						
Certification	UN38.3,CE,IEC62619,IE62477,IEC62933-5-2,UL9540A						

1. Test conditions : 100% DOD, 0.5P 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. Derated operation at > 45°C.

CONTENTS

AUTUMN Series

Micro ESS Solution

SUN-BK80/160/200/250-2.56KWH-EU-AM4-18/32L ····· 45

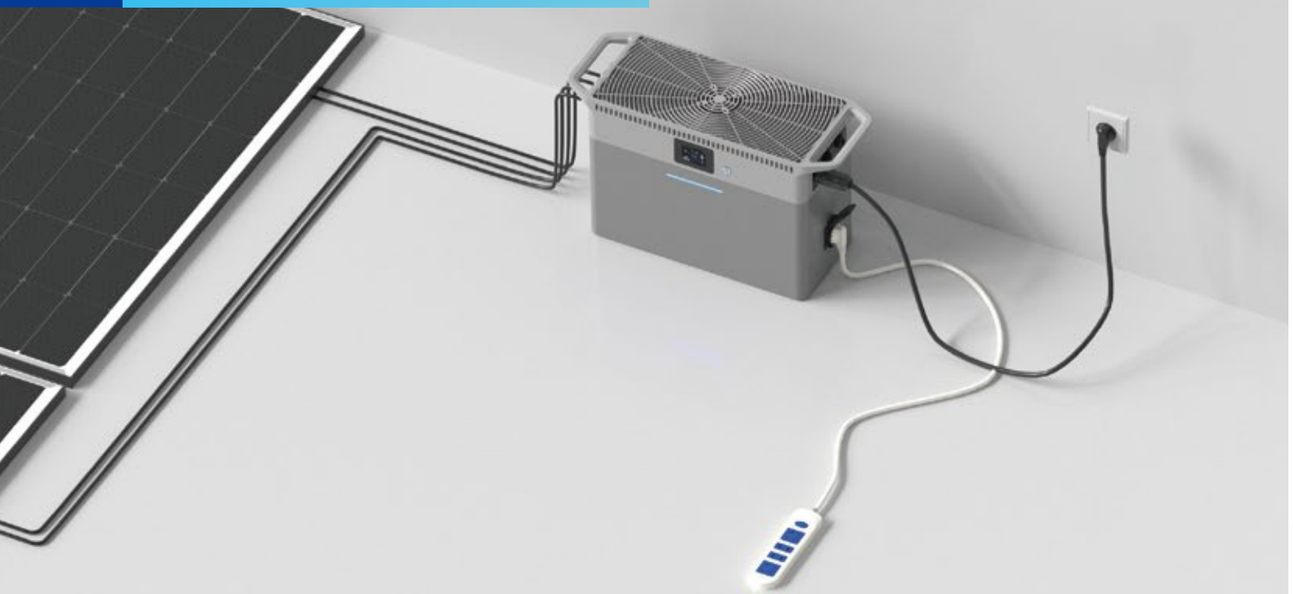
Residential ESS Solution

WD-G12100 & WD-G12200 & WD-G24100 ····· 47

Autumn Series

Micro ESS Solution

Micro ESS



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

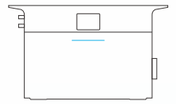
- IP65 Protection Rating
- 10-year standard warranty

