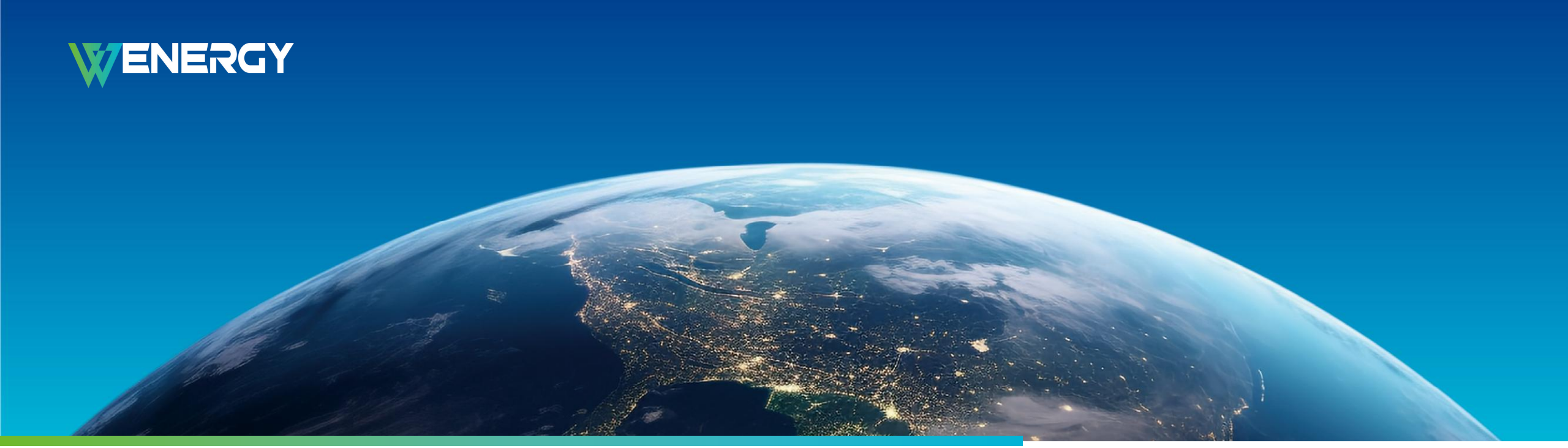


Wenergy Technologies Pte. Ltd.

· Full chain technology

· Professional intelligent control

· Full safety guarantee

wenergystorage.com

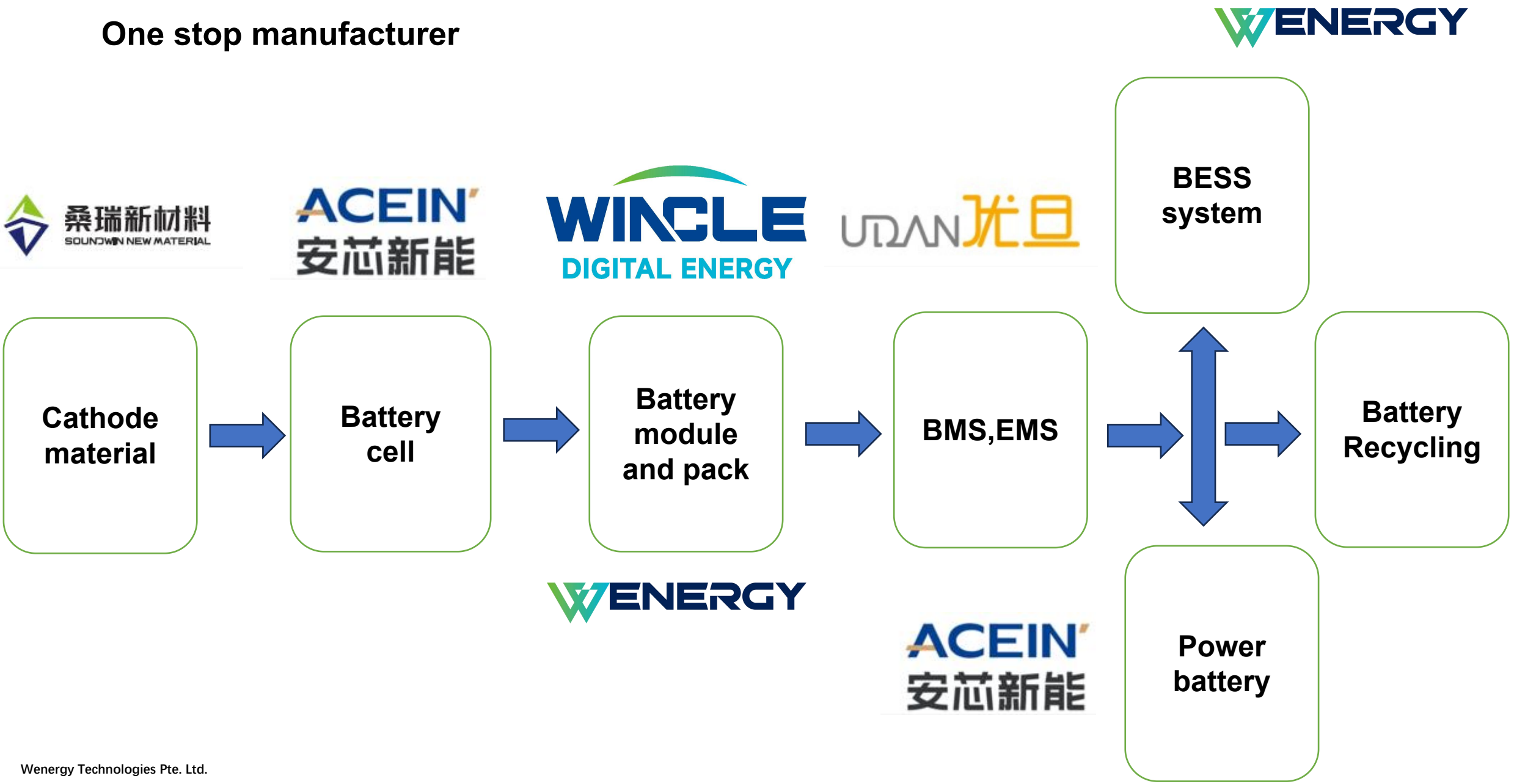
CONTENT

01 | Company Profile

Company introduction

- **Wenergy Technologies Pte. Ltd.**
- focuses on providing turnkey solutions of renewable energy storage, which combine with grid, wind or PV power system, CHP etc. Wenergy has deeply involved in battery storage industry for over decade.
- Our storage solutions are approprite for power generation, grid side and user side, including residential, industry & business, utility scale power storage,etc.
- We developed the BMS and EMS solution, remote monitor, track and control the energy storage system easily.
- Wenergy aim to take advanced,smart and powerful energy solutions to the world!

One stop manufacturer



About Factory

Produce Capability




- 14 Fully automatic production lines

Factory Construction Time Schedule		Annual Battery Capacity	Annual Cathode Material
1st Phase	Finished in 2012	6 GWh(NCM and LFP)	65,000(Ton)
2nd Phase	Finished in June 2016		
3rd Phase	Finished in July 2018		
4th Phase	In Changsha	20 GWh(LFP Prismatic)	

Test Center

More than 100 million RMB investment on the test equipment !

- **Safety test equipment**

- **Material inspection and analysis test**
- **Electrical performance and environmental adaptability test**

R&D Team

Key Areas

- Cathode and Anode Materials
- Electrolyte and Separator Materials
- Cell Structure Design
- BMS and Battery Pack Technology

Development Direction

- Focus on the development of High-performance NCM and NCA cathode materials, energy storage batteries and solid-state batteries.

