



Powtrix™ 1.0 Liquid cooling 3.727MWh Battery System



High security

- 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 echelon configuration;
- Large scale fire impact assessment test results were good, no propagation to adjacent container;
- 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 echelon configuration;



Long life and durability

- 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.
- Special energy storage battery, standard cycle 10000+, service life of 20 years;
- 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

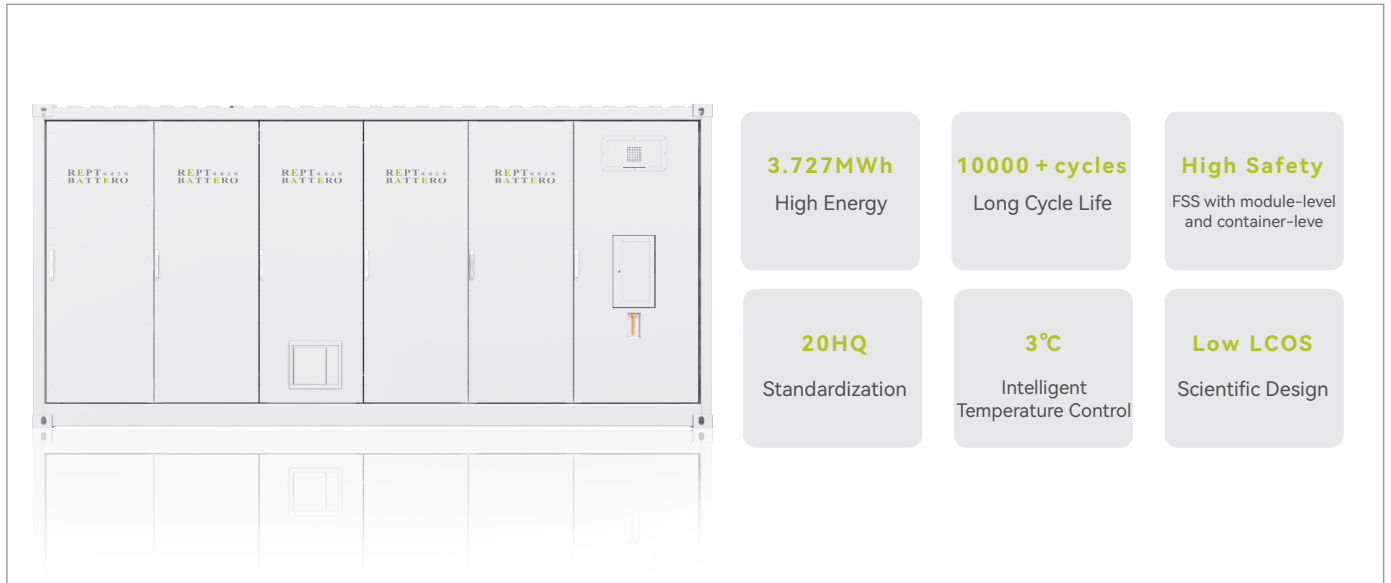
- Adaptive design, module structure retention and internal force release optimization in the whole life cycle;
- Excellent steel structure stability, 2 times lifting load, 10 times ballast performance recognized by classification society;
- The overall structural stability meets IEEE693 high level earthquake 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



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General

Product Model	Y52R08C10
Configuration	416s10p
Communication protocol	CAN, RS485, TCP/IP
Elevation	≤3000m
Cooling and heating type	Liquid cooling / heating
Operating ambient temp	-30~55°C

Electrical Parameters

Withstand voltage	4500VDC, leakage current ≤5mA	
Short circuit current	109.8kA@10 racks	13.1kA @1 rack
Rated energy	3727.36kWh	100%DOD , 0.5P
Rated voltage	1331.2V	
Operating voltage range	1040V~1500V	
Rated charge power	1863.5kW(0.5P)	According to power map
Rated discharge power	1863.5kW(0.5P)	According to power map
Short peak charging power	3727kW@60s	According to power map
Short peak discharging power	3727kW@60s	According to power map
Auxiliary power supply	3phase 400Vac±10% 50Hz(CE) 3phase 480Vac±10% 60Hz(UL)	
DC side output form	1/2/12 outputs(optional)	

Mechanical Parameters

Mass	~36t	
IP level of enclosure	IP55	
Dimension	6058mm×2438mm×2896mm	L ×W ×H , 20HQ

Certification

Executive standard	UL9540A-2019, UN38.3, ROHS, GBT36276-2018	For module
	UL9540A-2019, UL1973-2022, IEC60730-1-2022 EC62619-2022, IEC63056-2020, GBT36276-2018	For unit
	UL9540-2023, UN3536, NFPA69-2019	For container