Quiet Operation

- Fanless design with natural cooling

SUN-BK80/160/200/250-2.56KWH-EU -AM4-18/32L

Technical Data



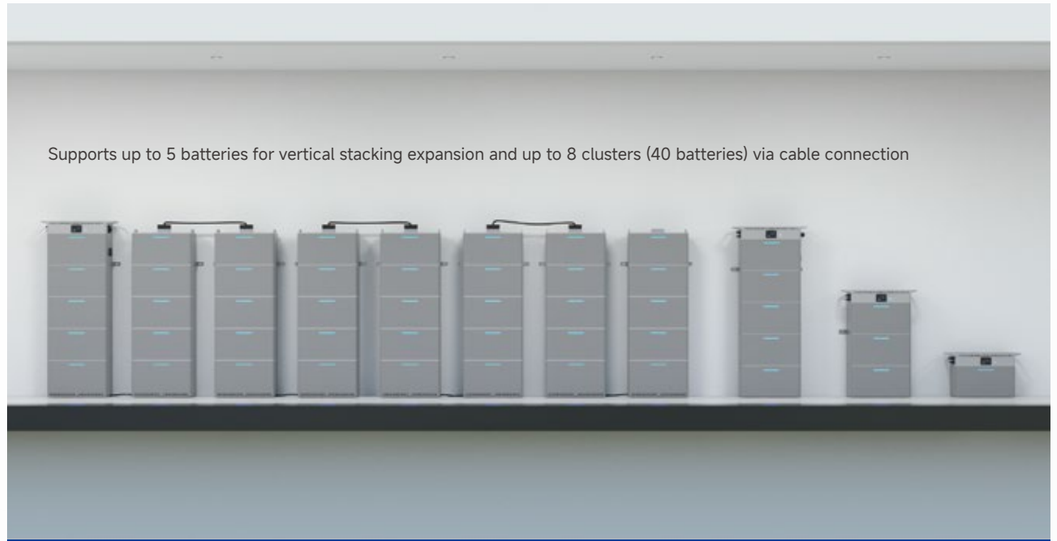
Model	SUN-BK80-2.56KWH -EU-AM4-18L	SUN-BK160-2.56KWH -EU-AM4-18L	SUN-BK200-2.56KWH -EU-AM4-18L	SUN-BK250-2.56KWH -EU-AM4-18L
Battery Input Data				
Battery Type	$LiFePO_4$			
Battery Voltage Range(V)	44.8-57.6 V			
Battery Nominal Energy (Wh)	2560Wh			
Max.Charging/Discharging Current(A)	50A			
Charging Strategy for Li-ion Battery	Self-adaption to BMS			
PV String Input Data				
Max. PV access power (W)	4400W			
Max. Operating PV Input Current (A)	18+18+18+18A			
Max. Input Short-Circuit Current (A)	32+32+32+32A			
Rated PV Input voltage (V)	42.5V			
Start-up Voltage (V)	25Vdc			
MPPT voltage range (V)	20 ~ 55V			
No. of MPP Trackers/No. of Strings MPP Tracker	4/1+1+1+1			
AC Input/Output Data				
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			
Rated AC Input/Output Current（A）	3.7A / 3.5A	7.3A / 7.0A	9.1A / 8.7A	11.4A / 10.9A
Max. AC Input/Output Current（A）	4A / 3.9A	8A / 7.7A	10A / 9.6A	12.5A / 12A
Peak Power (off-grid) (W)	2 times of rated power,10s			
AC Input / Output Frequency and Voltage	50Hz (45Hz ~ 55Hz) , 60Hz (55Hz ~ 65Hz) , L + N + PE , 220 / 230 Vac			
Power Factor Adjustment Range	0.8 leading-0.8lagging			
Max. Continuous AC Passthrough (grid to load)(A)	30A			
DC Injection Current	<0.5%In			
Efficiency				
Max. Efficiency	96.5%			
Euro Efficiency	96.0%			
MPPT Efficiency	>99%			
Equipment Protection				
Integrated	DC reverse polarity protection, AC Output Overcurrent Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection, Insulation Impedance detection, Anti-islanding protection			
Surge Protection Level	TYPE II(DC),TYPE II(AC)			
General Data				
Max. Inverter Parallel NO.	3 pcs (up to 7.5 kW rated output)			
Communication Interface	Wi-Fi，Bluetooth，LoRa			
Operating Temperature Range (°C)	-10°C ~ 55°C, >45°C Derating, (-20°C~55°C with heating, optional)			
Permissible Altitude (m)	2000m			
Ingress Protection(IP) Rating	IP 65			
Cabinet Size (W X H X D)	560 × 330 × 210mm			
Weight (kg)	30kg			
Permissible Ambient Humidity	0% ~ 95% (No Condensing)			
Warranty	10 years			
Grid Regulation	VDE 4105, IEC 61727/62116, VDE 0126, AS 4777.2, CEI 0-21, EN 50549-1, G98, C10-11, UNE 217002			
Safety EMC/Standard	IEC 62619, UN38.3, IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1/2/3/4			