740+
Project footprint

490+
Patent application for invention

180+
Invention Authorization

300+
Engineering and technical personnel

60+
Masters and PhDs

1+
President Emeritus

Management System Certificates

中泰认证

QUALITY MANAGEMENT SYSTEM CERTIFICATION

Registration NO: 29023Q13046-11R0S

Hunan Wincle Energy Storage Technology Co., Ltd

Unified social credit code:91430104MABY89MF90

Registered Address:No. 2501, Building 12, 13, and 15, Phase 2, Fangmaoyuan, No. 1177 Meixihu Huanhu Road, Tianding Street, Yuelu District, Changsha City, Hunan Province

Office Address:No. 2501, Building 12, 13, and 15, Phase 2, Fangmaoyuan, No. 1177 Meixihu Huanhu Road, Tianding Street, Yuelu District, Changsha City, Hunan Province

Business Address:No. 2501, Building 12, 13, and 15, Phase 2, Fangmaoyuan, No. 1177 Meixihu Huanhu Road, Tianding Street, Yuelu District, Changsha City, Hunan Province

Established Quality Management System Accord With

GB/T 19001-2016 idt ISO9001:2015 standard

Through the certification scope is as follows

R&D and sales of electric energy storage equipment (battery system) (excluding qualification permits)

The release date for the first time: 15-11-2023

The issuance date: 15-11-2023

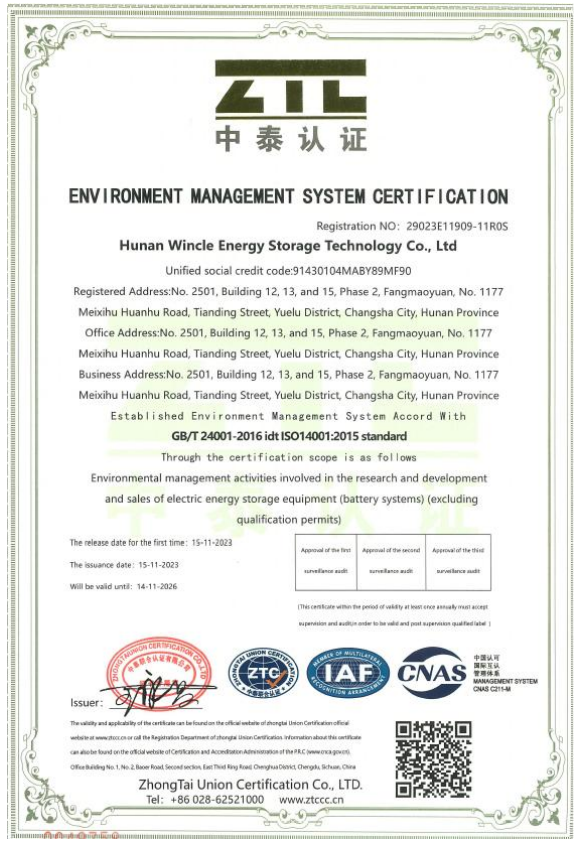
Will be valid until: 14-11-2026

Approval of the first surveillance audit | Approval of the second surveillance audit | Approval of the third surveillance audit

Issuer:

ZhongTai Union Certification Co., LTD.

Tel: +86 028-62521000 www.ztccc.cn



中泰认证

ENVIRONMENT MANAGEMENT SYSTEM CERTIFICATION

Registration NO: 29023E11909-11R0S

Hunan Wincle Energy Storage Technology Co., Ltd

Unified social credit code:91430104MABY89MF90

Registered Address:No. 2501, Building 12, 13, and 15, Phase 2, Fangmaoyuan, No. 1177 Meixihu Huanhu Road, Tianding Street, Yuelu District, Changsha City, Hunan Province

Office Address:No. 2501, Building 12, 13, and 15, Phase 2, Fangmaoyuan, No. 1177 Meixihu Huanhu Road, Tianding Street, Yuelu District, Changsha City, Hunan Province

Business Address:No. 2501, Building 12, 13, and 15, Phase 2, Fangmaoyuan, No. 1177 Meixihu Huanhu Road, Tianding Street, Yuelu District, Changsha City, Hunan Province

Established Environment Management System Accord With

GB/T 24001-2016 idt ISO14001:2015 standard

Through the certification scope is as follows

Environmental management activities involved in the research and development and sales of electric energy storage equipment (battery systems) (excluding qualification permits)

The release date for the first time: 15-11-2023

The issuance date: 15-11-2023

Will be valid until: 14-11-2026

Approval of the first surveillance audit | Approval of the second surveillance audit | Approval of the third surveillance audit

Issuer:

ZhongTai Union Certification Co., LTD.

Tel: +86 028-62521000 www.ztccc.cn

中泰认证

OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM CERTIFICATION

Registration NO: 29023S11838-11R0S

Hunan Wincle Energy Storage Technology Co., Ltd

Unified social credit code:91430104MABY89MF90

Registered Address:No. 2501, Building 12, 13, and 15, Phase 2, Fangmaoyuan, No. 1177 Meixihu Huanhu Road, Tianding Street, Yuelu District, Changsha City, Hunan Province

Office Address:No. 2501, Building 12, 13, and 15, Phase 2, Fangmaoyuan, No. 1177 Meixihu Huanhu Road, Tianding Street, Yuelu District, Changsha City, Hunan Province

Business Address:No. 2501, Building 12, 13, and 15, Phase 2, Fangmaoyuan, No. 1177 Meixihu Huanhu Road, Tianding Street, Yuelu District, Changsha City, Hunan Province

Established Occupational Health And Security Management System Accord With

GB/T 45001-2020 idt ISO 45001:2018 standard

Through the certification scope is as follows

Occupational health and safety management activities involved in the research and development and sales of electric energy storage equipment (battery systems) (excluding those requiring qualification permits)

The release date for the first time: 15-11-2023

The issuance date: 15-11-2023

Will be valid until: 14-11-2026

Approval of the first surveillance audit | Approval of the second surveillance audit | Approval of the third surveillance audit

Issuer:

ZhongTai Union Certification Co., LTD.

Tel: +86 028-62521000 www.ztccc.cn

Report issued under the responsibility of:

SGS

Evaluation REPORT NFPA 69: 2024 Edition Standard on Explosion Prevention Systems	
Report Reference No. ..... :	SZES250100059001
Date of issue..... :	2025-02-27
Total number of pages	22 pages
Testing Laboratory .....:	**SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch**
Testing location ..... :	No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China
Tested by (name + signature)..... :	Riming Wang
Approved by (name + signature) :	Jerry Xiao
Applicant's name ..... :	Hunan Wincle Digital Energy Technology Co., Ltd
Address ..... :	No. 2501, Building 12, 13, and 15, Phase 2, Fangmaoyuan, No. 1177 Meixihu Huanhu Road, Tianding Street, Yuelu District, Changsha, 410000, Hunan, China
Test specification:	
Standard..... :	Chapter 8 of NFPA 69: 2024 Edition
Test procedure..... :	SGS-CSTC
Non-standard test method..... :	N/A
Test Report Form No. ..... :	NFPA 69: 2024 Edition
Test Report Form(s) Originator..... :	SGS-CSTC
Master TRF..... :	Dated 2024-11

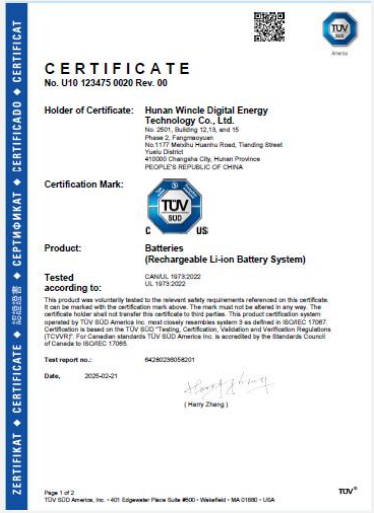
ISO9001

ISO14001

ISO45001

NFPA

Domestic and International Certificates



CERTIFICATE

No. U10 123475 0020 Rev. 00

Holder of Certificate: Hunan Wincle Digital Energy Technology Co., Ltd.

Certification Mark:

Product: Batteries (Rechargeable Li-ion Battery System)

Tested according to: CANUL 1973:2022, UL 1973:2022

UL1973

CERTIFICATE OF COMPLIANCE

Certificate Number: SGSNA/25/SZ/00049

Contract Number: 803189

Certificate Project Number: SZ-CERT250200936

Certified Product: DC ESS, Liquid-cooled LFP container system

Trademarks:

Model(s): ES-1228.8V314Ah-U, ES-1228.8V282Ah-U, ES-1228.8V261Ah-U, ES-1228.8V216Ah-U, ES-1075.2V314Ah-U

Technical Data: See page 2

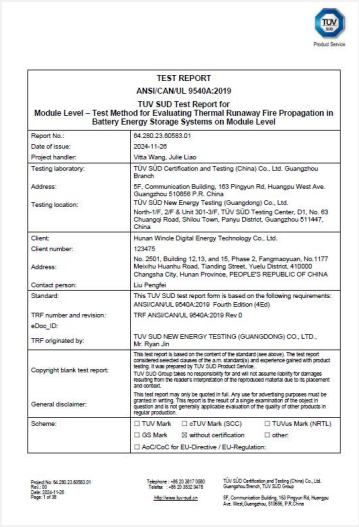
Certificate Holder: Hunan Wincle Digital Energy Technology Co., Ltd.

ANSI/CAN/UL 9540:2023,Third Edition, Dated June 28, 2023

Authorized by: Mark Lohmann, Certifier

Effective date: 25 February 2025

UL9540



TEST REPORT

ANSI/CAN/UL 9540A:2019

TUV SUD Test Report for Module Level – Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems on Module Level

Report No.: 64.260.23.60583.01

Date of issue: 2024-11-26

Project handler: Vitta Wang, Julie Liao

Testing laboratory: TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch

Address: 5F, Communication Building, 163 Pingyun Rd, Huangpu West Ave, Guangzhou 510656 P.R. China

Testing location: TUV SUD New Energy Testing (Guangdong) Co., Ltd. North-1/F, 2/F & Unit 301-3/F, TÜV SÜD Testing Center, D1, No. 63 Chuangxi Road, Shiou Town, Panyu District, Guangzhou 511447, China

Client: Hunan Wincle Digital Energy Technology Co., Ltd.

