Gotion

A Global Leader

In the Energy Storage Industry

ESS Market

Front-of-the-Meter

- Utility-scale Generation
- Utility-scale Energy Storage
- Transmission and Distribution

Behind-the-Meter

- Commercial and Industrial (C&I)
- Residential
- Electromobility

Go Innova**tion**

Cherish | Pragmatism | Integrity | Innovation

www.gotion.com

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About Gotion

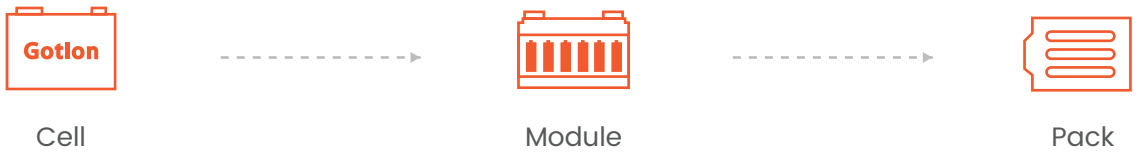
Gotion High-tech Co., Ltd. is a pioneering leader in the energy storage battery industry. It was listed on the Shenzhen Stock Exchange in China in May 2015 (002074.SZ) and on the SIX Swiss Exchange in July 2022 (GDR listing code: GOTION). As an internationally diversified company with European and American capital participation, its main business includes power lithium batteries, energy storage solutions, and power transmission and distribution equipment. Gotion has over 20 years of expertise in material and cell technology, with an in-house vertical value chain exceeding 600k tons. Offering integrated carbon-zero solutions across 10+ applications, Gotion is recognized as a world-class Tier 1 BESS supplier.

Product Market Layout

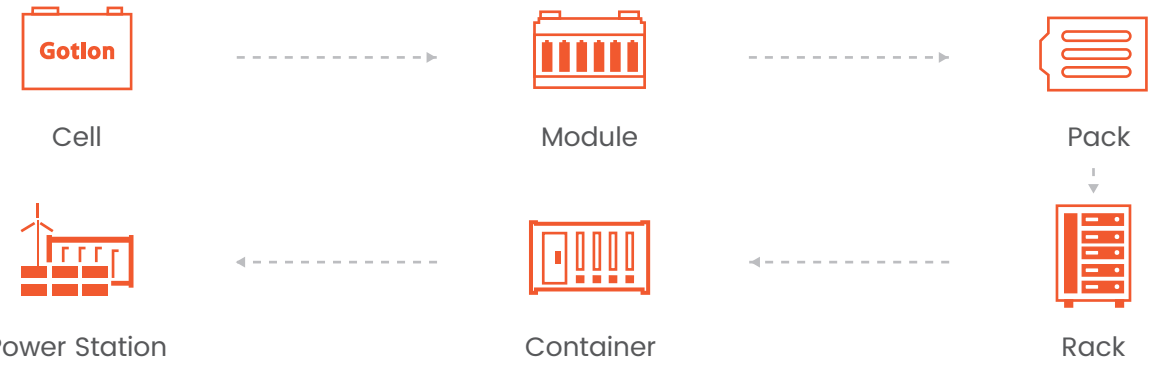
- EV Market
- ESS Market
- Recycling Market

Main Business

EV Battery Systems and Services



Energy Storage Solutions and Services



We Provide

- Localized Factory
- Extended Warranties
- After-sales Service
- Financing Service

* All Services for Both EV and ESS

Global Achievements

Tier 1

Gotion is Recognized as a Tier 1 Energy Storage Manufacturer in Bloomberg's Rankings for 2024

Tier 1

Gotion is Listed as a Tier 1 Energy Storage Manufacturer by SMM in 2024

2024

Volkswagen Battery Category Best Supplier

Worldwide Top 3

the Global Installed Capacity of LFP Batteries in 2023

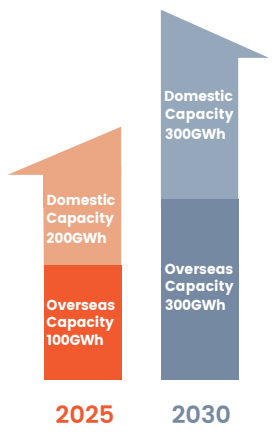
Worldwide No.5

Total Shipment Volume of Energy Storage Lithium Batteries in 2023

2024

China Top 500 Enterprises

Global Capacity Strategic Layout



EMEA

40 GWh
200,000 tonnes (Cathode)

Asia-Pacific

20 GWh

Americas

40 GWh
200,000 tonnes(Cathode)

China

200 GWh
400,000 tonnes (Cathode)

Energy Storage Product Achievements

Applied since **2018**

Project Cases **>200**

Shipment Volume **>26GWh**

- Huaibei Wanneng Energy Storage Power Station Project I - **the largest single-capacity grid-side LFP energy storage power station in China.**
- California Theater Energy Storage Project - **the first case in the US.**

Global ESS Market Performance

Europe & Africa

Italy
NHOA, Volume: >10MWh

Netherlands
Haitai, ProfiNRG, etc.
Volume : >100MWh

UK
PGT, Volume : >400MWh

France
Ebusco, Innovent, etc.
Volume : >70MWh

Angola
Volume : >5MWh

Democratic Republic of Congo
Replus, Volume: >70MWh

Americas

USA
NextEra, Ormat, Doosan, Anza, EP, etc.
Volume: >3GWh

Asia-Pacific

China
Datang, Anhui Province Energy, State Power Investment, Jingneng, CHN Energy, China Three Gorges Corporation, etc.
Volume: >20GWh

Japan
Fuji Electric, Edison Power, Miyakojima, etc.
Volume: >200MWh

Thailand
Volume: >150MWh

Company Milestones

2020

- Earned Strategic Investment from Volkswagen Group

2021

- Launched the Construction of Overseas Factories in EMEA, Americas, APAC.

2022

- Nominated as the First Global Supplier for VW's UC Project
- Issued GDRs and Went Public on the Swiss Stock Exchange
- Co-operation with VinES Cell Factory in Vietnam Started

2023

- Launched the First Locally Produced Battery Product in Germany
- the Illinois Battery Plant in the U.S. Officially Started
- the First Battery Product of NVGOTION in Thailand Officially Launched.