SUN-BK80/160/200/250-2.56KWH-EU-AM4-18/32L

Technical Data



Model	SUN-BK80-2.56KWH-EU-AM4-32L	SUN-BK160-2.56KWH-EU-AM4-32L	SUN-BK200-2.56KWH-EU-AM4-32L	SUN-BK250-2.56KWH-EU-AM4-32L
Battery Input Data				
Battery Type	$LiFePO_4$			
Battery Voltage Range(V)	44.8-57.6 V			
Battery Nominal Energy (Wh)	2560Wh			
Max.Charging/Discharging Current(A)	50A			
Charging Strategy for Li-ion Battery	Self-adaption to BMS			
PV String Input Data				
Max. PV access power (W)	5760W			
Max. Operating PV Input Current (A)	32+32+32+32A			
Max. Input Short-Circuit Current (A)	48+48+48+48A			
Rated PV Input voltage (V)	42.5V			
Start-up Voltage (V)	25Vdc			
MPPT voltage range (V)	20 ~ 55V			
No. of MPP Trackers/No. of Strings MPP Tracker	4/1+1+1+1			
AC Input/Output Data				
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			
Rated AC Input/Output Current (A)	3.7A / 3.5A	7.3A / 7.0A	9.1A / 8.7A	11.4A / 10.9A
Max. AC Input/Output Current (A)	4A / 3.9A	8A / 7.7A	10A / 9.6A	12.5A / 12A
Peak Power (off-grid) (W)	2 times of rated power,10s			
AC Input / Output Frequency and Voltage	50Hz (45Hz ~ 55Hz) , 60Hz (55Hz ~ 65Hz) , L + N + PE , 220 / 230 Vac			
Power Factor Adjustment Range	0.8 leading-0.8lagging			
Max. Continuous AC Passthrough (grid to load)(A)	30A			
DC Injection Current	<0.5%In			
Efficiency				
Max. Efficiency	96.5%			
Euro Efficiency	96.0%			
MPPT Efficiency	>99%			
Equipment Protection				
Integrated	DC reverse polarity protection, AC Output Overcurrent Protection, AC Output Overvoltage Protection, AC Output Short Circuit Protection, Thermal Protection, Insulation Impedance detection, Anti-islanding protection			
Surge Protection Level	TYPE II(DC),TYPE II(AC)			
General Data				
Max. Inverter Parallel NO.	3 pcs (up to 7.5 kW rated output)			
Communication Interface	Wi-Fi, Bluetooth, LoRa			
Operating Temperature Range (°C)	-10°C ~ 55°C, >45°C Derating, (-20°C~55°C with heating, optional)			
Permissible Altitude (m)	2000m			
Ingress Protection(IP) Rating	IP 65			
Cabinet Size (W X H X D)	560 × 330 × 210mm			
Weight (kg)	30kg			
Permissible Ambient Humidity	0% ~ 95% (No Condensing)			
Warranty	10 years			
Grid Regulation	VDE 4105, IEC 61727/62116, VDE 0126, AS 4777.2, CEI 0-21, EN 50549-1, G98, C10-11, UNE 217002			
Safety EMC/Standard	IEC 62619, UN38.3, IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1/2/3/4			



Model	AE-F2.56
Battery Technical Specification	
Battery Chemistry	$LiFePO_4$
Battery Nominal Voltage	51.2V
Battery Nominal Energy	2560Wh
Max. Charging / Discharging Current	50A
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*
Other Technical Specification	
Display	LED (SOC, Alarm)
Communication Interfaces	LoRa
Dimension (W × D × H) (mm)	450 × 210 × 244 (without terminal)
Ingress Protection(IP) Rating	IP 65
Weight Approximate	22±3 kg
Operating Temperature Range	-10°C~55°C (-20°C~55°C with heating, optional)
Max. Operating Altitude	2,000m
Relative Humidity	0% ~ 95% (No Condensing)
Certification	UN38.3, IEC 62619, CE
Installation Style	Floor-Mounted, Stacked-Mounted
Warranty	10 years

*Maximum 40 Pieces AE-F2.56 Packs in Parallel, Up to 102.4kWh.



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

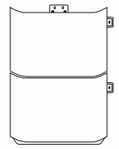
- Max.4 packs in series and Max. 10 units in parallel

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.

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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

Reliable

- Operating temp :-20℃ to 50℃
- 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℃
- 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

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

Technical Data

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
PV Input Power (kWp)	/ | 200
Battery OperatingVoltage (Vd.c.)	660 ~ 864
Energy (kWh)	215
Dimension (Wx D x H,mm)	1865 x 1000 x 2500
Weight Appr. (kg)	2900 | 3030
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

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%

PV Specification	MS-GS215-2H3
Max.PV Access Power (kW)	200
Max.PV Input Power (kW)	160
Max. Input Voltage (V)	800
Start Voltage (V)	200
MPPT Voltage Range (V)	180~750
Full Load Voltage Range (V)	450~750
Number of MPPT	8pcs
MPPT Max.Current/Short Current (A)	40/60



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

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

Ultimate Safety

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

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 & MC-L430-BC-3
MS-MPPT400-2 / MS-MPPT200-2

