

HaloDyne Na 2300



The HaloDyne Na 2300 is a utility-scale liquid-cooled sodium-ion battery energy storage system that leverages wide-temperature operability, high-level safety protection, long cycle life, and intelligent grid-tie capabilities, widely suited for large-scale energy storage power plants, large commercial & industrial projects, grid peak shaving, and renewable energy consumption scenarios

Core Features

1. High-Density All-in-One Integration

2.3MWh standard 20-foot container architecture integrating sodium-ion battery PACKs, 3-tier BMS, layered liquid cooling thermal management, power distribution units, and dynamic environment monitoring systems.

2. Multi-Layer Safety Protection

Uniform liquid cooling thermal control combined with PACK-level aerosol fire suppression and full-area hazard detection to comprehensively mitigate thermal runaway risks.

3. High-Reliability Enclosure Architecture

Class-A fire-rated steel structure featuring industrial anti-corrosion and seismic resistance, delivered in a standardized modular form factor for simplified O&M and extended service life.

4. Intelligent Grid Adaptation & Dispatch

Centralized BMS + EMS architecture supporting automated peak shaving and valley filling, intelligent demand management, Virtual Power Plant (VPP) integration, and real-time grid dispatch response.

Technical Specifications

Item		Specifications
Battery Parameters	Battery Type	Sodium-ion battery, 160Ah, 2.86V
	Rated Capacity	2300kWh
	Rated DC Voltage	1189.76V
	Rated Voltage Range	624V~1435.2V
	System Configuration	12P416S
General Data	Cycle Life	> 8000 cycles (0.5C/0.5C, 90% DOD, 80% SOH)
	Operating Temperature	0°C ~ 55°C (Charging) -30°C~ 55°C (Discharging) Power derating above 45°C
	Storage Temperature	-10°C~50°C
	Relative Humidity	5%~95% (Non-condensing)
	Cooling Method	Liquid-Cooling
	Fire Extinguishing Media	Aerosol
	Altitude	≤2000m
	IP Rating	IP55
	Corrosion Resistance Class	C5
	Installation Site	Outdoor
	Noise Emission	≤75dB (1m away from the container)
	Dimensions (D*W*H)	6058*2438*2896mm
	Weight	≈38T
	Communication Protocol	IEC 61850, Modbus, TCP/IP, CAN
	Compliance Standards	UN 38.3, IEC 61000, IEC 62619, IEC62477, IEC 63056