2024

- Awarded Volkswagen' s Best Supplier

Global Footprints

8 Global R&D Centers; **20** Global Production Hubs; **4** The Layout of Localized Supply of Materials

Germany
- Research Institute
- Battery Manufacturing Hub

Morocco
Under Construction
- Material Hub
- Battery Manufacturing Hub

Slovakia
Under Construction
- Battery Manufacturing Hub

India
- Research Institute
- Battery Manufacturing Hub

Thailand
- Battery Manufacturing Hub

Singapore
- Joint Laboratory

Headquarters R&D Plant Materials

China

- Headquarters
- Engineering Research General Institute
- Battery Manufacturing Hub
- Material Hub

America

- Silicon Valley Institute
- Cleveland Institute
- Material Hub
- Battery Manufacturing Hub

Japan

- Tsukuba Research Institute

Argentina

Under Construction

- Material Hub
- Battery Manufacturing Hub

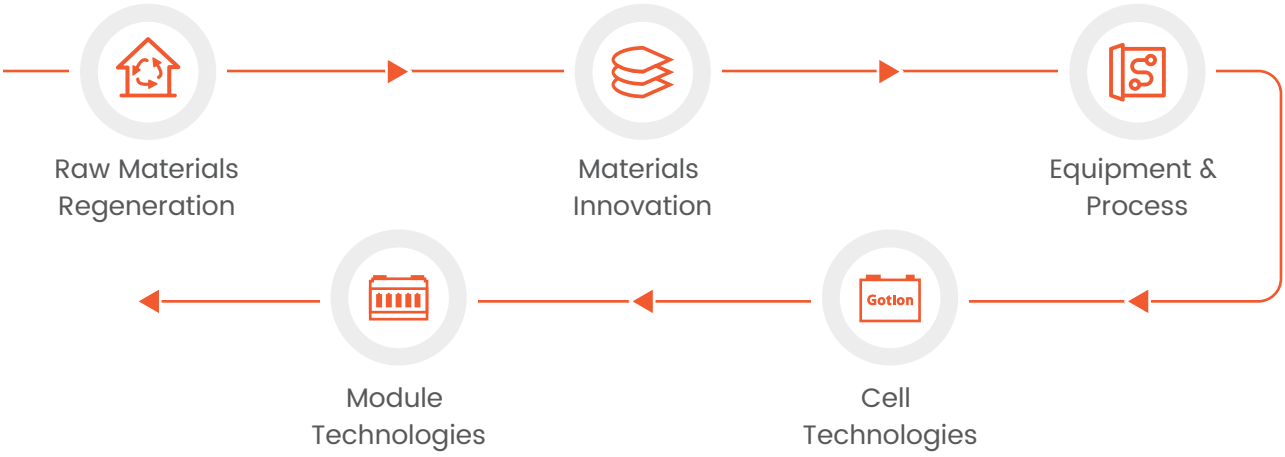
Indonesia

- Material Hub
- Battery Manufacturing Hub

Vietnam

- Battery Manufacturing Hub

Technology Highlights



Intelligent Manufacturing Technologies

- Long Cycle Life
- Real-time Monitoring of Cell
- High Reliability and Safety

BMS Technologies

- Autonomous System Diagnosis
- Standardized Protocols
- Intelligent Temperature Control
- Dual-network Redundancy Design
- Certification of Energy Storage HV System

9295 Patents Applied

290 Research Papers Published

93 Industry Standards Formulated

≥1000 Material Field Patent Holdings

Data as of 30.06.2024

R&D Strength

Three Validation Platforms

Material Testing

Electrical Performance Testing

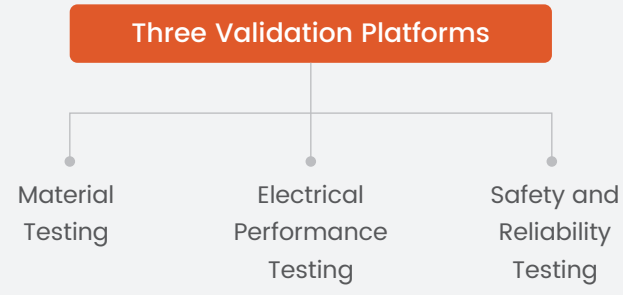
Safety and Reliability Testing

Team Size

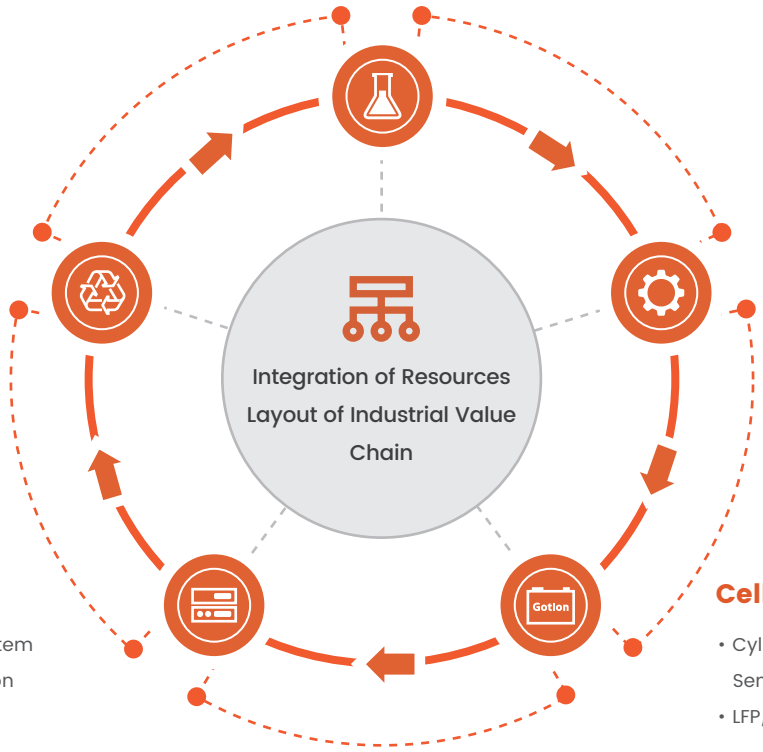
R&D Investment YOY Growth Rate (2023)	14.57%
Current R&D Team	7,000+
Materials R&D Team	1,000+
Overseas R&D Personnel	600+
Ph.D. Degree Holders	200+

Scientific and Technological Innovation

1 Global New Energy Vehicle Innovation Technology Award (Key Technology and Application of Phosphate Polyanionic 210Wh/kg Battery)



Worldwide Integrated Industry Chain



Raw Materials

- Lithium Carbonate
- Nickel-cobalt Laterite Ores

Recycling

- Battery Recycling
- Cascaded Utilization

Battery Materials

- Cathode and Anode Materials
- Separator
- Copper Foil
- Cathode Precursor

Modules & Packs

- Battery Management System
- Energy Storage Application System Solutions

Cells

- Cylindrical/Prismatic/Pouch/ Semi-solid-state Battery
- LFP/NCM/LFMP/NA+, etc.

Full Industrial Chain

- Europe, Africa, America, Asia-Pacific and China
- Independent Self-sufficient Raw Material Supply
- Closed Loop Industry Value Chain
- Substantial Lithium Mine Layout

America	Europe & Africa	China	
Cathode Material	Cathode Material	Hefei, Anhui	NCM, LFP Cathode Material, Separator
Anode Material	Separator	Yichun, Jiangxi	Lithium Carbonate
Separator	Aluminum Foil	Caofeidian, Hebei	NCM Precursors
Argentina	**Indonesia**	Wuhai, Inner Mongolia	Anode Material
Lithium Carbonate	Nickel-Cobalt	Tongling, Anhui	Copper Foil

Quality Assurance

Recognized by CNAS in 2015, the Gotion High-tech Testing and Experimental Center is East China's largest lithium-ion battery testing facility. It houses over 1,000 advanced testing devices and employs 700+ technical experts. The center specializes in materials development, performance testing, safety, reliability, and BMS which leads key national projects.

