

Utility-Scale Solutions

Neptune 3420



Safety

- High-efficiency intelligent thermal management design
- Meets UL and IEC standard

Economical

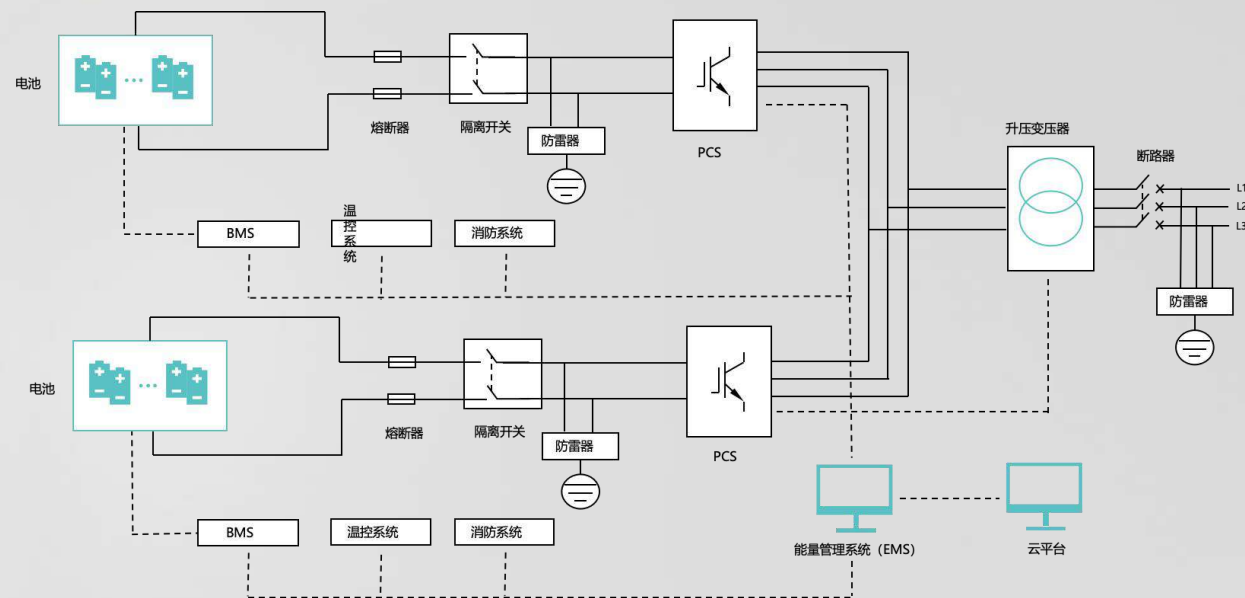
- Non-walk-in design
- Integrated system design
- Reducing transportation, installation, and commissioning costs

Intelligent

- Cloud platform, full life cycle health management
- Built-in EMS, multiple operation modes

Efficiency

- Modular all-in-one design
- Convenient installation



Medium and high-voltage on-grid system

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20-foot containerized energy storage

Product Parameters			
System Parameters	Model specifications	3.42MWh	5MWh
	Cooling method	liquid cooling	
	Cycle	≥7000	
	Fire protection	PACK level (aerosol/perfluorohexane) + Cluster level (aerosol/perfluorohexane + water spraying)	
	Protection	IP55	
	Dimensions	6058*2438*2896mm	6458*2438*2896mm
Battery Parameters	Cell	300Ah	314Ah
	Series and parallel connections (pack)	1P44S	1P52S
	Series and parallel connections (battery system)	9P396S	12P416S
	Rated Voltage	1267.2VDC	1280VDC
	Voltage Range	1108.8 ~ 1425.6VDC	1000 ~ 1460VDC
	Charge and discharge rate	0.5C	0.5C
	Rated charge and discharge current	1500A	1570A

Neptune 3420: High-Performance Utility-Scale Energy Storage

Core Products
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The Neptune 3420 is a pre-engineered, modular energy storage solution designed for rapid deployment and optimal performance. Incorporating advanced battery technology, liquid cooling, and intelligent control systems, this system delivers exceptional energy density and efficiency.



Model specifications	3.42 MWh
Cooling method	Liquid cooling
Fire protection measures	PACK grade (aerosol/perfluorophenone) + Cluster grade (aerosol/perfluorophenone + water spray)
Rated voltage	6058*2438*2896mm
Voltage range	1108.8 to 1425.6VDC
Charge and discharge ratio	0.5 C
Rated current	1350A

Diverse application scenarios

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Low-voltage grid-connected scenario



Mid-Size factory



Shopping Mall

Medium and high-voltage on-grid scenario



Facility



Industrial Park

Grid-side scenario



Ground-mounted PV
power station



Wind power station

Microgrid on/off-grid scenario



Service center



Island microgrid

Key Features

Core Products



Optimal Temperature Control:

Advanced liquid cooling system maintains a precise temperature

($\pm 7^{\circ}\text{C}$)

Scalable Energy Storage:

Modular design with

3.42MWh capacity

Uncompromising Safety:

Multi-level safety features, including fire suppression and environmental monitoring



All-in-One Solution:

Integrated container design simplifies installation and maintenance

Remote Monitoring and Control:

Optional

4G video monitoring

for real-time system oversight

Rapid Fire Suppression:

Automated Heptafluoropropane system for swift fire containment

Our team has extensive experience in landing projects

Project Cases

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Henan Jiuwei Junxian Wind Farm Energy Storage Project

Completed in 2021, power generation side, service photovoltaic 50MW, energy storage 5MW/5MWh



Changsha Furong Substation Energy Storage Project

Built in 2018, grid-side, within Changsha, energy storage 26MW/52MWh



NDRC Xinjiang Lopu Hundred MW Battery Energy Storage Project

Built in 2023, power generation side, supporting PV capacity of 400 MW, energy storage 100MW/400MWh



Three Gorges Group Tibet Tianjing Photovoltaic Power Station Additional Energy Storage Project & Tibet Autonomous Region Inventory Photovoltaic Project

Installation Cases

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Jiangsu, China



Shaoxing, China



Jiangsu, China



Huzhou, China



Jiaxing, China



Pinghu, China



Suqian, China