Client number: 123475

Address: No. 2501, Building 12,13, and 15, Phase 2, Fangmaoyuan, No.1177 Meixihu Huanhu Road, Tianding Street, Yuelu District, 410000 Changsha City, Hunan Province, PEOPLE'S REPUBLIC OF CHINA

Contact person: Liu Pengfei

Standard: This TUV SUD test report form is based on the following requirements: ANSI/CAN/UL 9540A:2019 Fourth Edition (4Ed)

TRF number and revision: TRF ANSI/CANUL 9540A:2019 Rev 0

eDoc_ID:

TRF originated by: TUV SUD NEW ENERGY TESTING (GUANGDONG) CO., LTD., Mr. Ryan Jin

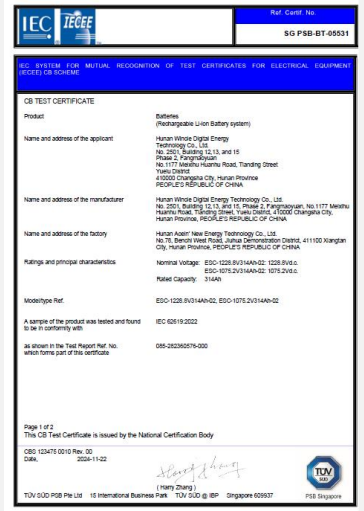
Copyright blank test report: This test report is based on the content of the standard (see above). The test report considered selected clauses of the a.m. standard(s) and experience gained with product testing. It was prepared by TUV SUD Product Service.

TUV SUD Group takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

General disclaimer: This test report may only be quoted in full. Any use for advertising purposes must be granted in writing. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production.

Scheme: ☐ TUV Mark ☐ cTUV Mark (SCC) ☐ TUVus Mark (NRTL) ☐ GS Mark ☒ without certification ☐ other: ☐ AoC/CoC for EU-Directive / EU-Regulation:

UL9540A



Ref. Certif. No. SG PSB-BT-05531

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

CB TEST CERTIFICATE

Product: Batteries (Rechargeable Li-ion Battery system)

Name and address of the applicant: Hunan Wincle Digital Energy Technology Co., Ltd. No. 2501, Building 12,13, and 15 Phase 2, Fangmaoyuan No.1177 Meixihu Huanhu Road, Tianding Street Yuelu District 410000 Changsha City, Hunan Province PEOPLE'S REPUBLIC OF CHINA

Name and address of the manufacturer: Hunan Wincle Digital Energy Technology Co., Ltd. No. 2501, Building 12,13, and 15, Phase 2, Fangmaoyuan, No.1177 Meixihu Huanhu Road, Tianding Street, Yuelu District, 410000 Changsha City, Hunan Province, PEOPLE'S REPUBLIC OF CHINA

Name and address of the factory: Hunan Aoshi' New Energy Technology Co., Ltd. No.78, Benxin West Road, Juhua Demonstration District, 411100 Xiangtan City, Hunan Province, PEOPLE'S REPUBLIC OF CHINA

Ratings and principal characteristics: Nominal Voltage: ESO-1228.8V314Ah-02: 1228.8Vd.c. ESO-1075.2V314Ah-02: 1075.2Vd.c. Rated Capacity: 314Ah

Model/type Ref.: ESO-1228.8V314Ah-02, ESO-1075.2V314Ah-02

A sample of the product was tested and found to be in conformity with: IEC 62619:2022

As shown in the Test Report Ref. No. which forms part of this certificate: 085-282360576-000

Page 1 of 2 This CB Test Certificate is issued by the National Certification Body

CBC 123475 0010 Rev. 00 Date, 2024-11-22

TÜV SÜD PSB Pte Ltd 1E International Business Park TÜV SÜD @ IBP Singapore 609937 PSB Singapore

IEC62619

VERIFICATION OF COMPLIANCE

No.: SZES25010005918A

Applicant: Hunan Wincle Digital Energy Technology Co., Ltd. No. 2501, Building 12, 13 and 15, Phase 2, Fangmaoyuan, No.1177 Meixihu Huanhu Road, Tianding Street, Yuelu District, 410000 Changsha, Hunan, China

Manufacturer: Same as applicant

Product Name: DC Integrated Battery Energy Storage System (Product name: Rechargeable Li-ion Battery System)

Model No.: ES-1228.8V314Ah, ES-1228.8V282Ah, ES-1228.8V261Ah, ES-1228.8V216Ah, ES-1075.2V314Ah

Trade Mark:

Rating: See page 2

Protection against Electric Shock: Class I

Degree of Protection: IP54 for battery cabinet, electrical cabinet and fire cabinet except for IP24 for Liquid cabinet

Additional Information: --

Sufficient samples of the product have been tested and found to be in conformity with

Test Standard: IEC 62933-5-2:2020

as shown in the Test Report Number(s): SZES25010005910I

This Verification of Compliance has been granted to the applicant based on the results of tests, performed by Laboratory of SGS-CSTC Standards Technical Services Co., Ltd. on sample of the above-mentioned product in accordance with the provisions of the relevant specific standards.

Rocky Wang, Technical Manager, 2025-02-24

SGS-CSTC Standards Technical Services Co., Ltd.

IEC62933

EU Type Examination Certificate

Certificate No: DK-EMC000035 i01

Certificate Holder: Hunan Wincle Digital Energy Technology Co., Ltd., No. 2501, Building 12,13, and 15 Phase 2, Fangmaoyuan No.1177 Meixihu Huanhu Road, Tianding Street Yuelu District 410000 Changsha City, Hunan Province PEOPLE'S REPUBLIC OF CHINA

Product Type: Energy Storage System CONTAINER ENERGY STORAGE SYSTEM

Model(s): ES-1228.8V314Ah, ES-1228.8V282Ah ES-1228.8V261Ah, ES-1228.8V216Ah ES-1075.2V314Ah

We, TÜV SÜD DANMARK ApS, as Notified Body number 2443, have examined the technical documentation and supporting evidence for the above listed equipment and found it to comply with the requirements of Annex III Module B of EMC Directive 2014/30/EU in relation to the following essential requirements covered by the examination.

Essential Requirements: Annex I 1(a) Emissions Annex I 1(b) Immunity

This is based upon examination of the following Technical Data file, Please refer to the Annex for further technical details.

Technical Documentation: Wincle ES-1228.8V314Ah (v) EMC-0 TCF

Valid from: 2024-01-29

Total pages: Page 1 of 4

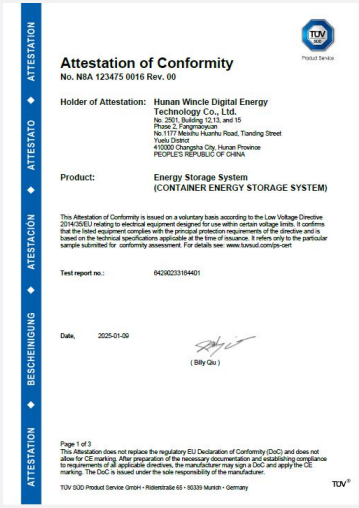
(Thomas Twynam)

This certificate has been issued in accordance with the TÜV SÜD Testing, Certification,Validation and Verification Regulations and constitutes page 1 of the combined Certificate and Annex. The Conditions for the validity of this certificate are listed in the Annex. For further details, related to this certification please contact

Issued by TÜV SÜD DANMARK under document number: DKEI 123475 0014 Rev. 00

TÜV SÜD DANMARK ApS - Standvejen 125 - 2960 Hellerup - Denmark

IEC61000



Attestation of Conformity

No. N8A 123475 0016 Rev. 00

Holder of Attestation: Hunan Wincle Digital Energy Technology Co., Ltd. No. 2501, Building 12,13, and 15 Phase 2, Fangmaoyuan No.1177 Meixihu Huanhu Road, Tianding Street Yuelu District 410000 Changsha City, Hunan Province PEOPLE'S REPUBLIC OF CHINA

Product: Energy Storage System (CONTAINER ENERGY STORAGE SYSTEM)

This Attestation of Conformity is issued on a voluntary basis according to the Low Voltage Directive 2014/35/EU relating to electrical equipment designed for use within certain voltage limits. It confirms that the listed equipment complies with the principal protection requirements of the directive and is based on the technical specifications applicable at the time of issuance. It refers only to the particular sample submitted for conformity assessment. For details see: www.tuvsud.com/ps-cert

Test report no.: 64260233164401

Date, 2025-01-09

(Billy Qiu)

Page 1 of 3

This Attestation does not replace the regulatory EU Declaration of Conformity (DoC) and does not allow for CE marking. After preparation of the necessary documentation and establishing compliance to requirements of all applicable directives, the manufacturer may sign a DoC and apply the CE marking. The DoC is issued under the sole responsibility of the manufacturer.