Quality and Emergency Response System

Full Flow Management

- QMS
- Quality Audit
- Quality Performance
- Quality Culture

Development Quality

- Design Quality Management
- Project Gate Review
- NPI

Supplier Quality

- Supplier Management
- Supplier Qualification
- Incoming Material Quality

Manufacturing Quality

- Process Improvement
- Product Quality
- Lab & Gauges

After-sales Service

- Complaints Improvement
- Product Safety
- Failure Analysis Program

Customer Services

- *24/7 Remote Monitoring
- *Active Fault FCST
- Standardized Failure Tree Analysis

*24/7 Remote Monitoring and Fault FCST Active are Customized Service.

Quality Assurance

Certificate for Online Auditing

ISO9001 | IATF16949 | ISO 14001 | ISO45001

*Not all the certifications are on the page and partial certifications are in progress.

5

ESS Product

Utility-Scale BESS

Commercial & Industrial BESS

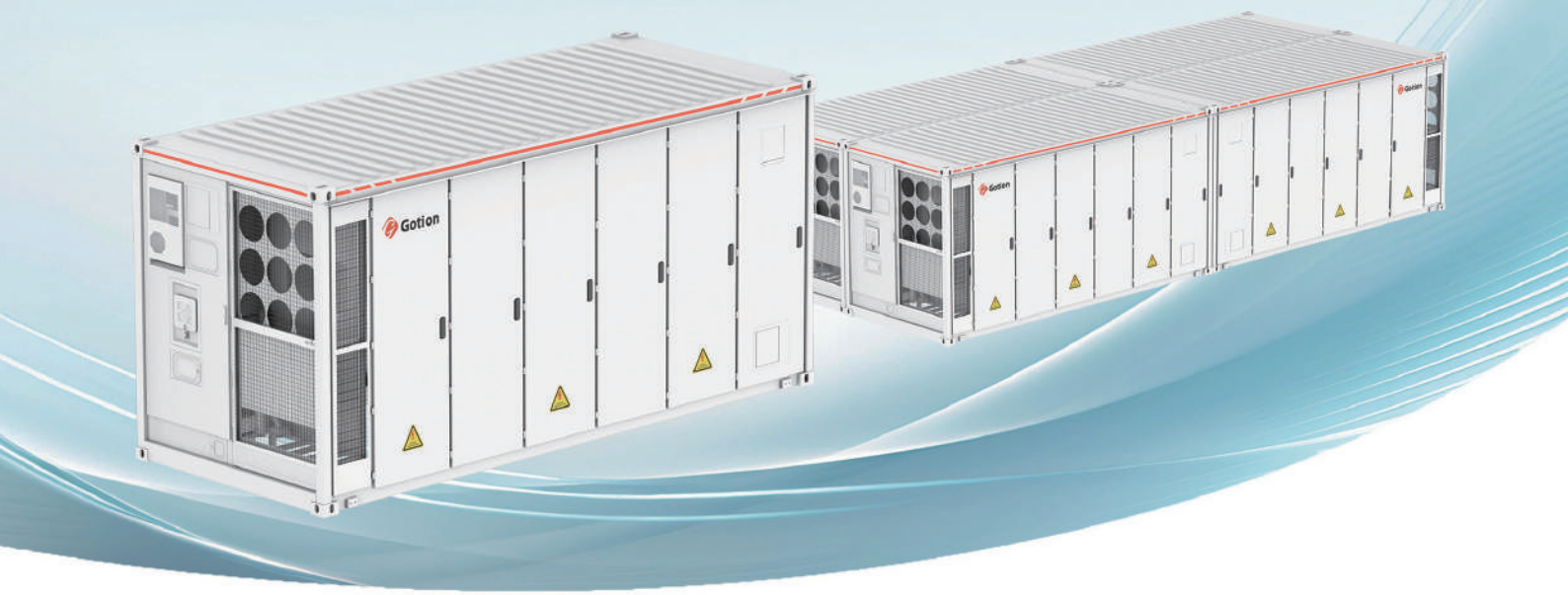
Residential BESS

Mobile EV Chargers

Portable Power for Gendome Residential

Gotion GRID 5015

Liquid-Cooled Energy Storage System III



5015kWh
High Energy

12,000 Cycles
Long Life Span

3-Layer Protection
High Safety

20ft
Standard Container

3°C
Intelligent Temperature Control

600MWh per acre
Optimized Energy Density

- High-Energy-Density System
- Optional Battery Container
- Optimal Space Utilization
- Integrated BMS
- Low Cost with Minimal Footprint

ESS Product Solution

- Thermal Energy Storage
- Wind and Solar Energy Storage
- Shared Energy Storage
- Peak-valley Arbitrage

UL NFPA UN38.3 3536 9 GB IEC RoHS CSA GROUP MSDS TÜV SÜD

*The image illustrates two electrical racks physically mounted together to fit into the container, and one electrical rack comprises four battery packs connected in series.

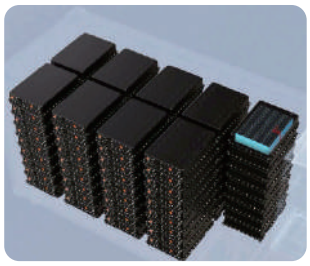
Model	ESD1331-05P5015
Electrical Parameters	
Cell Type	LFP-314Ah
Cell Cycle Life	> 12,000*
Rated Voltage of Single Cell	3.2Vdc
Pack Configuration	1P104S
Rack Configuration	1P416S
System Configuration	12P416S
System Nominal Energy	5015kWh
System Rated Voltage	1331.2Vdc
System Voltage Range	1040Vdc ~ 1497.6Vdc
Charge / Discharge Rate	≤0.5p @ 25°C/77°F
Components	
High Voltage Box	Integrated
Confluence Cabinet	Integrated
Monitoring System (HMI)	Integrated
Fire Suppression System	• Explosion-proof Exhaust and Ventilation System • Temperature/Smoke/Combustible Gas Detection System • **PACK-level submerged** Fire Extinguishing System • Aerosol Fire Extinguishing System • Prefabricated Water Sprinkler System (Optional)
Thermal Management System	• Integrated Liquid Cooler 60kW Cooling Capacity for Battery • Air-cooling for Other Equipment
EMS	Not Integrated
BMS	Integrated Option: U.S. Manufactured
Conditions	
Storage Temperature	-30°C ~ 60°C/-22°F ~ 140°F
Working Ambient Temperature	-30°C ~ 45°C/-22°F ~ 113°F(>45°C/113°F Derating)
Working Relative Humidity	0% ~ 95% (Non-condensing)
Working Altitude	≤3000m/9842ft (>3000m/9842ft Derating)
Other Parameters	
Ingress Protection	IP55 (Except Liquid Cooler)
Communication Interface	CAN, RS-485, Ethernet
Communication Protocol	CAN, Modbus-TCP/IP, Modbus RTU, IEC104
Dimensions (W×D×H)	6058mm×2438mm×2896mm/238.5in×96in×114in (20ft Container)
Weight (t)	44
Standards & Certification	UL9540A, UL9540, UL1973, UN38.3, UN3536, NFPA855, NFPA69, RoHS, Reach, (EU) 2023/1542, IEC 62477-1, IEC 60529, IEC 61000-6-2, IEC 61000-6-4, IEC 62933-5-2, IEC 63056, IEC 62619, GB/T 36276

*70% capacity retention after 12,000 cycles (0.5P charge/discharge, 90% DoD at 25+2°C)

