

HaloDyne

Na 120/119



The HaloDyne Na 120/119 is an all-in-one liquid-cooled sodium-ion energy storage system featuring wide-temperature resilience, integrated PCS, three-level intelligent fire protection, and seamless VPP integration, widely suited for commercial and industrial applications including peak-valley arbitrage, demand management, PV-storage-charging, and distributed renewable energy consumption.

Core Features

1. Efficient Liquid Cooling Thermal Management

Sodium-ion cells + intelligent liquid cooling architecture, maintaining a system temperature difference $\leq 6^{\circ}\text{C}$, effectively reducing cell degradation and extending overall operational lifespan.

2. Full Lifecycle Safety Protection

Battery pack/cluster circuit isolation + independent compartment design + three-level intelligent fire protection, building a multi-layer protective architecture to comprehensively mitigate safety risks across the entire lifecycle.

3. Intelligent Energy Dispatch

Integrated BMS + EMS centralized control, supporting automated peak shaving and valley filling, intelligent demand management, VPP aggregation access, and real-time grid dispatch response.

4. Flexible Deployment & Simplified O&M

Modular architecture for flexible capacity scaling, full remote O&M/diagnostics support, and open industrial communication interfaces for robust system scalability.

Technical Specifications

Item		Specifications
AC input/output	Rated Power	120kW
	Rated Voltage	400V
	Rated Frequency	50/60Hz
	Power Factor	> 0.99
Battery Parameters	Battery Type	Sodium-ion battery, 160Ah, 2.86V
	Rated Capacity	119kWh
	Maximum DC Current	200A
	Rated DC Voltage	743.6V
	Rated Voltage Range	615V~897V
	Battery Module	148.7V/23.795kWh
	System Configuration	1P260S
General Data	Cycle Life	>6000 cycles (1C/1C, 90% DOD, 80% SOH) >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	C4
	Installation Site	Outdoor
	Noise Emission	≤75dB
	Dimensions (D*W*H)	1450*1400*2340mm
	Weight	2600kg
	Communication Protocol	Modbus TCP
	User interface	Modbus TCP/IP, IEC 61850, IEC 104, CAN
	Remote Monitoring	Wi-Fi and Ethernet
	BMS	Integration
	EMS	Local integration
	PCS	Integration, AS4777 Compliant Grid-tie Inverter
	Max ESS Units in Parallel	On Grid up to 20; Off Grid up to 6
	Compliance Standards	UN 38.3, UN 3551, UN3552, IEC 61000, IEC 62619, IEC62477, IEC60529