

NOVA AC/DC Integrated Energy Storage Container

NOVA S750-1527-EN

750kW/1527kWh

Powered by CATL's 306Ah long-cycle batteries, the energy storage container supports a maximum 750kW AC 400V output, meeting the needs of projects of various scales.

High Safety



- Uses CATL's high thermal stability LFP batteries with IP67 battery packs
- Features energy storage battery health management, supporting life prediction, health assessment, and safety warnings
- Four-level fire safety protection ("monitoring, early warning, alarm, execution") for **cells, packs, and containers**

High Efficiency



- CATL long-life cells with **≥12,000 cycles**
- Supports fast frequency modulation response, full-link response time **≤0.7s**

Intelligence



- Equipped with CESS (Intelligent Energy Management System), enabling rapid upgrading of "photovoltaic-storage-charging-inspection" microgrid technologies and solutions
- AI algorithms deeply integrate grid power, photovoltaic power, local grid tariff mechanisms, system operation efficiency ranges, and real-time load demands to enhance system benefits
- OTA (Over-The-Air) remote diagnosis and online operation maintenance

Flexible Expansion



- Uses **AC400V output** for flexible access to low-voltage transformers and various AC loads
- Supports multi-energy access (photovoltaic, wind power, diesel generation) and output to multiple loads (charging stations, industrial parks, commercial CBDs, etc.)

Application Scenarios



Industrial parks



Commercial CBDs



Charging stations



Public parking lots



Virtual power grids

Testing and Certification:

UN38.3, UL1973, IEC62619, UL9540A,
IEC62477, IEC61000, EN50549



Appearance Configuration

Appearance	silk-printed (customizable)
Dimensions	20-foot container
Weight	TBD

Electrical Parameters

Input/Output Power	Input: AC 750kW; Output: AC 750kW
DC Working Voltage Range	650–950V (grid-connected); 650–950V (off-grid)
AC Rated Output Voltage	400VAC, -20% ~ +15% (grid-connected); AC400V (off-grid)
Unbalance Degree	100%
Total Harmonic Voltage Distortion	<3% (load >30%, grid-connected); <1.5% (resistive load, off-grid)
Rated Output Frequency	50/60Hz

Scenario & Safety

Cooling Type	Liquid cooling
Protection Level	Whole machine ≥IP54, pack ≥IP67
Temperature & Humidity Range	-30 ~ 50°C/0 ~ 95%
Altitude	4000m (>2000m derated operation)
Noise	80±3dB

Energy Storage Battery Parameters

Battery Type	LFP
Energy Storage Capacity	1527kWh
Charge/Discharge Rate	0.5P
Rated Voltage	832V
Battery Voltage	650 ~ 949V
Range Cycle Life	12000 Cycles 25°C, 0.5P, @70%SOH