Gotion GRID 3421

Liquid-Cooled Energy Storage System II

Exceptional Safety

Protection Design	1st Level Protection	2nd Level Protection	3rd Level Protection
• Dry/wet separation design by an integrated die-casting structure of the liquid cooling plate and pipeline	• Continuous cell level temperature monitoring from BMS • Abnormal Cell Temperature Rise Alarm	• Thermal, Smoke, Combustible Gas Detection and Alarm • Liquid Leakage Detection	• Prefabricated Water Sprinkler System (optional) • External Fire Hose Connection Port
	• PACK-level submerged fire extinguishing system for thermal runaway suppression, tested and proven with no reignition after 24 hours	• Active Ventilation and Exhaust System • Pressure Relief System • FK 5-1-12 Automatic Dry Agent Fire Extinguishing System	

System-3421 | Rack×9 | Pack×81 | Cell×3564

UL NFPA UN38.3 3536 GB IEC RoHS CSA GROUP MSDS TÜV SÜD

Model	ESD1267-05P3421
Electrical Parameters	
Cell Type	LFP-300Ah
Cell Cycle Life	>8000
Rated Voltage of Single Cell	3.2Vdc
Pack Configuration	1P44S
Rack Configuration	1P396S
System Configuration	9P396S
System Nominal Energy	3421kWh
System Rated Voltage	1267.2Vdc
System Voltage Range	990Vdc ~ 1445.4Vdc
System Rated Power	1710.5kW
Charge / Discharge Rate	≤ 0.5P @ 25°C/77°F
Components	
High Voltage Box	Integrated
Confluence Cabinet	Integrated
Monitoring System (HMI)	Integrated
Fire Suppression System	• Explosion-proof exhaust and ventilation system • Temperature/smoke/combustible gas detection system • **PACK-level submerged** fire extinguishing system • FK 5-1-12 automatic dry agent fire extinguishing system • Prefabricated water sprinkler system (optional)
Thermal Management System	• Integrated Liquid Cooler 40kW Cooling Capacity • Air-cooling for Container
EMS	Not Integrated
BMS	Integrated
Conditions	
Storage Temperature	-30°C ~ 60°C/-22°F ~ 140°F
Working Ambient Temperature	-30°C ~ 45°C/-22°F ~ 113°F(>45°C/113°F Derating)
Working Relative Humidity	0% ~ 95% (Non-condensing)
Working Altitude	≤3000m/9842ft (>3000m/9842ft Derating)
Other Parameters	
Ingress Protection	IP54
Communication Interface	CAN, RS-485, Ethernet
Communication Protocol	CAN, Modbus-TCP/IP, Modbus RTU, IEC104
Dimensions (W×D×H)	6058mm×2438mm×2896mm/238.5in×96in×114in (20ft Container)
Weight (t)	37
Standards & Certification	UL9540A, UL9540, UL1973, UN38.3, UN3536, NFPA855, NFPA69, IEC 62477-1, IEC 61000-6-2, IEC 61000-6-4, IEC 62933-5-2, IEC 63056, IEC 62619, IEC 60730-1, GB/T 36276

Gotion EDGE 760

Lithium-ion Battery Outdoor Cabinet for C&I

Advantages

High Safety

- Cabinet-to-cabinet fire resistance
- Cabinet body : fire resistance rating of 1.5 hours
- Temp and smoke sensors+aerosol and water fire protection system

Flexible Integration

- Prefabricated cabinets, easy for on-site installation
- Adapt to size of 20ft and 40ft standard container
- Supporting parallel connection and system expansion
- Supporting reduced pack configurations

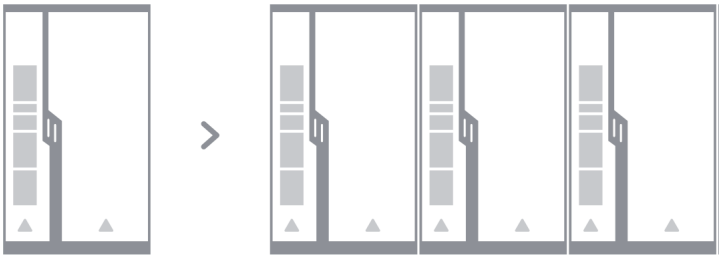
Multiple Scenarios

- Urban buildings, communities
- Low-voltage area network
- Highly integrated liquid-cooled C&I ESS

Smart and User-Friendly

- Supporting parallel and offline mode
- Early fault warning and location
- Real-time monitoring and fault logging

Application Scenario



The above schematic diagram illustrates that the EDGE 760 cabinet supports parallel connections of up to three (expanding total system capacity up to 2.28MWh) to provide enhanced scalability and flexibility while ensuring robust performance.

Model	ESD1267-05P760-G
Electrical Parameters	
Cell Type	LFP-300Ah
Cell Cycle Life	>8000
Rated Voltage of Single Cell	3.2Vdc
Pack Configuration	1P44S
Rack Configuration	1P396S
System Configuration	2P396S
System Nominal Energy	760kWh
System Rated Voltage	1267.2Vdc
System Voltage Range	990Vdc ~ 1445.4Vdc
System Rated Power	380kW
Charge / Discharge Rate	≤0.5P @ 25°C/77°F
Components	
High Voltage Box	Integrated
Monitoring System (HMI)	External
Fire Suppression System	• Temperature/Smoke Detection • Explosion Relief Panel • **PACK-level Submerged** Fire Extinguishing System • Aerosol Fire Extinguishing System • Prefabricated Water Sprinkler System (optional)
Thermal Management System	Integrated Liquid Cooler 12kW Cooling Capacity
EMS	Not Integrated
BMS	Integrated
Conditions	
Storage Temperature	-30°C ~ 60°C/-22°F ~ 140°F
Working Ambient Temperature	-20°C ~ 45°C/-4°F~113°F (>45°C/113°F Derating)
Working Relative Humidity	0% ~ 95% (Non-condensing)
Working Altitude	≤2000m/6562ft (>2000m/6562ft Derating)
Other Parameters	
Ingress Protection	IP55
Communication Interface	CAN, RS-485, Ethernet
Communication Protocol	CAN, Modbus-TCP/IP, Modbus RTU, IEC104
Dimensions (W×D×H)	2400mm×1400mm×2500mm/94.5in×55.1in×98.4in
Weight (t)	8
Standards & Certification	UL9540A, UL9540, UL1973, UN38.3, UN3480, NFPA68, IEC 62477-1, IEC 61000-6-2, IEC 61000-6-4, IEC 63056, IEC 62619, IEC 60730-1, GB/T 36276