Technical Data

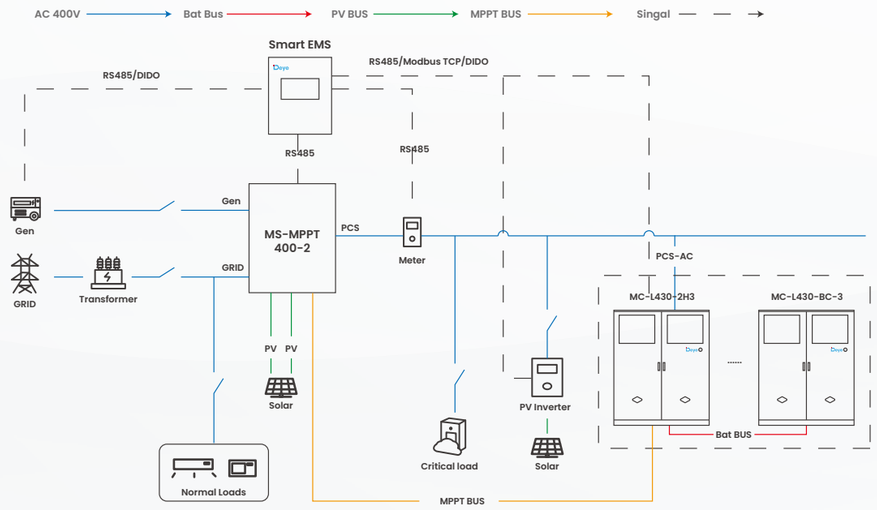
Model	MC-L430-2H3 (AC BESS)
System Parameters	
Operating Temperature	-25°C ~ +55°C (>40°C Derating)
Storage Temperature	-30°C ~ +60°C
Humidity	0 ~ 95% (No condensation)
Type of cooling	Liquid cooling
Fire Suppression	Aerosol, Water
Ingress Protection	IP54
Anticorrosion grade	≥C4
Altitude	≤2000m
Communication	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	648~876Vd.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	-1~+1

Model	MC-L430-BC-3 (DC 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	≤4700kg
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	648~876Vd.c
Charge and discharge rate	0.5P

MC-L430-2H3 & MC-L430-BC-3
MS-MPPT400-2 / MS-MPPT200-2

Technical Data

Model	MS-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	≤10ms
MPPT Parameters	
No. of MPPT	2
Max. PV Access Power (kW)	400(200*2)
Max. PV Input Power (kW)	320(2*160)
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%



Model	MS-MPPT200-2
PV String Input Data	
Max. PV Access Power (kW)	200
Max. PV Input Power (kW)	160
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



Advanced Safety

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

Applications

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

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

Performance

- 1.1x overload, 1.5x overload
- Max RTE: 88.5%
- System Operating Conditions :
- -20℃ ~ 55℃ | IP54 | C4-M
- Supports 2 PCS & 2 MW off-grid

WS-G(S)2000-2H3/WS-G(S)2000-4H3

Technical Data

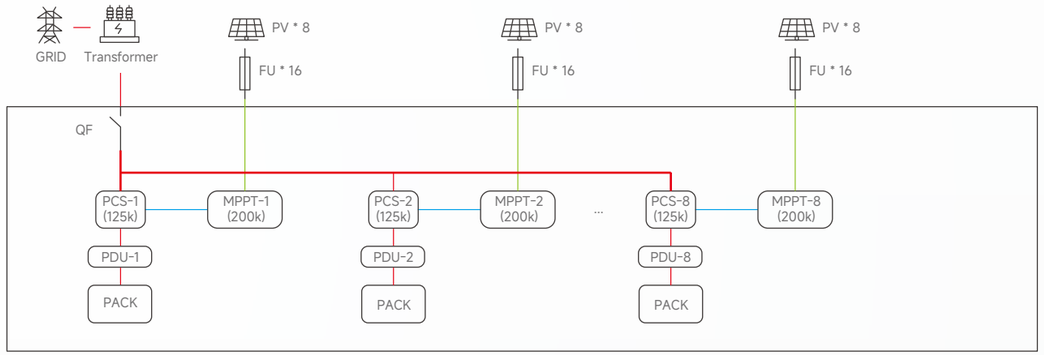
Model	WS-GS2000-2H3	WS-G2000-2H3
AC Parameter		
Rated power	1000kW	
Max. Apparent Power	1100kVA	
AC Rated Current	1443A(8×180.4A)	
Rated Voltage/Range	400V/0.85Un-1.1Un	
Grid Connection Form	3L+N+PE	
Frequency/Range	50Hz/45Hz-55Hz	
Power Factor Adjustment Range	0.8 leading-0.8lagging	
Total Current Harmonic Distortion （THDi）	<3% (of Rated power)	
DC Injection Current	<0.5% In	
Max.RTE	88.50%	
Battery Parameter		
Cell Type	LFP	
Nominal Capacity (Cell)	314Ah	
PACK Configuration	1P16S	
Battery Configuration	256S1P*8	
Battery Energy	2057kWh	
Battery Voltage Range	819.2Vdc(691.2~921.6Vdc)	
Other Parameter		
Fire Protect System	Gas fire protection+Water fire protection	
Cooling Type	Air cooling	
Communication Port	RJ45	
Communication Protocol	Modbus TCP，IEC104，IEC61850	
Operating Ambient	-20~55 °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)	≤26000kg	
Installation Location	Floor mount	
Recommend Storage Temperature (°C)	-20~60	
PV Parameter		
Max. PV Input Power	1280kW(160kW*8)	/
Max. PV Input Voltage	800Vdc	/
Start-up Voltage	200Vdc	/
MPPT Voltage Range	180-750Vdc	/
Full Load MPPT Voltage Range	450-750Vdc	/
Rated PV Input Voltage	600Vdc	/
Max. Operating PV Input Current	8 × （40+40+40+40+40+40+40+40） A	/
Max. Input Short-Circuit Current	8 × （60+60+60+60+60+60+60+60） A	/
No. of MPP Trackers	64 （8*8）	/
Max. Efficiency	>99%	/

