

# NOVA AC/DC Integrated Energy Storage Container

## NOVA S1000-2036-EN

1000kW/2036kWh

Powered by CATL's 306Ah long-cycle batteries, the energy storage container supports a maximum 1MW 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 and maintenance

### Flexible Expansion



- Can be flexibly downsized to 1MW/2MWh to meet various project scale requirements
- 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	TBN

## Electrical Parameters

Input/Output Power	Input: AC 1000kW; Output: AC 1000kW
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	2036kWh
Charge/Discharge Rate	0.5P
Rated Voltage	832V
Battery Voltage	650 ~ 949V
Range Cycle Life	12000 Cycles 25°C, 0.5P, @70%SOH