



The Ener Hexon® Aurora 5015 Containerized Liquid-Cooled Utility ESS primarily consists of 314Ah liquid-cooled battery PACKs, a control box, a main control panel, a liquid cooling unit, a liquid cooling pipeline system, a BMS (Battery Management System), a fire protection system, auxiliary power distribution, and more. The system has a nominal energy capacity of 5015.96 kWh, utilizing 314Ah Lithium Iron Phosphate (LFP) battery cells. A single PACK is configured as 1P52S. Each battery cluster is formed by connecting 8 battery PACKs in series. A single system comprises 12 clusters in total. Each is equipped with one control box. The DC side supports multiple parallel branch circuits converging into a centralized PCS (Power Conversion System). The temperature control system features an independent liquid cooling circulation system. The fire protection system employs an aerosol fire suppression + combustible gas detection + explosion-proof ventilation and exhaust + water fire suppression solution. The overall container utilizes a non-walk-in external maintenance design.

The Ener Hexon® Aurora 5015 Containerized Liquid-Cooled Utility ESS can be applied in generation-side, grid-side, and user-side fields, meeting various application scenario needs such as renewable energy consumption, peak shaving and frequency regulation, shared energy storage, independent energy storage, and peak load shifting.

Key Features: E-S³ Design Concept

Safe

- Utilizes high-safety, long-life, high-efficiency, large-capacity Lithium Iron Phosphate (LFP) batteries;
- Integrates advanced BMS products for real-time monitoring and intelligent management; comprehensive battery protection strategies and fault detection/isolation measures ensure energy storage system safety;
- Combustible gas + temperature + smoke cabin-level detection; total flooding gas fire suppression; integrates six safety protections - pre-warning, detection, prevention, isolation, venting, and suppression - into one system; implements BMS whole-unit linkage protection strategy with ultra-early warning protection control for enhanced safety;
- Unaffected by extreme operating conditions; high protection rating: IP54 (IP55 for battery compartment); corrosion resistance rating C4 or higher.

Simple

- Supports centralized topology solution, centralized DC-side convergence; simple topology communication and control logic ensure system stability and reliability;
- Employs 314Ah large-capacity battery cells; PACK uses an extremely narrow 770mm cooling plate; the enclosure uses a standard 20-foot container meeting sea and land transport requirements; single container footprint < 15m²; supports expansion and parallel cabinet connection, saving 35% on footprint, resulting in better overall station EPC cost;
- Factory pre-fabricated production supports cost-effective and efficient deployment on-site, effectively reducing construction workload; on-site installation and commissioning efficiency improved by 50%, lowering project costs.

Smart

- Efficient liquid cooling temperature control strategy; fully variable frequency liquid cooling units; cluster-level throttling design; temperature difference within Pack < 2.5°C; smooth battery cell temperature fluctuations extend battery service life by 15%;
- Independent dehumidification and cooling air conditioner ensures temperature and humidity control within the cabin to prevent condensation;
- Supports one-click upgrades for fast maintenance and updates.

Technical Parameters

Model		YTLS1T5015A	
Category	Name	Parameter	Remarks
Battery Parameters	Cell Type	LFP-3.2V-314Ah	
	Battery Rated Capacity [kWh]	5015.96	@25°C±3°C
	Nominal Voltage [Vdc]	1331.2	
	Voltage Range [Vdc]	1164.8 ~ 1497.6	
	Charging C-rate	≤0.5CP	
	Discharging C-rate	≤0.5CP	
	Maximum Charging/Discharging Power [kW]	2500	2 units of 1250kW
	Operating Temperature	Charging [°C]	5 ~ 45
		Discharging [°C]	0 ~ 45
	Recommended Ambient Temperature [°C]	25±10	
System Parameters	Cooling Method	Liquid Cooling	50% Ethylene Glyco Aqueous Solution
	Fire Protection System	Aerosol + Water-based Fire Protection	
	Anti-corrosion Grade	C4	C5 optional
	Lightning Protection Grade	Class II	
	Protection Level	IP54 (IP55 for battery compartment)	
	Operating Temperature Range [°C]	-20 ~ +55	Derating when >45°C
	Storage Temperature [°C]	-20 ~ +35 (≤6 months)/ -20 ~ +45 (≤1 month)	SOC @20% ~ 50%
	Operating Humidity Range	0 ~ 95%RH	No condensation
	Installation Method	Outdoor Installation	
	Working Condition	2 charges and 2 discharges per day	
	System Communication Interface	Ethernet/RS485	
	External System Communication Protocol	Modbus TCP/IEC104/IEC61850/Modbus RTU	
	Altitude [m]	≤4000	Derating when >3000m
	Dimensions [mm] (L*W*H)	6058*2438*2896	
	Weight [T]	Approx.42.5	
Certification	IEC62619, IEC60730, IEC63056, IEC61000, IEC62477, UN38.3, UN3536		

※Information may be subject to modify without notice.If there is any change in product size and parameters, please refer to the latest information without prior notice.