Gotion GRID 2703

Air Cooling Energy Storage System I

Advantages of Products

Standardization

- 20ft Standard Container
- Modular Design and Optimal Layout

Space Optimization

- High Volumetric Energy Density
- Double Containers Connection

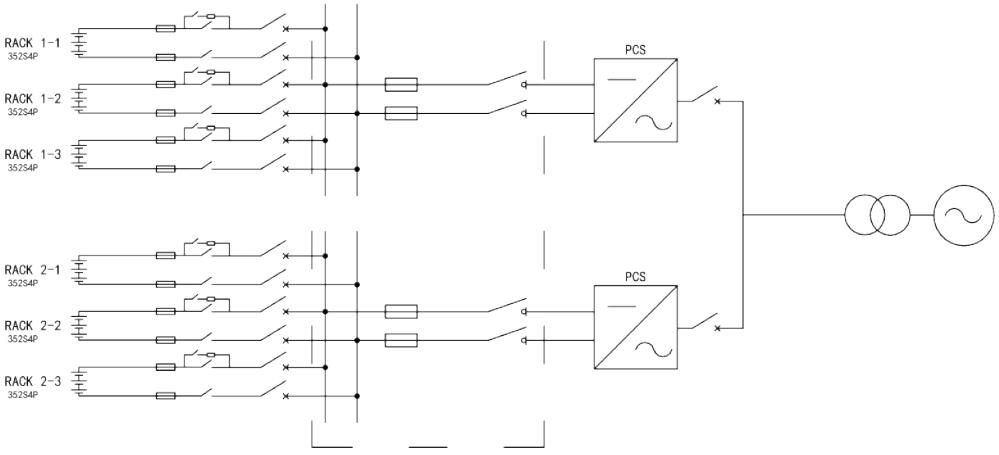
Superior Performance

- Super Long Cycle Life
- High Conversion Efficiency

Intelligent Temperature Control

- Modular Management for Temp Uniformity
- Automatic Security System+Full Immersion +Fast Response

Architecture Diagram



Model	ESD1126-05P2703
Electrical Parameters	
Cell Type	LFP-100Ah
Cell Cycle Life	>8000
Rated Voltage (Vdc) of Single Cell	3.2
Pack Configuration	4P16S
Rack Configuration	4P352S
System Configuration	24P352S
System Nominal Energy (kWh)	2703
System Rated Voltage (Vdc)	1126.4
System Voltage Range (Vdc)	880~1284.8
System Output Voltage (Vac)	/
System Rated Power (kW)	1351
Charge / Discharge Rate	0.5P@25° C
Conditions	
High Voltage Box	Integrated
Confluence Cabinet	Integrated
Monitoring System (HMI)	Integrated
Fire Suppression System	Explosion-proof Exhaust and Ventilation+Temperature/Smoke/Combustible Gas Detection +Multi-stage Fire Suppression System
Thermal Management System	Air-Cooling for Container(6 Units)
Components	
Storage Temperature (° C)	-30~60
Working Ambient Temperature (° C)	-30~45 (>45° C Derating)
Working Relative Humidity (%)	0~95 (Non-condensing)
Working Altitude (m)	<3000 (≥ 3000 Derating)
Other Parameters	
Max. Parallel Number	/
Ingress Protection	IP54
Communication Interface	CAN, RS485, Ethernet
Communication Protocol	CAN, Modbus-TCP/IP, Modbus RTU, IEC104
Dimensions (W×D×H) mm	6058×2438×2896 (20ft Container)
Weight (t)	≈ 32
Standards & Certification	
UL	UL1973, UL9540A, UL9540
IEC	IEC 62477-1, IEC 61000-6-2, IEC 61000-6-4, IEC 62933-5-2, IEC 63056, IEC 62619, IEC 60730-1
Transportation	UN38.3, UN3536

Gotion EDGE

ESC-R100-211-CE

Advantages of Products

Comprehensive Protection Real-time Monitoring

- EMS real-time monitoring and fault logging
- BMS real-time detection to protect the safe operation of the battery system

Modular Design

- Scalable design, customized design
- High space utilization

Unattended, Intelligent Operation and Maintenance(O&M)

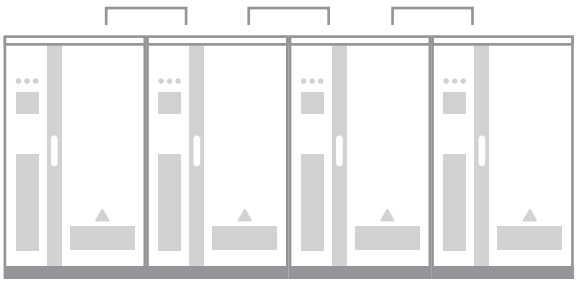
- Access to energy storage intelligent O&M system
- Intelligent statistical analysis
- Cloud-side collaboration
- reporting and remote control

Safe, Environmentally Friendly and Highly Adaptable

- Suitable for PV & Diesel microgrids
- Automatic switching between on-grid and off-grid operation

On-grid Max. parallel number: 20

Off-grid Max. parallel number: 4



* Support 4 Sets for Parallel Connection

The industrial and commercial storage products feature a modular system design, available in economic and standard models. The economic models are compact with high energy density, while the standard models offer excellent energy and power adaptability with flexible configuration options. These products facilitate peak shifting, staggered power consumption, and help alleviate grid pressure.

Model	ESC-R100-211-CE	ESD832-05P522-G
Electrical Parameters		
Cell Type	LFP-300Ah	LFP-314Ah
Cell Cycle Life	>8000	>12000
Rated Voltage (Vdc) of Single Cell	3.2	3.2
Pack Configuration	1P44S	1P52S
Rack Configuration	1P220S	1P260S
System Configuration	1P220S	2P260S
System Nominal Energy (kWh)	211	522
System Rated Voltage (Vdc)	704	832
System Voltage Range (Vdc)	600~803	728~936
System Output Voltage (Vac)	400@50Hz/60Hz	480@60Hz
System Rated Power (kW)	100	250
Charge / Discharge Rate	0.5P@25° C	0.5P@25° C
Components		
High Voltage Box	Integrated in Control Box	Integrated
Confluence Cabinet	Integrated in Control Box	/
Monitoring System (HMI)	Integrated	
Fire Suppression System	Temperature/Smoke Detection +Gas Concentration Detection +Explosion Relief Panel +Aerosol	Temperature/Smoke Detection +Explosion Relief Panel +Aerosol +Water Sprinkler System
Thermal Management System	Integrated Liquid Cooler(5kW Cooling Capacity) + Air-cooling for PCS	Integrated Liquid Cooler + Liquid Cooler for PCS
Conditions		
Storage Temperature (° C)	-30~60	
Working Ambient Temperature (° C)	-20~45 (>45 Derating)	
Working Relative Humidity (%)	0~95 (Non-condensing)	
Working Altitude (m)	≤ 2000 (>2000 Derating)	<3000 (≥ 3000 Derating)
Other Parameters		
Max. Parallel Sets	20(Grid-connected), 4(Off-grid)	5(Grid-connected), 2(Off-grid)
Ingress Protection	IP55	
Communication Interface	4G*, RS-485, Ethernet	CAN, RS485, Ethernet
Communication Protocol	Modbus/MQTT	
Dimensions (W×D×H) mm	1340×1300×2300	2370×1500×2250
Weight (t)	≈ 2.6	≈ 5
Standards & Certification		
UL	/	UL1973, UL9540A, UL9540
IEC	IEC 62477-1, IEC 61000-6-2, IEC 61000-6-4, IEC 63056 IEC 62619, IEC 60730-1	TBD
Transportation	UN38.3, UN3480	TBD

* Support for Extended Integration; 05P522 product is on-going

NAVY CUBE

Green Alternative to Diesel Gensets

Advantages of Products

Comprehensive Protection Real-time Monitoring

- EMS real-time monitoring and fault logging
- BMS real-time detection to protect the safe operation of the battery system