TÜV SÜD Product Service GmbH - Ridlerstraße 65 - 80339 Munich - Germany

IEC62477

Ref. Certif. No. JPTUV-067790

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

SYSTEME CEI D'ACCEPTATION MUTUELLE DE CERTIFICATS D ESSAIS DES EQUIPEMENTS ELECTRIQUES (IECEE) METHODE OC

CB TEST CERTIFICATE

CERTIFICAT D'ESSAI OC

Rechargeable Polymer Li-ion Battery

7.2Vdc, 25Ah, 180Wh

Soundon

N/A

NGC-GW

IEC 62133:2012

National differences see test report

17054028 001

TÜVRheinland®

Date: 27.11.2015

Signature:

CB IEC62133

02 | Wenergy Products

Battery Cell

Type	Common Battery (NCM)			Economical Battery& Energy Storage Battery (LFP)
Spec	8688190-17.5Ah  11217127-32Ah 	8688190-19Ah 		12156260-50Ah  14109314-50Ah 
Advantages	● High maturity, yield of 96%+ ● Over ten million pcs were shipped ● Flexible in size and suitable for various application			● 100% domestic materials, extreme cost control ability ● Energy storage battery Cycle life 6000 cycles ● Supply chain is stable and reliable to ensure good product consistency ● Safe and reliable, and can pass any abuse test
Weight	290±25g(17.5Ah)	290±25g(19Ah)	545±15g(32Ah)	940±20g
Energy Density	≥220Wh/kg	≥239Wh/kg	≥214Wh/kg	≥194Wh/kg
Application	Passenger vehicles, Commercial vehicles			Low speed vehicles, ESS

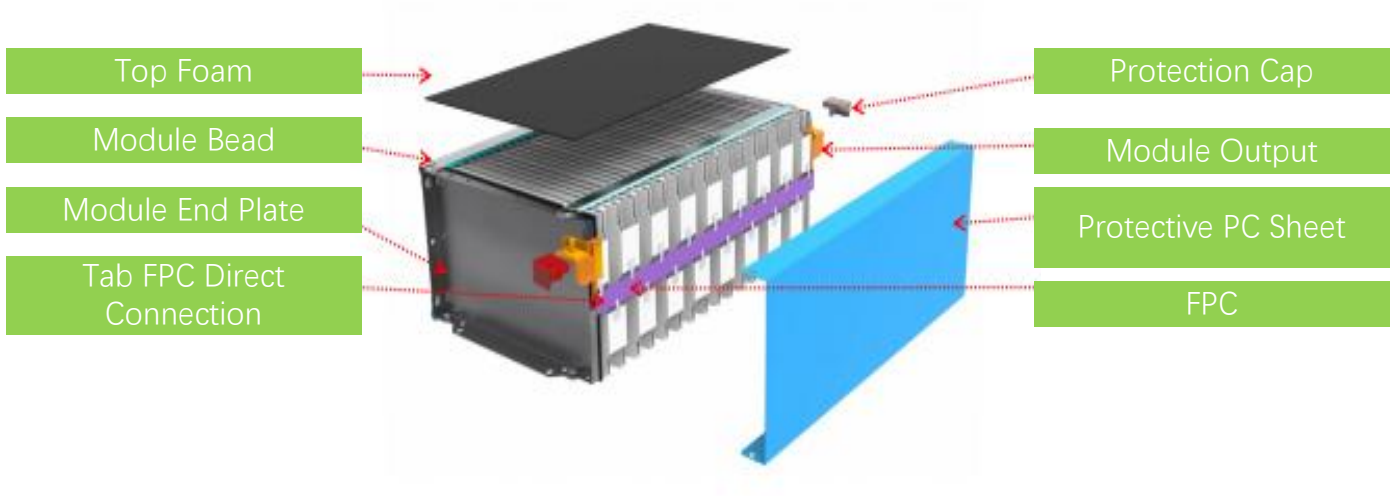
Battery Cell

Type	Long Cycle Battery (LFP)	Long Cycle Battery (LFP)	Long Cycle Battery (LFP)
Spec	Prismatic SEPFe72174205A-280Ah 	Prismatic SEPFe72174205A-314Ah 	Prismatic SEPFe72174205A-325Ah 
Advantages	● Cycle life 8000 cycles + ● The cell capacity is 20Ah higher than the industry level	● Cycle life 8000 cycles + ● The cell capacity is 20Ah higher than the industry level	● Cycle life 12,500 cycles + ● The cell capacity is 20Ah higher than the industry level
Weight	5.4±0.27kg	5.80±0.3kg	6.00±0.32kg
Energy Density	≥165Wh/kg	≥173Wh/kg	≥173Wh/kg
Application	ESS	ESS	ESS, Construction machinery, heavy trucks

Battery Module

PACK/Home Energy Storage Standardized Module

Name	Parameter
Cell model	12156260-50Ah（LFP）
Configuration	2P16S
Module rated voltage（V）	51.2V（40V~58.4V）
Module capacity（Ah）	100
Energy (kWh)	5.12
Module weight(kg)	32.5
Energy Density	157.5Wh/kg



High Energy Density

Simplified Design

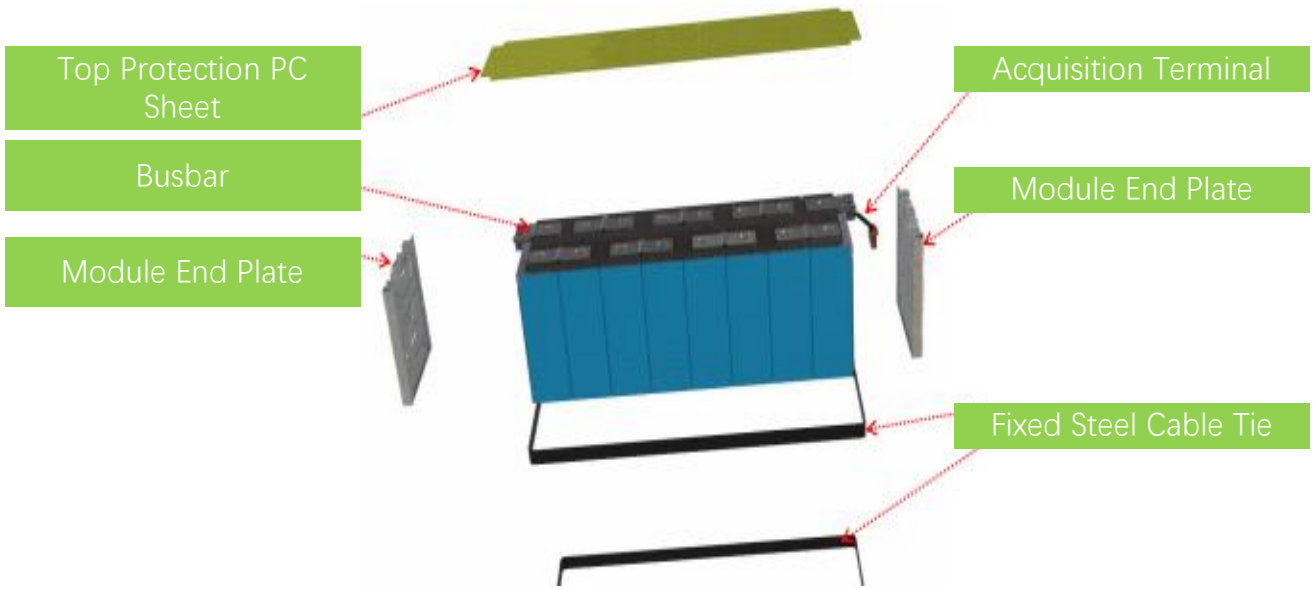
Battery Module

PACK/Prismatic Energy Storage Module

Name	Parameter
Cell model	SEPFe72174205A-280Ah（LFP）
Configuration	1PNS
Module rated voltage（V）	N*3.2V
Module capacity（Ah）	280
Energy (kWh)	MN*0.16
Application	Industrial and Commercial Energy Storage
Energy Density	160Wh/kg

