

Ymir 5k

5MWh Liquid Cooling Battery Energy Storage System

TBAT-5015-15-L-E



Product Overview

The 5MWh liquid-cooled energy storage system is a high-capacity battery storage solution featuring a standardized design that allows flexible configuration. This product integrates energy storage batteries, a Battery Management System (BMS), combiner cabinet, thermal management system, and fire protection system, and can be paired with mainstream energy storage inverters for a wide range of applications. The next-generation 5MWh liquid-cooled system features a highly integrated structural design, significantly reducing site footprint and shortening construction timelines for users.

- 20-foot, 5 MWh system with 40% increase in energy density.
- Intelligent liquid-cooled heat pipe system with $\leq 3^{\circ}\text{C}$ temperature difference within clusters.
- High-altitude design, supporting elevations up to 5000 meters.
- New insulation materials for improved thermal resistance.
- Compliant with GB/UL/IEC/UN3536/FCC Part 15B/NFPA855,etc.
- C5 Anti-corrosion protection.
- Integrated transport and rapid installation.
- Active fire protection system compliant with NFPA standards.
- Interfaces for aerosol and water-based fire suppression systems.



Model	TBAT-5015-15-L-E
Cell Type	LFP 3.2V / 314Ah
Battery Module Configuration	1P104S
Max. Voltage of Cell	3.6V
Min. Voltage of Cell	2.8V
Number of Module per Rack	8
Battery Rack Configuration	1P416S
Number of Racks per Container	12
Nominal DC Voltage	1331.2V
Operating Voltage Range	1164.8~1497.6V
Nominal Capacity	5.015MWh
P-rate	0.5P / 0.25P
Max. charging/discharging power	2500kW
Temperature Range	-30 ~ 55°C
Cooling Method	Liquid cooling
Relative Humidity	$\leq 95\%RH$, non-condensing
Cycle life	≥ 8000 cycles (25°C, 90%DOD, 80%EOL)
Max. Altitude	$\leq 5000m$ (>3000m needs to be customized, >2000m derating)
Auxiliary power supply specification	3P+N
IP Protection Degree	IP55
Anti-corrosion level	C3 / C4 / C5 (Optional)
Fire Suppression System	Aerosol + Water
Weight	42.5T
Dimensions (W×D×H)	6058×2438×2896 mm