Compact Design

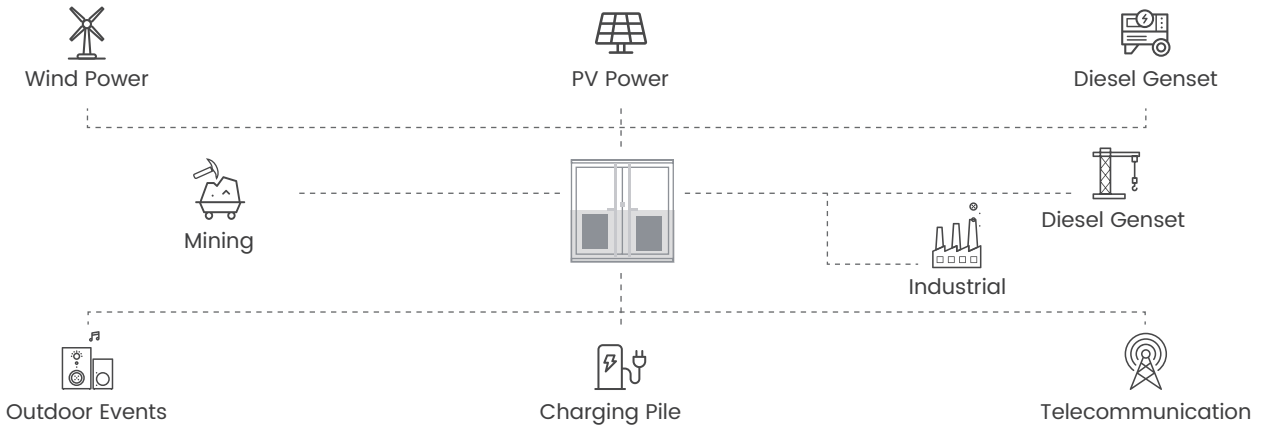
- All-in-one solution within a 10ft container
- Space utilization rate of 93%
- Modular design featuring plug-and-play functionality

Safe, Environmentally Friendly and Highly Adaptable

- Four-layer fire protection system
- Zero CO_2 and NOx emissions
- Quiet operation with a noise level below 75dB
- Integrating diverse energy sources with flexibility

Smart and Visualized Energy Management System

- Cloud-based EMS platform
- Remote monitoring through mobile APP or weblink
- User-centric interface and robust data analysis capabilities



Model	NAVY 606	NAVY 378
Electrical Parameters		
Cell Type	LFP-300Ah	
Cell Cycle Life	>8000	
Rated Voltage (Vdc) of Single Cell	3.2	
Pack Configuration	1P44S	
Rack Configuration	1P220S	
System Configuration	3P220S	2P220S
System Nominal Energy (kWh)	633	422
System Rated Voltage (Vdc)	704	
System Voltage Range (Vdc)	616~792	
System Output Voltage (Vac)	400@50Hz/60Hz	
System Rated Power (kW)	400	250
Charge / Discharge Rate	Charge 0.5P/Discharge 0.67P@25° C	
Components		
High Voltage Box	Integrated in Control Box	
Confluence Cabinet		
Monitoring System (HMI)	Integrated	
Fire Suppression System	Temperature/Smoke Detection + PACK-level Submerged Fire Extinguishing+Aerosol +Water Sprinkler System	
Thermal Management System	Integrated Liquid Cooler, 12kW Cooling Capacity	
Conditions		
Storage Temperature (° C)	-30~60	
Working Ambient Temperature (° C)	-20~45 (>45 Derating)	
Working Relative Humidity (%)	0~95 (Non-condensing)	
Working Altitude (m)	≤ 2000 (>2000 Derating)	
Other Parameters		
Max. Parallel Sets	4	
Ingress Protection	IP55	
Communication Interface	CAN, RS-485, Ethernet	
Communication Protocol	CAN, Modbus-TCP/IP, Modbus RTU, MQTT	
Standards & Certification	UL1973, UL9540A, IEC62619, MSDS, UN38.3, UN3536	
Dimensions (W×D×H)mm	2991×2438×2896	2991×2438×2591
Weight (t)	≈ 12	≈ 9

LEYDEN POWER

* Support for Extended Integration

Gotion HOME 5/10/15/20kWh

Lithium-ion Battery Residential ESS

Products Superiority

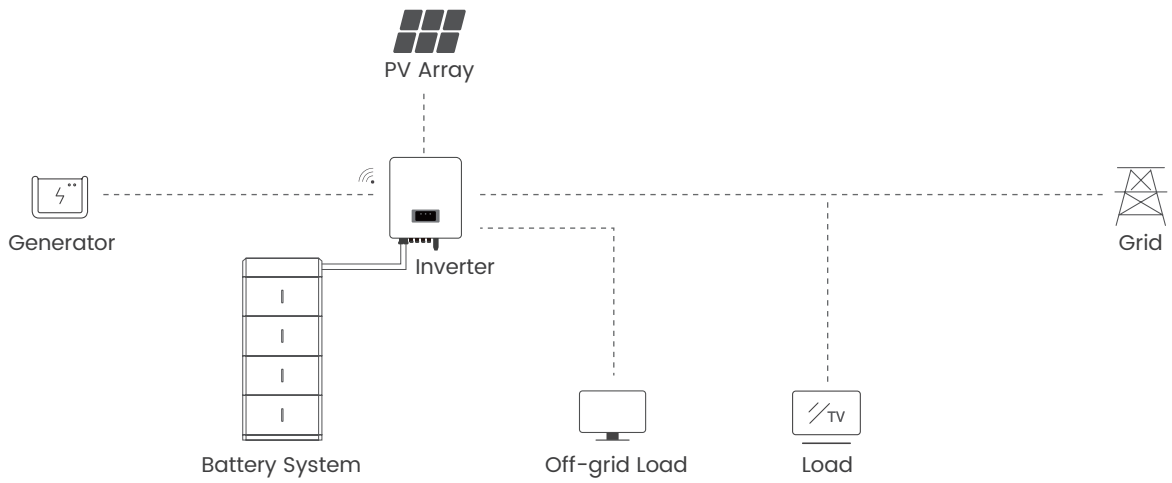
- Stable and Secure LFP Battery
- Cell/Module/System Triple Protections

- Modular Design
- Extendable Application

- Easy to Handle, 30mins Quick Install
- Ground Stand or Wall Mounted

- IP65, Household Friendly
- Covers an Area of 0.16m^2

Application Scenario Diagram



Model	HSD51.2-02C05L	HSD51.2-02C10L	HSD51.2-02C15L	HSD51.2-02C20L
Electrical Parameters				
Quantity of Packs	1	2	3	4
Rated Voltage (Vdc)	51.2			
Voltage Range (Vdc)	43.2~56.8			
Nominal Energy (kWh)	5	10	15	20
Usable Energy (kWh)	4.8	9.8	14.7	19.6
Max. Output Power (kW)	2.5	5	5	5
Conditions				
Working Environment Temp (°C)	-20~45			
Working Temp (°C)	Charge:0~53 Discharge: -20~58			
Working Humidity Range (%)	5~95 (Non-condensing)			
Altitude (m)	<3000 (≥3000 Derating)			
Installation Environment	Indoor/Outdoor			
Other Parameters				
Max. Parallel Sets	16	8	5	4
Communication Interface	CAN, RS-485			
Certification	IEC62619, IEC60730, IEC63056, UL9540, UL9540A, UL1973, UL60730, UN38.3, IEC 61000-6-3			
Ingress Protection	IP65			
Dimensions (W×D×H) mm	705×239×528	705×239×846	705×239×1164	705×239×1482
Weight (kg)	67	120	170	220