WS-G(S)2000-2H3/WS-G(S)2000-4H3

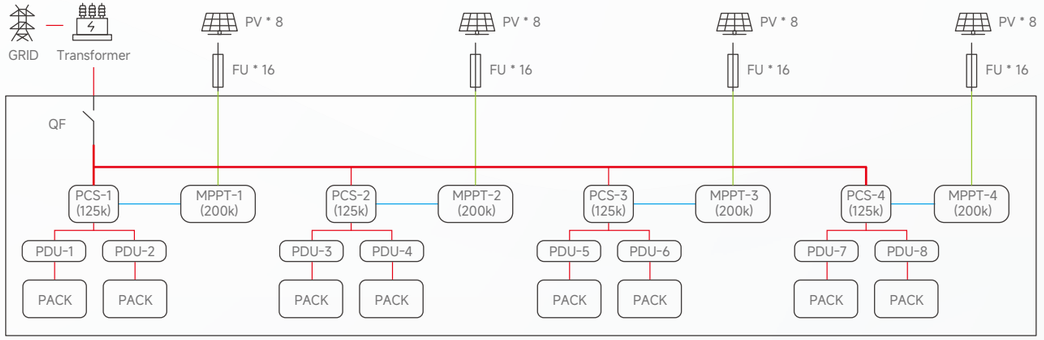
Technical Data

Model	WS-GS2000-4H3	WS-G2000-4H3
AC Parameter		
Rated power	500kW	
Max. Apparent Power	550kVA	
AC Rated Current	722A(8×180.4A)	
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 Parameter		
Cell Type	LFP	
Nominal Capacity (Cell)	314Ah	
PACK Configuration	1P16S	
Battery Configuration	256S1P*8	
Battery Energy	2057kWh	
Battery Voltage Range	819.2Vdc(691.2~921.6Vdc)	
Other Parameter		
Fire Protect System	Gas fire protection+Water fire protection	
Cooling Type	Air cooling	
Communication Port	RJ45	
Communication Protocol	Modbus TCP，IEC104，IEC61850	
Operating Ambient	-20~55 ℃	
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)	≤26000kg	
Installation Location	Floor mount	
Recommend Storage Temperature (°C)	-20~60	
PV Parameter		
Max. PV Input Power	640kW(160kW*4)	/
Max. PV Input Voltage	800Vdc	/
Start-up Voltage	200Vdc	/
MPPT Voltage Range	180-750Vdc	/
Full Load MPPT Voltage Range	450-750Vdc	/
Rated PV Input Voltage	600Vdc	/
Max. Operating PV Input Current	4×（40+40+40+40+40+40+40+40）A	/
Max. Input Short-Circuit Current	4×（60+60+60+60+60+60+60+60）A	/
No. of MPP Trackers	32（4*8）	/
Max. Efficiency	>99%	/

2-hour Energy Storage Solution　1MW/2MWh(2h)



4-hour Energy Storage Solution　0.5MW/2MWh(4h)