High Energy Density

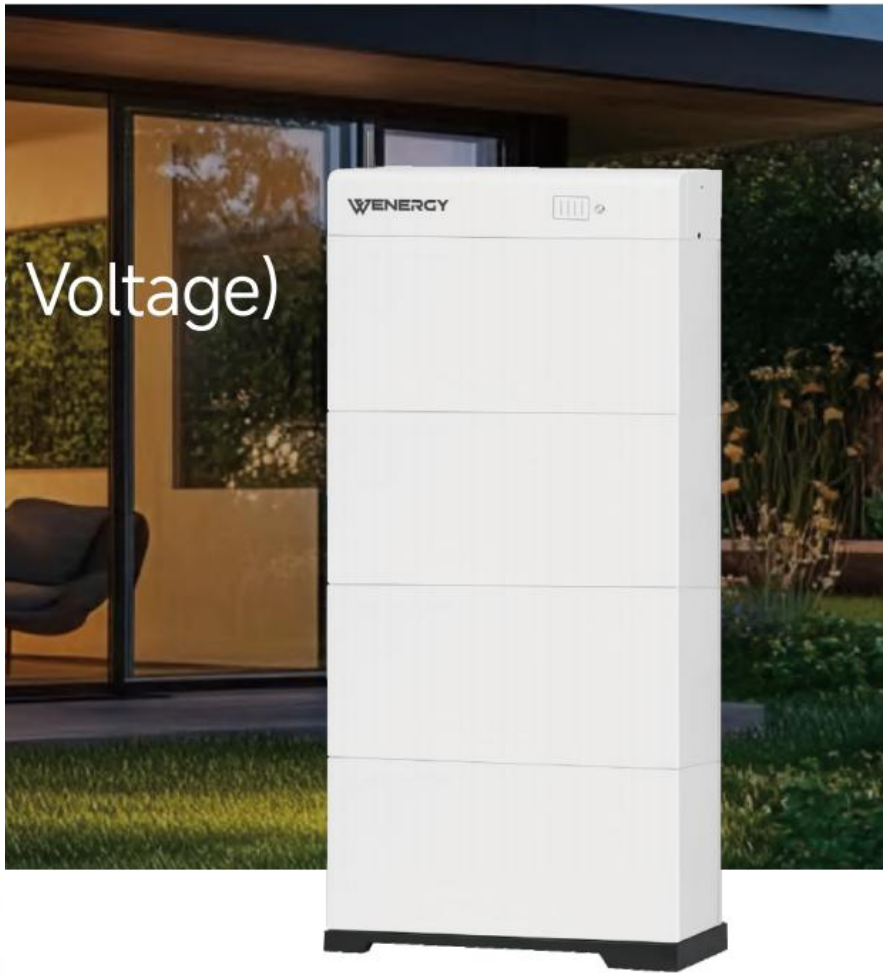
Simplified Design



Great Wall Series —— Residential ESS

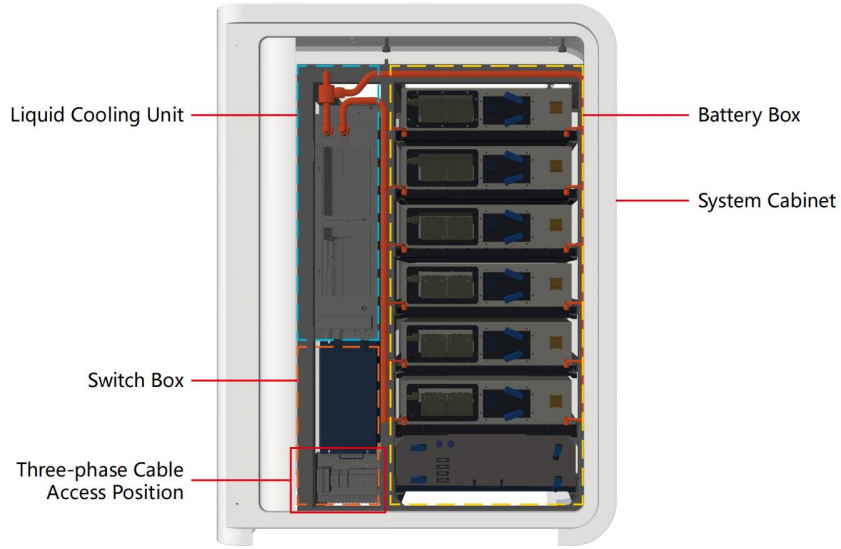
Product Parameters

Model Number	GreatWall 05	GreatWall 10	GreatWall 15	GreatWall 20
Battery System Energy	5.1kWh	10.2kWh	15.3kWh	20.4kWh
Usable Energy	4.8kWh	9.7kWh	14.5kWh	19.4kWh
Number of Battery Modules	1	2	3	4
Rated Battery Voltage	51.2V	51.2V	51.2V	51.2V
Operating Battery Voltage Range	44.8~56V	44.8~56V	44.8~56V	44.8~56V
Recommended Charging/Discharging Power	2.5kW	5.0kW	7.5kW	10.0kW
Recommended Charging/Discharging Current	50A	100A	150A	200A
Max. Charging/Discharging Current	100A	150A	210A	240A
System Dimensions (W*H*D)	725*480*200mm	725*780*200mm	725*1080*200mm	725*1380*200mm
System Net Weight	56kg	102kg	148kg	194kg
Communication	RJ45(RS485, CAN,Dry contact)			
Environment				
Operating Temperature	Charge: 0°C~50°C, Discharge: -20°C~50°C			
Operating Temperature (with Integrated Heating Module)	Charge: -25°C~50°C, Discharge: -25°C~50°C			
Operating Altitude	≤4000m			
Installation	Wall-mounted or Floor-mounted			
Ingress Protection Rating	IP66			
Warranty	10years			
Cycle Life	≥6000 cycles			
Scalability	Max.16 Modules in parallel (81.9kWh)			
Certification	IEC62619 / VDE2510 / CE / UN38.3 / UL1973 / UL9540A (Only for US version)			



Star Series —— Cabinet ESS

Product Parameter			
Model	**Star 258/Pro**	**Star 289/Pro**	**Star 385/Pro**
Rated capacity	258kWh	289kWh	385kWh
Rated power	125kW	125kW	/
Nominal voltage	AC380V (AC315/290V)		
Rated output frequency	50Hz		
Unbalanced load capacity	100%		
IP protection level	IP54		
Cooling method	Liquid cooling		
Noise	<65dB（1m away from the system）		
Size	W1578*D1380*H2450mm W1578*D1380*H2500mm		
Communication interface	RS485		
Communication protocol	Modbus tcp		



Liquid Cooled Battery Pack

The standard liquid-cooled battery pack uses an integrated housing with a liquid cooling system at the bottom.
A battery pack with a voltage of 153.6V and a capacity of 280Ah is composed of 4 standard modules in series.

True All in One —— Star CL192Pro/60(MPPT+PCS+STS+ATS+Charger)

Category	Name	Parameter		
System parameters	Rated energy (kWh)	96.46	144.69	192.92
	Rated power (kW)	60		
	Protection level	IP54		
	Auxiliary power supply	Self-powered/externally powered		
	Working humidity range	10% ~ 90%		
	Working temperature range (℃)	-30 ~ 55(> 45℃ derating)		
	Cabinet size (width × depth × height mm)	(1750 ±10)×(1435 ±10)×(2392 ±10)		
	Weight (kg)	1900 ±100	2225 ±100	2 5 50±100
	Maximum working altitude (m)	3000m		
	Cooling method	Smart liquid cooling		
	Fire extinguishing	Aerosol firefighting		
	Communication	Ethernet		
	Protocol	MODBUS TCP/IP		
	Connection	Three-phase four-wire		
AC parameters	Rated charge and discharge power (kW)	60		
	Maximum charge and discharge power (kW)	72 (60S 25℃)		
	Rated charge and discharge current (A)	87		
	Rated grid voltage (V)	400		
	Allowable grid voltage range (V)	300 ~ 440		
DC parameters	Maximum DC voltage (V)	1000		
	Minimum DC voltage (V)	150		
	DC voltage operating range (V)	150 ~ 1000		
	DC side maximum current (A)	180		