* Test conditions (usable energy): 100% depth of discharge (DoD), 0.2P rate charge & discharge at 25°C
* Charge/discharge derating occurs when the operating temperature below 5°C or over 45°C

Battery Cells

LFP Energy Storage Cell

• IFP20100140A-30Ah

• IFP27175200A-100Ah

• IFP50160116A-102Ah

Model	IFP20100140A-30Ah	IFP27175200A-100Ah	IFP50160116A-102Ah
Electrical Parameters			
Cell Type	LFP-30Ah	LFP-100Ah	LFP-102Ah
Rated Voltage (V)		3.2	
Working Voltage (V)		2.0~3.65(T > 0° C)	
Cycle Life	>3000	>8000	>6000
Charge/Discharge Rate	1P@25° C	0.5P@25° C	0.5P@25° C
DCR (mΩ)	≤ 3	≤ 1.5	≤ 1.5
ACR (mΩ)	0.6~1.2	0.4~0.6	0.27~0.4
Weight Energy Density (Wh/kg)	≥ 166	≥ 155	≥ 168
Conditions			
Storage Temp (° C)		-30~60	
Optimum Working Temp (° C)		10~35	
Charge Temp Range (° C)		0~55	
Discharge Temp Range (° C)		-30~60	
Other Parameters			
Certification	UL1973, UL9540A, UN38.3	UL1973, UL9540A, UN38.3, GB/T 36276	UL1973, UL9540A, UL1642, UN38.3, IEC62619, RoHS2.0, MSDS
Dimensions (T×W×H) mm	21.2×100×144	27.2×175.4×206.1	49.9×160×118.5
Weight (g)	615±18	2022±60	1970±30

Battery Cells

LFP Energy Storage Cell

• IFP81175200-300Ah

• IFP72175207-314Ah

• IFP81175200-330Ah

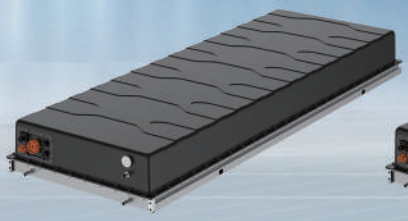
Model	IFP81175200-300Ah	IFP72175207-314Ah	IFP81175200-330Ah
Electrical Parameters			
Cell Type	LFP-300Ah	LFP-314Ah	LFP-330Ah
Rated Voltage (V)		3.2	
Working Voltage (V)		2.5~3.65(T > 0° C)	
Cycle Life	>8000	>12000	>12000
Charge/Discharge Rate	0.5P@25° C	0.5P@25° C	0.5P@25° C
DCR (mΩ)	≤ 0.5	0.3~0.5	0.3~0.5
ACR (mΩ)	0.1~0.3	0.15~0.3	0.1~0.3
Weight Energy Density (Wh/kg)	≥ 160	≥ 178	≥ 170
Conditions			
Storage Temp (° C)		-30~60	
Optimum Working Temp (° C)		15~35	
Charge Temp Range (° C)		0~55	
Discharge Temp Range (° C)		-30~60	
Other Parameters			
Certification		UL1973, UL9540A, UN38.3, GB/T 36276, IEC62619	
Dimensions (T×W×H) mm	81.0×175.4×202.5	71.95×174.8×207.1	81.0×175.4×202.5
Weight (g)	5998±300	5630±200	6140±300

Standard Pack

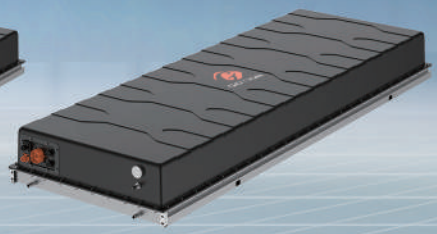
LFP Battery Storage Module

• EPD51-05P20

• EPD140-05P42



• EPD332-05P104



• EPD320-05P105

Model	EPD51-05P20	EPD140-05P42	EPD332-05P104	EPD320-05P105
Electrical Parameters				
Cell Type	LFP-100Ah	LFP-300Ah	LFP-314Ah	LFP-330Ah
Configuration	4P16S	1P44S	1P104S	1P100S
Rated Voltage (Vdc)	51.2	140.8	332.8	320
Voltage Range (Vdc)	40.0~58.4	110.0~160.6	260.0~379.6	250.0~365.0
Nominal Energy (kWh)	20.48	42.24	104.49	105.60
Charge/Discharge Rate	≤0.5P@25℃			
Conditions				
Charge Working Temp Range (℃)	0~55			
Discharge Working Temp Range (℃)	-30~60			
Optimum Working Temp (℃)	15~35			
Operating Humidity Range (%)	≤95			
Installation Environment	Indoor			
Other Parameters				
Communication Interface	CAN			
Certification	UL1973, UL9540A, UN38.3, GB/T 36276			
Ingress Protection	/	IP67		
Dimensions (W×D×H) mm	390×975×245	787×1085×235	2170×785×243	2350×785×240
Weight (kg)	160±5	313±5	720±5	705±5

GRID-R

LFP Battery Rack

• ERD1267-05P380
(Liquid Cooling)

• ERD1331-05P418
(Liquid Cooling)

Advantages of Products

- **High Reliability and Safety**
- **Multi-level BMS Structure**
- **Soft Start Function**
- **1500V DC System**
- **Easy Installation and Maintenance**
- **Smart Insulation Monitoring**

*The image illustrates two electrical racks physically mounted together to fit into the container, and one electrical rack comprises four battery packs connected in series.

Model	ERD1267-05P380	ERD1331-05P418
Electrical Parameters		
Cell Type	LFP-300Ah	LFP-314Ah
Pack Configuration	1P44S	1P104S
Rack Configuration	1P396S	1P416S
System Nominal Energy (kWh)	380.1	417.99
System Rated Voltage (Vdc)	1267.2	1331.2
System Voltage Range (Vdc)	990.0~1445.4	1040~1497.6
Maximum Charge / Discharge Rate	0.5P@25° C	
Conditions		
Optimum Working Temperature (° C)	15~35	
Working Relative Humidity (%)	0~95(Non-condensing)	
Other Parameters		
Cooling Mode	Liquid-cooling	
Communication Interface	CAN	
Dimensions (W×D×H)mm	896×1065×2385	978×1050×2188
Weight (kg)	3110±80	3000±100
Standards & Certification		
Chinese Standards & Certification	GB/T 36276	
UL	UL1973 UL9540A	
IEC	IEC 62477-1, IEC 61000-6-2, IEC 61000-6-4, IEC 63056, IEC 62619, IEC 60730-1	IEC 62619, IEC 63056