Winter Series

Utility-Scale ESS Solution

Liquid - Cooled ESS



WS-L4300-BC-3-A
WS-PCS2250-2-A

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

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

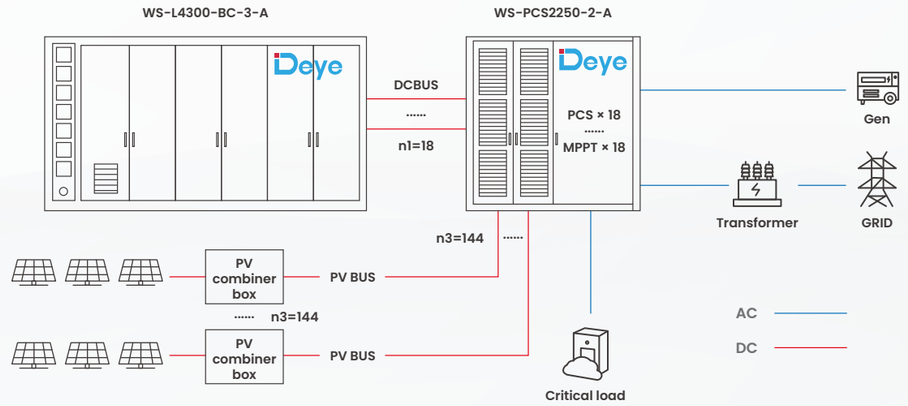
High Energy Density

- 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-A
WS-PCS2250-2-A

Technical Data

Liquid-Cooled ESS	
Model	**WS-L4300-BC-3-A**
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 ~ +50°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-M (Optional C5)
Altitude	≤2000m
Communication	CAN、RS485、TCP、DIDO
Weight	38500kg
Dimensions (W × D × H)	6058 × 2438 × 2896mm



Liquid-Cooled ESS	
Model	**WS-PCS2250-2-A**
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	2250 (18 × 125KW)
Power Factor	-1 ~ +1
Battery Input Voltage Range	630Vdc ~ 1000Vdc
Max. DC Charging / Discharging Current	(18 × 190A)
MPPT Data	
Max. PV Input Power	2880kW (18 × 160kW)
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 (3P4W)
AC Max Current	5400A
Gen Side Data	
AC Rated Voltage / Frequency	400Vac / 50Hz (3P4W)
AC Max Current	3600A
Load Side Data	
AC Rated Voltage / Frequency	400Vac / 50Hz (3P4W)
AC Max Current	3247A
General Data	
Operating Temperature	-30°C ~ +55°C
Humidity	0 ~ 95% (No condensation)
Ingress Protection	IP55
Anticorrosion grade	C4-M (Optional C5)
Altitude	≤2000m
Weight	8000kg
Dimensions (W × D × H)	2991 × 2438 × 2896mm

