

REPT
BATTERO

Powtrix™ 2.0

5.015MWh Battery System



5.015MWh

High Energy



High Safety

Multi-factor safety
matrix analysis and
measures



Seismic Resistance

Suitable for high-intensity
seismic zones in accordance
with IEEE 693 standard



3°C

Intelligent
Temperature Control

Datasheet

Product Model	Y104R04C12
Configuration	416S12P
Communication protocol	CAN, RS485, TCP/IP
Thermal management methods	Liquid cooling / heating
Operating ambient temperature	-30°C~55°C
Altitude	De-rated over 3,000 meters

Electrical Parameters

Withstand voltage	4500Vd.c., leakage current ≤5mA,	
Short circuit current	130.56kA@12 strings	13.6kA @1 string
Rated energy	5015.9kWh	100%DOD , 0.5P
Rated voltage	1331.2V	
Operating voltage range	1040V-1500V	
Rated charge power	2500kW(0.5P)	According to power map
Rated discharge power	2500kW(0.5P)	According to power map
Short peak charging power	5000kW@60s	According to power map
Short peak discharging power	5000kW@60s	According to power map
Auxiliary power supply	400Vac,50Hz,3L/N/PE(EU) 480Vac,60Hz,3L/N/PE(US)	
DC side output form	1/2/12 outputs(optional)	

Mechanical Parameters

Mass	~44.5t	
IP level	IP55	
Dimension	6058mm×2438mm×2896mm	L ×W ×H , 20HQ

Certification

Standard	UL9540A-2019,UN38.3,RoHS,GBT36276-2023	For module
	UL9540A-2019,UL1973-2022,IEC62477-1-2012 IEC62619-2022,IEC63056-2020,IEC60730-1-2022,GBT36276-2023	For string
	UL9540-2023,NFPA68-2023,NFPA69-2024,NFPA855,UN3536 IEC62477-1-2012,IEC62933-5-2-2022,IEC61000-6-2-2016,RoHS IEC61000-6-4-2018,IEEE Std 693-2018,ISO3744-2010,REACH	For container

Product Features

High Safety

- UL9540A thermal forced spread test evaluation results are excellent, combustible gas monitoring, pressure relief and explosion protection meet NFPA68, NFPA69 specifications;
- "2+2" fire prevention and control measures: The design adopts the modular built-in fire suppression & container firefighting system multiple configuration;
- Insulation strength of the system is sufficient, and no breakdown or flashover in 5kVd.c. withstand test. The DC circuit is equipped with multi-level disconnections, which are multiple configuration;
- Large scale fire impact assessment test results were good, no propagation to adjacent container.

Extremely long life

- Thermal management design adopts centralized cooling, multistage shunt, parallel flow channel, throttling control. The temperature difference of cells in the module is 2°C, and that is 3°C for container level;
- Protection is in place and reliable and durable. The protection grade of the enclosure is IP55, the anti-corrosion grade is C4/C5, and the high voltage module is IP67;

Solid and reliable

- Adaptive design, module structure retention and internal force release optimization in the whole life cycle;
- Excellent steel structure stability, 2 times lifting load, 10 times ballast performance recognized by classification society;
- The overall structural stability meets IEEE693 high level earthquake tolerance;
- Electrical components are tested for high temperature durability at 60°C; The liquid cooling pipeline is checked at 1000 hours of high temperature cycle;

Relevant certifications