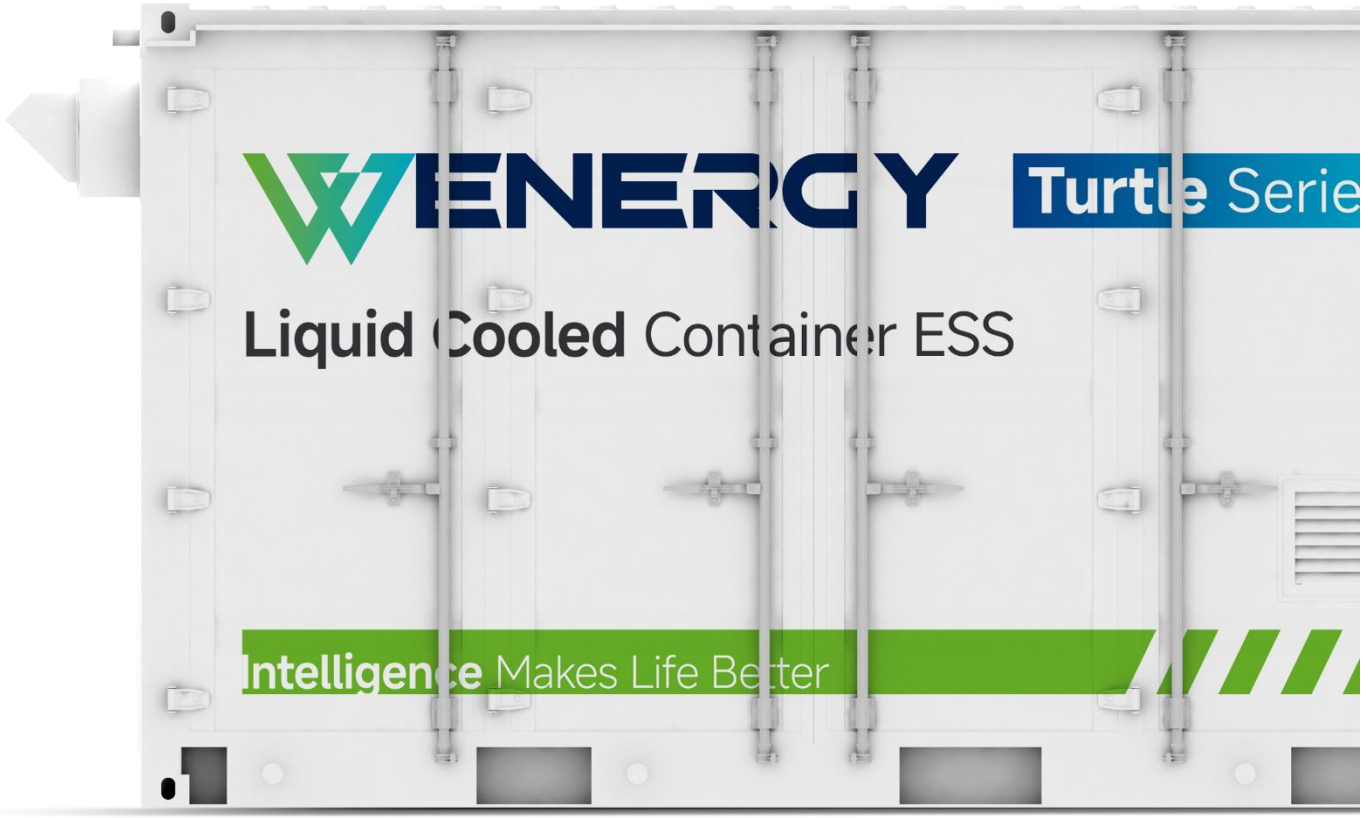
Liquid Cooled Battery Pack

The standard liquid-cooled battery pack uses an integrated housing with a liquid cooling system at the bottom.

A battery pack with a voltage of 153.6V and a capacity of 314Ah is composed of 4 standard modules in series.

Turtle Series —— Container ESS

Specification	Turtle 3.44	Turtle 3.85	Turtle 5
Battery type	LFP		
Rated capacity	3.44MWh	3.85MWh	5.016MWh
Rated power	1.725MW	1.725MW	2.5MW
Rated voltage	1228.8V		
Voltage range	1075.2V ~ 1382.4V		
Soc estimation accuracy	≤5%		
Self-discharge rate month	≤3%		
IP protection Level	IP54		
Weight (Kg)	33,000	37,000	40,000
Cooling type	Liquid Cooling		
Noise	<65 dB (1m away from the System)		
Communication interface	Wired: LAN, CAN, RS485		
Communication protocol	Modbus tcp		



03 | Safety Solution

Safety Solution

- **iPCS Security conversion**
  Security conversion: integrated and flexibility charging/discharging
- **iEMS Security Management**
  Security Management：Smart control + Pre-Warning Radar
- **iBMS Security protection**
  Security protection：Real-time monitoring + active protection

- **Security design**
  Security design: Hardware and structure security+efficient energy storage
- **Security process**
  Security process:
  Battery Doctor + Repair Butler
- **Security Fire prevention**
  Security Fire prevention:
  Thermal Assistant + Fire Guard

Master energy storage safe technology

6S security brian system: iPCS、iEMS、iBMS, Security design, Security process, Security fire prevention intelligent management。

Safety Solution

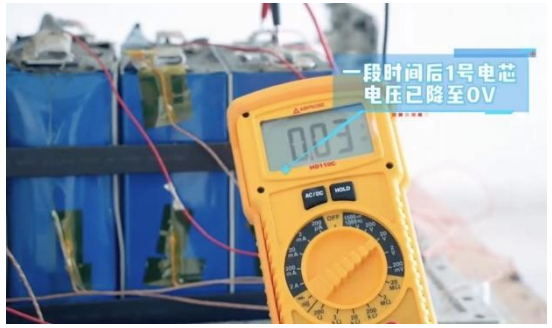
10 Key Points

Design	Security system, multi-layer protection, fire protection
Materials	LFP material with safe and stable performance
Cabinet	3 level security structure from system to pack to battery
BMS	Real-time monitoring, active protection
Battery	Mature technology, MES produce,fully testing
PCS	Security conversion,integrated and flexibility charging/discharging
PACK	Safety module,Safety material,Insulation warning
Fire Protection	Thermal Control Assistant Fire Guard
EMS	Security Management,Smart control + Pre-Warning Radar
Operation	Remote operation and maintenance for troubleshooting

Full chain production 10 keypoints to ensure safety

From design, production, delivery to post-operation and maintenance management, it covers all key safety aspects of energy storage, controlling technical quality and production costs from the source, resulting in higher safety and better compatibility between equipment.

Safety Solution



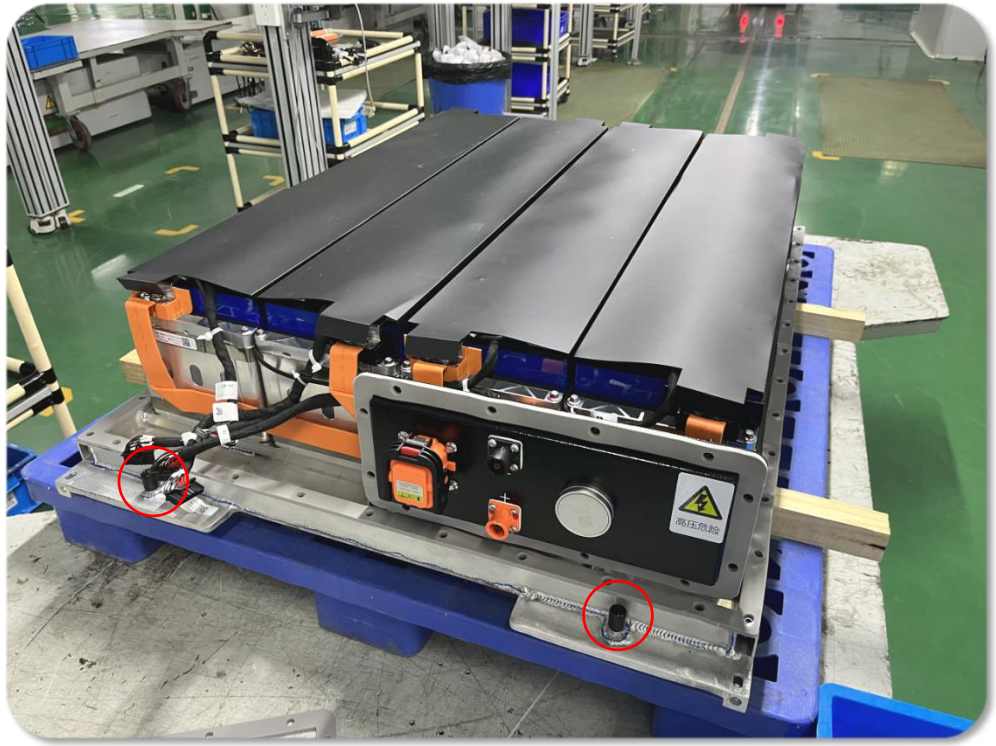
Step1: After the puncture test, the voltage drops to 0,and
There is no fire or smoke.

Step2:Trigger the heating to cause thermal runaway of two adjacent cells, there is no thermal spread in the module.

Step3:Triggering heat to cause thermal runaway in one cell, there is no thermal spread in the module.