Smart Mobile Charger

Product Advantages

Innovation and Revolution

- From "car-to-charger" to "charger-to-car"
- Unrestricted by time, space and specific sites

Flexibility and Intelligence

- Flexible deployment
- Remote operation and management

Safety and Fast Charging

- Stable operation and proactive protection
- One-click ordering, seamless charging
- High-rate & high-power charging

Energy Storage and Cost-Effectiveness

- Peak-shaving and valley-filling with small-scale "energy storage stations"
- Free from grid and site reconstruction

Application Scenarios

Airport

Railway Station

Expressway Service Area

Business Park

Paid Parking

Logistics Park

Residential District

Public Parking

Parameters		
Maximum Power (kWh)	184.32	
Battery Capacity (Ah)	300	
AC Input	Input Voltage Range (Vac)	260~530
	Maximum Input Current (A)	43
	Input Connection Method	3P+N+PE
DC Output	Output Voltage Range (Vdc)	300~1000
	Maximum Output Current (A)	150
	Maximum Output Power (kW)	60
	Efficiency	92%
DC Input	Input Voltage Range (Vdc)	260~900
	Maximum Input Current (A)	150
	Maximum Input Power (kW)	60
Ambient Temperature Range (°C)	-30~50	
Ingress Protection	IP54	
Communication Interface	Wireless Communication	
Communication Agreements with Vehicles	DIN SPEC 70122:2008	
Software Configuration	The Charging Protocol is Self-applicable and Expandable	
Charging Method	Swipe Card/Touch Screen/Scan the QR Code	
Charging Connector	CCS1, CCS2	
Maximum Speed (km/h)	5	
Maximum Gradient	8% with Full Load	
Maximum Obstacle-crossing Height	70mm Speed Bump	
Dimensions (W×D×H)(mm)	2100×1054×1400	
Weight (kg)	2150	



Model	Home 3000	Go 300	Micro 30
Product Name	Home 3000 Portable Power Station	Go 300 Portable Power Station	Micro 30 Power Bank
Capacity	3072Wh (51.2V, 60Ah)	288Wh (19.2V, 15Ah)	15000mAh (3.2V, 15Ah)
AC Output	3000W Total, 6000W Surge	300W Total, 600W Surge	22.5W Max
Cell Chemistry	EV-Proven LiFePO4	EV-Proven LiFePO4	EV-Proven LiFePO4
AC Charge	1800W Max, 120V, 15A (US)	Type C Charging 140W	/
Solar Charge	1500W Max, 12-75V/45A	200W Max, 12-30V/10A	/
DC Port	Type-C(140W/PD3.1), USB-A, RV, DC5521	Type-C×2 (140W/PD3.1), USB-A×2(18W)	Type-C Input: 5V/3A 9V/2A Type-C Output: 5V/3A 9V/2A 12V/1.67A USB-A Output: 5V/3A 5V/4.5A 12V/1.5A
Dimensions (W×D×H)	560×230×543mm/22.0×9.1×21.4in	210*200*158mm/8.27*7.87*6.22in	47×50×156mm/1.8×1.96×6.1in
Net Weight	83.8lbs/38kg	8.38lbs/3.8kg	1.05lbs/0.48kg
Wireless Charging	2×15W	1×15W	Magnetic Charging
Amazon Alexa/ Google Nest	Support	Support	No

Gendome Solar 200

Power Everything Connect Everywhere

Control Comes Easy

Now with Gendome App, you can monitor and adjust your electricity in real-time, set scheduled recharging to help you save energy bills, or even make Gendome part of your smart home setup, wherever you like.

Download APP

works with the Google Assistant

amazon alexa

Model	Solar 200	Solar 36
Product Name	Solar 200 Solar Panel	Solar 36 Solar Panel
Connector Type	DC2050 to MC4	USB-C / USB-A
Included Components	1x 200W Solar Panel, MC4 Solar Charging Cable	1x 36W Solar Charger, 1x USB-A to USB-C Cable, 2x Carabiner
Color	Grey	Grey
Mounting Type	Portable and Folding	Portable and Folding
Solar Cell	High Efficiency Silicon (Sunpower)	High Efficiency Silicon (Sunpower)
Transformation Efficiency (EFF)	≥ 23%	≥ 23%
Max Power	200W	36W
Water-Resistant	IP68	IP68
Ports	DC2050 to MC4	PD3.0 5V 3A/9V 3A/12V 3A(MAX)
Certification	FCC/CE/RoHS/IP68	FCC/CE/RoHS/IP68
Dimensions (unfolded)	1249×450×50mm/49.2×59.7×1.0in	895*280*12.5mm/33.3×11×0.49in
Dimensions (folded)	330×430×50mm/13.0×16.9×2.0in	198*280*30.5mm/7.8×11×1.2in
Net Weight	9.55lbs/4.33kg	1.8lbs/0.82kg

Project Cases

U.S. Storage Project

Netherlands EPC Company Project

PJM FM Project in the U.S.

Europe Storage Project

Shandong Weihai Project

Datang Longgan Lake Energy Storage Power Station Project

Anhui Jinzhai Independent Energy Storage Power Station Project

Shangneng Zhangjiakou Solar Energy Storage Project

Tibet Light Storage Comprehensive Energy Project

Hefei Lujiang ESS Plant

Huaneng Wind Energy Storage Frequency Modulation Project

State Grid Zhenjiang Changwang Energy Storage Project

Shenzhen Nanshan Power Plant
Frequency Modulation Project

Huaibei Wanneng Energy Storage
Power Station Project

Kunshan Industrial Park Energy
Storage Project

Zhangjiagang Yonglian Steel Plant
Energy Storage Power Station Project

Responsibility 2023 Performance

Gotion High-tech Won the "2023 Five-Star Gold Award " for Social Responsibility of Listed Companies in China's Manufacturing Industry

9,658
Hours of Various Types of Training Were Organized

Number of Training Participants
82,100

"Five-star" Service Certificate
by the China Quality Certification Center (CQC)
with a Score of 98.5

The World's
First
Zero-carbon Cathode Material Base

Occupational Health and Safety System Certificate
ISO14001
ISO45001

Greenhouse Gas Verification Statement Customer Satisfaction
ISO14064

PV Power Generation
49,650,000 kWh

Greenhouse Gas Emission Reduction
35976.67 Tons of Carbon Dioxide Equivalent

Energy-saving and Consumption-reducing Projects
123

Saving
95,620,000 Tons of Carbon Emissions

Number of Training Sessions YoY Growth Rate
44.7%

Training Hours YoY Growth Rate
107%

Total Instances YoY Growth Rate
74.8%

Data as of Dec. 2023.

After-sales Services ★★★★★

Five-star Aftersales Certification(CQC)

Service Mission

- Customer-Oriented
- Professional & Efficient
- Considerate & Responsible

Fast Service

- Respond within 2-6 Hours after the Fault
- Deliver Solutions within 4-8 Hours after the Fault
- Arrive On-site and Solve the Problems within 48-72 Hours after the Fault

Global Service Center

80+ Regional Specialists

300+ Regional Professional Service Providers

600+ Professional Service Stations

Global Accessory System

Timely Delivery

80+ Spare Parts Wehouses

6 Overseas Sub-warehoues (Coming Soon in 2024 H2)