WS-PCS1125-2-A
WS-TS1000-2-A

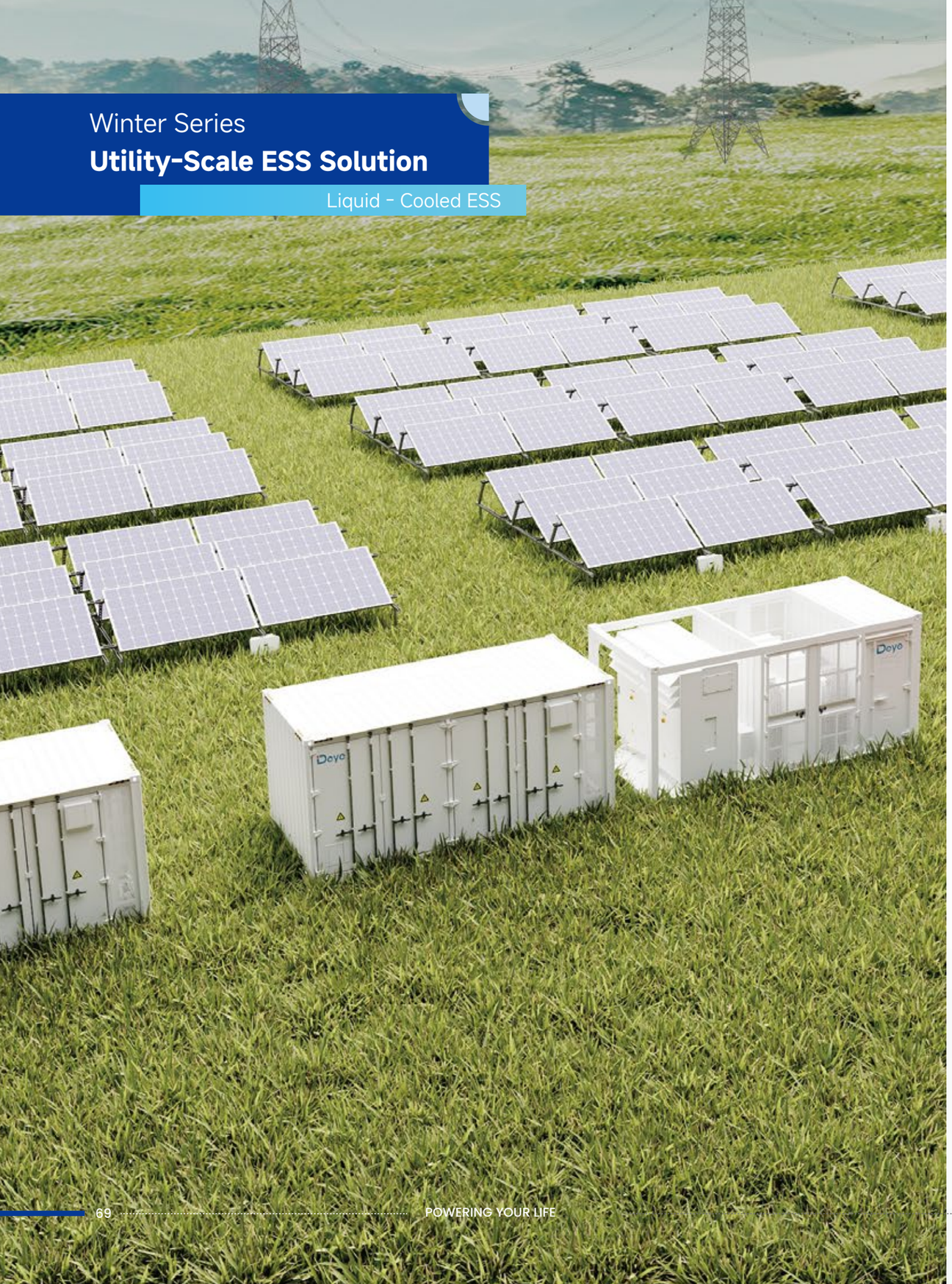
Technical Data

Model	WS-PCS1125-2-A
PCS Data	
AC Rated Power	1125kW (9 × 125kW)
AC Rated Voltage / Frequency	400Vac / 50Hz (3L+N+PE)
AC Rated Current	1624A (9 × 180.4A)
Power Factor	-1 ~ +1
Battery Input Voltage Range	630Vdc ~ 1000Vdc
Max. Charging / Discharging Current	1710A (9 × 190A)
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	≤4000kg
Dimensions (W × D × H)	1750 × 1120 × 2450mm

Model	WS-TS1000-2-A
Grid Side Data	
Rated AC Input/Output Active Power (kw)	1000
Rated AC Input/Output Current (A)	1450
Rated Input/Output Voltage (V)	220/380, 230/400 (three phase)
Grid Connection Form	3L/N/PE
Rated input/Output Grid Frequency	50Hz/60Hz
Load Side Data	
Rated AC Input/Output Active Power (kw)	1000
Rated AC Input/Output Current (A)	1450
Rated Input/Output Voltage (V)	220/380, 230/400 (three phase)
Grid Connection Form	3L/N/PE
Rated input/Output Grid Frequency	50Hz/60Hz
GEN Side Data	
Rated AC Input/Output Active Power (kw)	1000
Rated AC Input/Output Current (A)	1450
Rated Input/Output Voltage (V)	220/380, 230/400 (three phase)
Grid Connection Form	3L/N/PE
Rated input/Output Grid Frequency	50Hz/60Hz
System Data	
Dimension (W x D x H,mm)	2000 × 1200 × 2450mm
Weight Appr. (kg)	1600
System Operating temperature range	-20°C~55°C
Max. working altitude (m)	≤3000
IP Rating of Enclosure	IP54
Switching Time (ms)	≤20







WS-L5000-BC-2

The Low LCOS Multi-intelligent Energy Storage Solution

Economical and Efficient

- 20-foot container 5016kWh
- Maximum efficiency 94.5%
- Shoulder-to-shoulder/back-to-back installation

Flexible and Convenient

- Liquid cooling circuit equipped with bidirectional shut-off valve
- Equipped with waste liquid collection device
- Single/dual circuit output, 2/4h application

Smart Cloud Management

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

Ultimate Safety

- 2+3 Level Fire Protection System
- 3+2+1 Level Electrical Safety Protection

WS-MV5000-2

Integrated Boost and Conversion Solution

High-efficiency Conversion

- Three-level topology with a maximum efficiency of 99%
- Intelligent air-water cooling with a maximum operating temperature of 60℃

Safe and Reliable

- IP54/C5 high protection class
- Online insulation monitoring for safety assurance
- Interlocks with BMS and EMS to support multiple system protection functions

Grid Support

- Fast active/reactive power response, supporting source-grid-load-storage dispatching
- Weak grid support, enabling stable operation with SCR=1.1
- Equipped with grid-forming functions such as inertia support and microsecond-level voltage building