Safety Solution

• Battery Safety Design



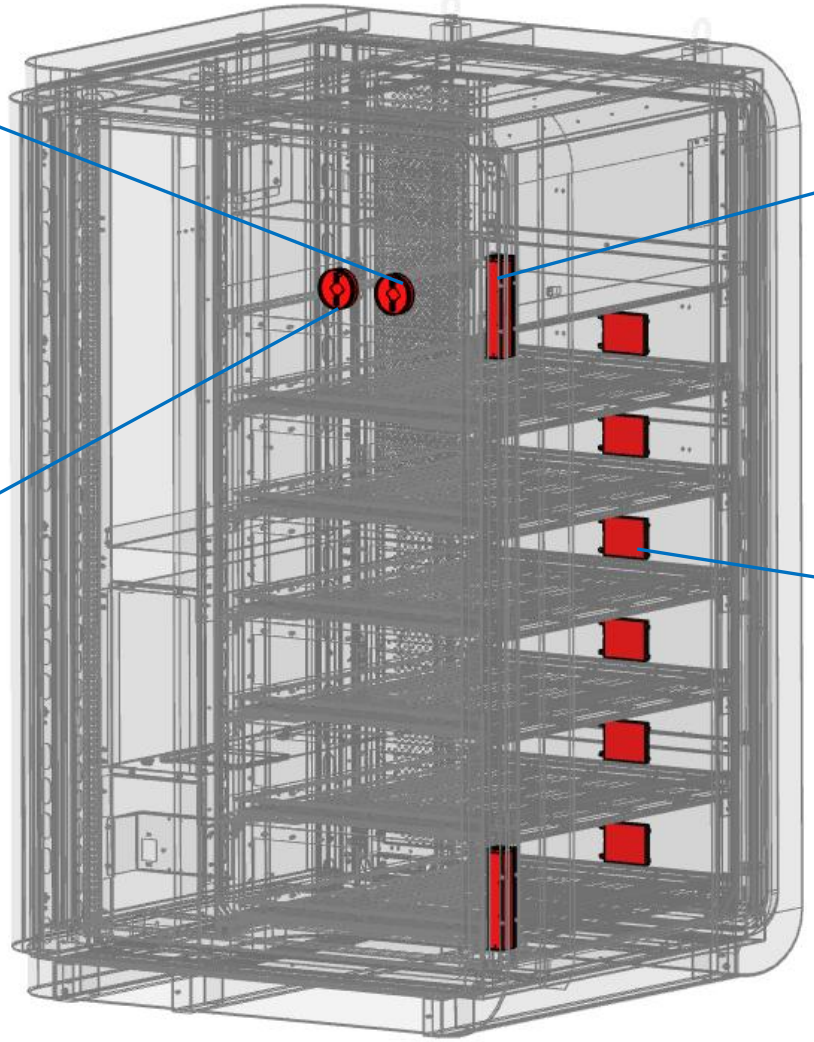
- Battery is installed on the condensate plate, the cooling liquid loop through the ports.

- The backup fire extinguisher start automatically when thermal run away, to make battery safety

Safety Solution

Temp Sensor

Smoke Sensor



300g aerosol

144g aerosol

Safety Solution

- **Structure Safety Design**

- Fire extinguisher and cooling system included, to make sure the whole container work safety.
- Red pipe is extinguisher, high pressure inject aerosol, black pipe is cooling loop.

04 | Application Cases

Reference List

Domestic

No.	Project Name	Energy(KWH)
1	Sichuan Luqiao 50KW/160KWH Energy Storage Project (Sichuan Xinzhi Manufacturing)	326
2	Xiangtan 523KWh hydrogen production off-grid energy storage project (Xiangtan Electric Co., Ltd.)	533
3	Ningbo 1814KWh capacitor energy storage project	732
4	Beijing Sound 1.037MWh smart micro-grid energy storage system	1,037
5	Shenzhen Shenghong 30.72 KWh/122.88KWh Industrial and Commercial Energy Storage Project	153
6	Guangzhou Electric Power Bureau 500KW/1MWH energy storage battery warehouse system (Sinexcel)	1,000
7	Chengdu Telonmei Home Storage System	525
8	Wuxi government intelligent building 80kw/160kwh energy storage project	160
9	Qingdao 107KWh / 53.7KWh Industrial and Commercial Energy Storage Project (Xi'an Terad)	215
10	Hunan Changgao 176KWh Substation DC Power Supply System	220
11	Xiangtan's first solar-storage-charge demonstration project 300KWh	300
12	Neimenggu develop new energy Co., Ltd. large-scale energy storage power station system project	300,000
13	China Huaneng Group Co., Ltd. Wind Large Energy Storage Power Station System Project	200,000
14	Gezhouba Laohekou Cement Co., Ltd.	20,640
15	Gezhouba Yicheng Cement Co., Ltd.	27,520
16	Gezhouba Jiayu Cement Co., Ltd.	20,640
17	Gezhouba Zhongxiang Cement Co., Ltd.	13,760
18	Gezhouba Shimen Special Cement Co., Ltd.	11,400
19	Jiangsu Jinfeng Cement Group Co., Ltd. Energy Storage Power Station System Project	129,000
20	Hunan Sangrui New Materials Co., Ltd.Energy storage power station system project	3,478
21	Hongyuan Mining Co., Ltd., Zhongxin Mining Co., Ltd.Energy storage system project	1,290
22	Shandong Heze Shan County Water Supply Company storage system project	916
23	Hefei Pinen Intelligent Technology Co., Ltd. Energy Storage Power Station System	2,580
24	Shanghai Zhujing Waterfront Park light storage and charging intelligent microgrid project	30
25	Hunan Haili Lithium battery energy storage project	3,440
26	Qingyuan Haofeng energy storage project	5,160
27	Jiangmen Nuohua energy storage project	13,760
28	Anhui Jinchun energy storage project	27,520
29	Guangzhou chuangxing Apparel Energy storage project	5,934
30	Guangdong Jiafujiade energy storage project	2,838
31	Chongqing Xiyuan camshaft energy stroage project	9,000
32	Foshan Geometric ceramics energy storage project	4,128
33	Taiyuan water treatment energy storage project	1,948
34	Hunan hongcheng commercial energy storage project	3,440
Domestic Market	814MWh	

International

No.	Project Name	Energy(KWH)
1	France 2.5MWH containerized energy storage system	358,570
2	Africa project	24,000
3	Spanish industrial and commercial energy storage	8,000
4	French solar array	154
5	Cyprus industrial and commercial energy storage projects	518
6	England C&I cabinet	2,580
7	Netherlands C&I cabinet	40,000
8	Germany C&I cabinet	6,450
9	Romania glass factory container project	20000(ongoing)
10	Poland C&I cabinets	4,128
11	Bulgaria C&I cabinets	25,432
12	Bulgaria ESS container project	3,858
13	Austria C&I cabinets	4,624
14	UK energy storage container project	23000(ongoing)
15	Czech commercial storage project	25000(ongoing)
16	Ukriane ESS container project	20000(ongoing)
International Market	566MWh	
Total	1380MWh	

CEEC-CGGC Group Project Cluster

Wenergy Technologies Pte. Ltd.

WENERGY

CGGC-Laohekou Cement ESS Project

Location Xiangyang, China

Scale **10.2**MW / **20.64**MWh

CGGC-Yicheng Cement ESS Project

Location Xiangyang, China

Scale **13.6**MW / **27.52**MWh

CGGC-Jiayu Cement ESS Project

Location Xianning, China

Scale **10.2**MW / **20.64**MWh

CGGC-Zhongxiang Cement ESS Project

Location Zhongxiang,China

Scale **6.9**MW / **13.76**MWh

CGGC-Gezhouba Special Cement ESS Project

Location Changde, China

Scale **5.725**MW / **11.44**MWh

China CGGC-Gezhouba Special Cement ESS Project

Location Shimen County, Hunan Province

Scale Phase 1: **4**MW / **8**MWh
Phase 2: **1.725**MW / **3.44**MWh

Application Scenario Photovoltaic + Energy Storage

Project Overview

Utilizing high-safety lithium iron phosphate battery technology and a prefabricated modular design, the project integrates solar power and waste heat recovery to enhance energy efficiency.

Since its launch, it has discharged approximately 6 million kWh of electricity, saving over 3 million yuan and operating at an impressive 88% efficiency, marking a significant step toward sustainable industrial energy management.

Benefits

Est. Total Discharge: 6 Million kWh

Est. Daily Cost Savings: > $136.50

Cumulative Savings: > $4.1 Million

System Efficiency: 88%

Annual Carbon Reduction: 3,240 tons

Project Overview

The mine previously relied solely on 18 diesel generators with a high energy cost of $0.44/kWh, exacerbated by rising fuel costs and logistics/labor expenses. Grid power ($0.14/kWh) offered lower rates but unreliable supply.

The project deployed a smart microgrid integrating solar PV, battery storage, diesel backup, and grid connectivity, prioritizing solar energy for daytime use with excess stored for nighttime/inclement weather while retaining diesel as backup.

Zimbabwe Microgrid Project

Scale

Phase 1: **12**MWp Solar PV + **3**MW / **6**MWh ESS

Phase 2: **9**MW / **18**MWh ESS

Application Scenario

Integrated Solar PV + Energy Storage + Diesel Generator (Microgrid)

System Configuration

- 12MWp Solar PV Modules
- 2 Customized Energy Storage Battery Containers (3.096MWh total capacity)

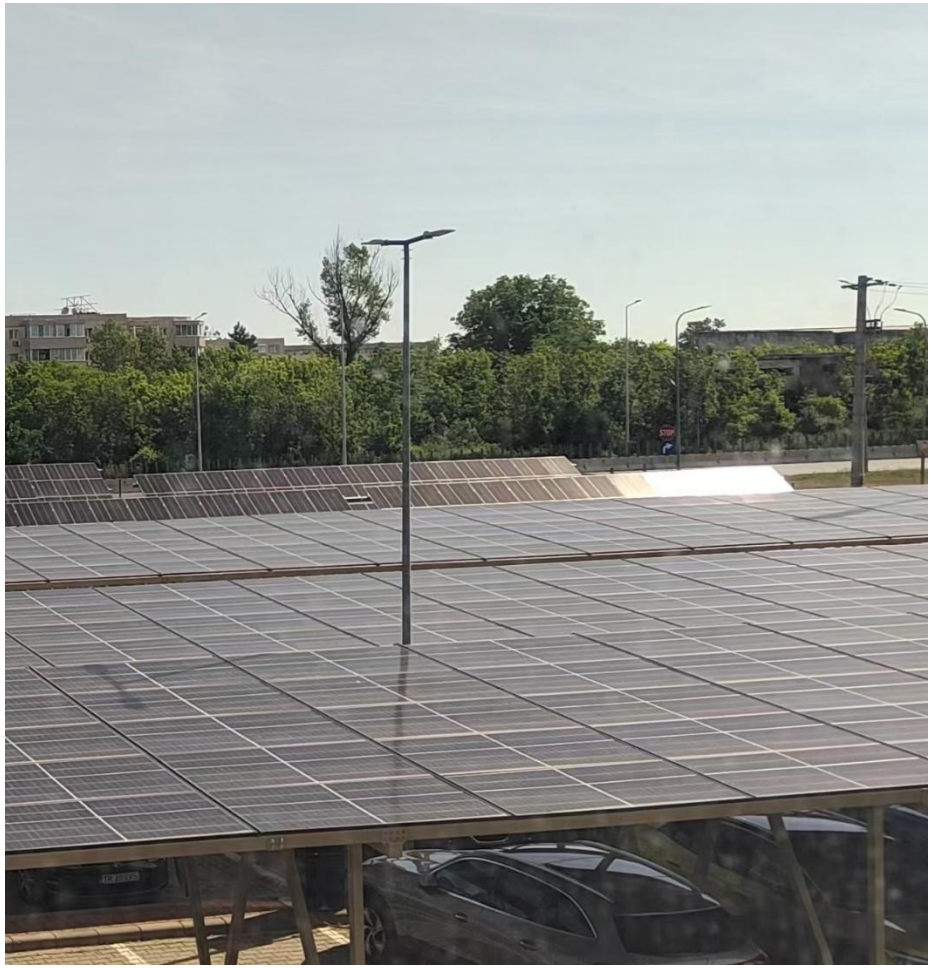
Benefits

Est. Daily Electricity Savings 80,000 kWh

Est. Annual Cost Savings $3 million

Est. Cost Recovery Period <28 Months

Romania Photovoltaic + Energy Storage+ Power Grid Project



Project Overview

The energy storage system is primarily used to participate in grid frequency regulation and enhance grid stability.

It also stores excess power generated by photovoltaics, providing power to the loads during peak demand or when generation is insufficient.

This improves energy utilization efficiency and reduces dependence on the traditional power grid.

Scale

10MW / **20**MWh

System Configuration

3.85 MWh battery energy storage system containers * 5

Germany Photovoltaic + Energy Storage Project

Project Overview

This integrated system combines photovoltaics (PV), energy storage (ESS), and the grid to maximize energy efficiency.

During sunlight, PV powers loads and charges ESS; at night or during low sunlight, ESS and PV jointly supply power until ESS SOC drops below 15%. The grid recharges ESS if SOC falls below 80%, ensuring reliable and cost-effective energy management.

System Configuration

20 kWp PV

258 kWh Star Series Energy Storage Cabinet

Benefits

Daylight powers loads, excess charges storage.
Low sunlight uses both solar and storage.
Grid supplements storage < 80% SOC at night.

China Energy Storage Project

Project Overview

Wenergy partnered with Hunan Haili Lithium Battery Technology to implement an energy storage project in Changsha High-Tech Development Zone.

Operating on a peak shaving and load shifting model, the system ensures reliable power for Haili's production. Completed in just 20 days, the project highlights Wenergy's commitment to efficient and sustainable energy solutions.

Scale

1.44MW / **3.096**MWh

System Configuration

- **12*258**kWh ESS Cabinet Connected to 10/0.4kV-2500kVA Transformer

Benefits

Est. Total Discharge: 998.998 MWh

System Efficiency: 88%

Zambia | Africa
Scenario: Solar-Storage-Diesel Off-Grid Operation
Scale: 3.45MW/7.7MWh

Netherlands | Europe
Scenario: Backup Power Supply, Park Energy Storage
Scale: 10MW/20.64MWh

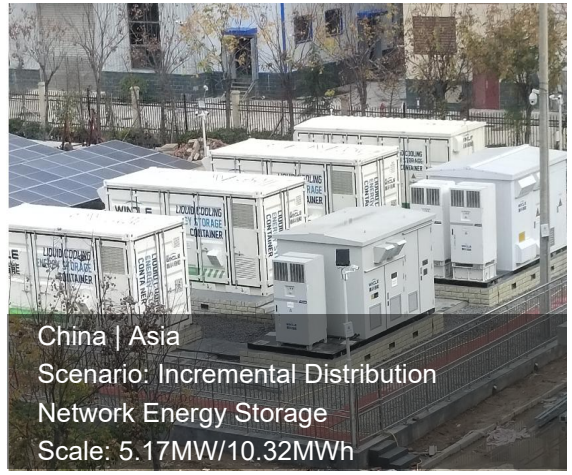
United Kingdom | Europe
Scenario: Commercial and Industrial Energy Storage
Scale:1.2MW/2.58MWh

Romania | Europe
Scenario: Grid-side and Commercial & Industrial ESS
Scale: 10MW/20MWh

Bulgaria | Europe
Scenario:Grid-side Peak Shaving
Scale: 17MW/34MWh

Philippines | Asia
Scenario: Commercial & Industrial Energy Storage
Scale: 16*258kWh (4.13MWh)

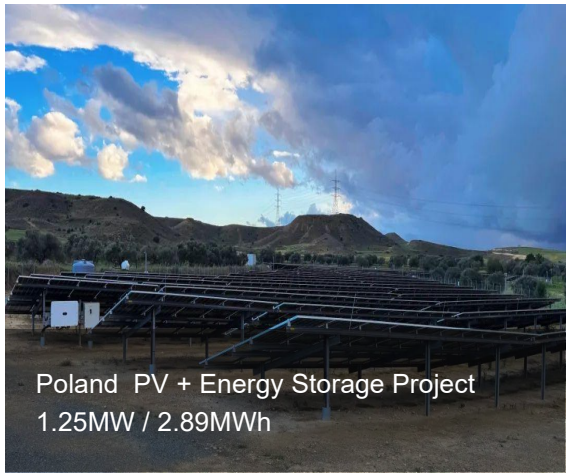
China | Asia
Scenario: Large-scale PV Power Plant with Storage
Scale: 6MW/12MWh



China | Asia
Scenario: Incremental Distribution Network Energy Storage
Scale: 5.17MW/10.32MWh

Germany S&P C&I ESS Project
1MW/2.64MWh

Netherlands BH Project
7.5MW / 17.3MWh



Poland PV + Energy Storage Project
1.25MW / 2.89MWh

Hebei State-Owned Special Steel Company Energy Storage Project
120MW / 240MWh

Qingyuan Metal Manufacturing Company Energy Storage Project
2.4MW / 5.16MWh

Foshan Geometric Ceramics Energy Storage Project
1.92MW / 4.128MWh

Taiyuan Water Treatment Energy Storage Project
0.88MW / 1.948MWh

Shanghai Zhujing Waterfront Park Optical Storage and Charging Intelligent Microgrid Project
18.7kWp PV/30kWh ESS/7kW EVSE*2

05 | Partners

Global Sales Network

- Products are sold to **6** continents / **60** countries and regions around the world

China, USA, Canada, Germany, UK, Italy, Netherlands, Bulgaria, Poland, Czech Republic, Austria, Romania, Cyprus ,Australia, New Zealand, Peru, Zimbabwe ……

Domestic Partners

International Partners

After-sales Service

Seven-star after-sales guarantees global energy storage applications in all scenarios

Safe, professional, convenient, leading and reliable

Overseas service outlets

China,United States, Canada, Peru, Italy,Germany, United Kingdom, Australia,
New Zealand, Zimbabwe

Better System

Service outlets + material network + spare parts central warehouse + old parts recycling

Systematic Services

On-site maintenance + empowered self-study, customer training + Remote diagnostic consultation + spare parts/tool support

Choose Wenergy for Secure Energy Storage

- Full chain technology control
- Professional intelligent control system
- Full security guarantee

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