Flexible Application

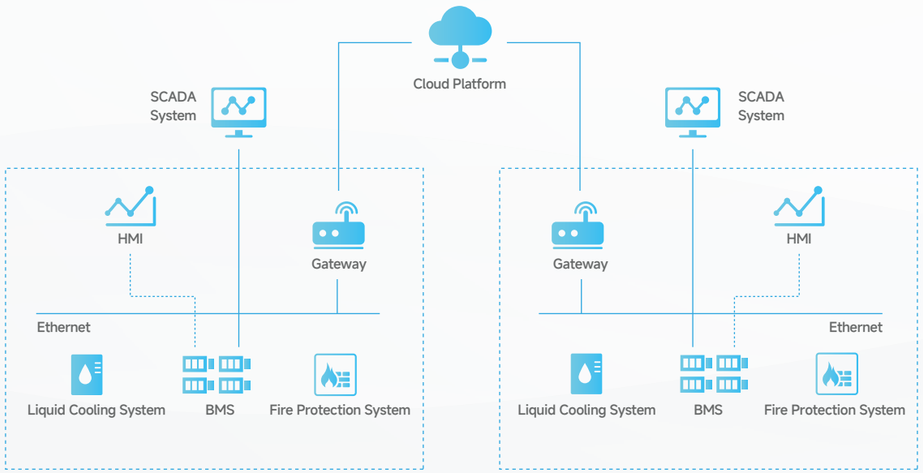
- Supports off-grid parallel operation and independently participates in grid black start
- Equipped with VSG, VF, PQ and other operating modes
- Supports application in various scenarios including high altitude, high salt spray, high temperature and extreme low temperature

WS-L5000-BC-2
WS-MV5000-2

Technical Data

Model	WS-L5000-BC-2
Battery Data	
Battery Type	$LiFePO_4$
Nominal Capacity (Cell)	314Ah
PACK Configuration	1P104S
RACK Configuration	4*1P104S
System Configuration	2*6P416S (12P416S)
Nominal Voltage	1331.2Vdc（1144-1497.6Vdc）
Nominal Energy	5016kWh（12× 418kWh）
Nominal Current	2*939A
Charge/Discharge Rate	0.5P
DC Efficiency	≥94.5%
System Data	
Operating Temperature	-30℃ ~ +55℃（>45℃ derating）
Storage Temperature	-30℃ ~ +60℃
Humidity	0 ~ 95%RH
Type of Cooling BAT	Liquid cooling
Fire Suppression	Aerosol、Water
Ingress Protection	IP55
Anticorrosion Grade	C4/C5
Altitude	≤3000m
Weight	≤40500kg
Dimensions (W × D × H)	6058*2438*2896mm
Communication	Ethernet/CAN
Standard Compliance	IEC62619,IEC62477,IEC62933,IEC63056,IEC61000,UN38.3,UN3536,NFPA855,UL9540A

Architecture Diagram



Model	WS-MV5000-2
DC Side Data	
Max. DC Voltage	1500Vdc
DC Voltage Range for Nominal Power	1000Vdc~1500Vdc
Max. DC Current	1913A*4
No. of DC Inputs	4
PCS AC Side Data	
Rated output power	1250*4 kVA
Max output power	1250*3*4 kVA @35℃
Rated AC voltage	690Vac
AC voltage range	586.5~759Vac（-15%~+10%）
Max AC current	3138*4 A
Nominal grid frequency	50Hz
Grid frequency rage	45~55Hz
Power factor range	1 leading ~ 1 lagging
Efficiency	
Average Efficiency	≥98.3%
Transformer	
Isolation Mode	Oil-Immersed Transformer
Transformer Rated Power	5250kVA
LV/MV Voltage	0.69kV/20-35kV
Transformer Vector	Dy11
Cooling Type	ONAN
General Data	
Dimensions（W*D*H）	12192×2438×2896mm
Weight	≤40T
Protection Degree	IP65 for PCS，IP54 others
Cooling Method	Natural air cooling (transformer)/Air-water cooling (PCS)
Altitude	3000m(> 2000m derating)
Operating Temperature Range	-40℃~60℃ (>45℃ derating)
Humidity Range	0~100%（non-condensing）
Anticorrosion Grade	C4/C5
Over Voltage Range	DC OVC II / AC OVC III
Surge Protection	DC Type II / AC Type II
Communication	RS485/ETH/CAN
Standard Compliance	IEC 62477, IEC 61000, IEC 62920, IEC 61727, IEC 62116,IEC 60076, IEC 62271-100/103/200, EN 50549-2/-10,ANSI C57.12.10/20

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