



ENERGY
STORAGE



BYHV-1000SAC

VoyagerPower 2.0 Air Cooling Energy Storage System

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⚠️ If the models and specifications in this product catalogue change due to product updates, we will not provide prior notification.



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Product Introduction

VoyagerPower 2.0 is a container energy storage system introduced by Beny, covering BESS from 1MWh~5MWh. ESS adopts an "All-In-One" design concept, with ultra-high integration that combines energy storage batteries, BMS (Battery Management System), PCS (Power Conversion System), EMS(energy management system),fire protection, air conditioning, and more into a single unit, making it adaptable to various scenarios. This product features a prefabricated cabin design flexible deployment, convenient transportation, and no need for internal wiring and debugging. It responds quickly, boasts high reliability, and offers functions such as peak shaving, power capacity expansion, emergency backup power, grid balancing, capacity management, and multi-level parallel connection.

Application Scenario

grid side: load corresponding , peak regulation, grid dispatching, energy transfer;
user side: peak cutting and valley filling , anti-reflux zero feedback, time-of-sale price, optical storage and charging;
micro-grid: light storage and firewood micro-grid , automatic and off-grid switching, black starting;

Product Features

Safe and reliable

IP55 protection grade design, cluster level aerosol layout, BMS and AC/DC multi-layer protection Settings to ensure the safe operation of the system;

Cost optimization

Small size, light weight, save floor space and installation costs, can be pre-installed whole system transportation, long life, low failure rate, low operation and maintenance costs;

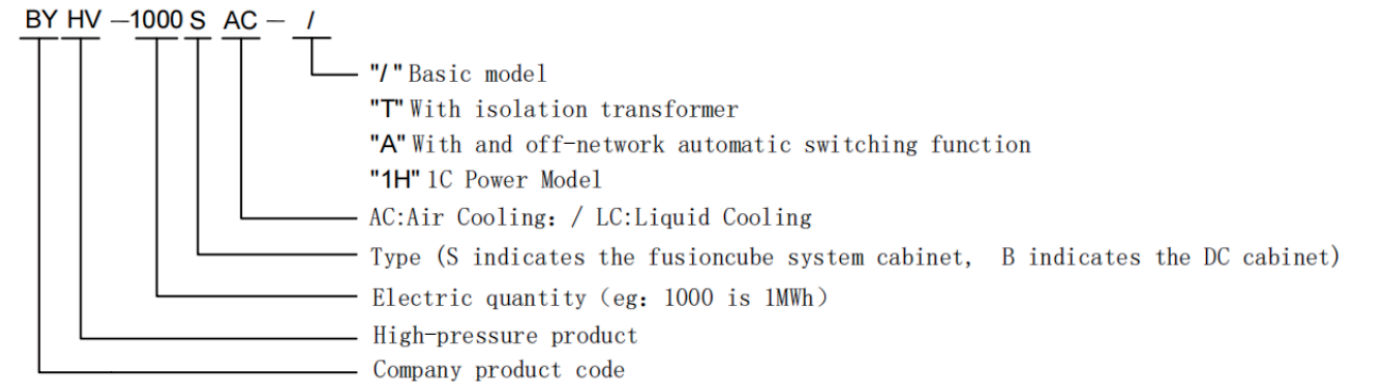
Efficient and convenient

Batteries, PCS, etc., all adopt modular design for easy installation and transportation, and can remotely guide configuration, equipment management, data analysis, fault prediction, etc.

Rich scene

Application strategies can be customized in different environments to meet product requirements;

Specifications and Model Description



Tip: "/" can be sequentially stacked after

Product Parameter

Type designation	BYHV-1000SAC		BYHV-1000SAC-1H
Battery Data			
Cell type	LFP 3.2V / 280Ah		
Battery configuration	(1P16*15)×5		
Battery capacity	1075.5kWh		
Battery current	655A	1310A	
Battery voltage range	624V~876V		
AC Output (On-grid)			
Nominal AC power	500kW	1MW	
Nominal AC voltage	400Vac 3P4W+PE/3P3W-PE		
Max. output current	794A	1588A	
THDi	<3% (at rated power)		
Grid frequency range	50Hz/60Hz (settable)		
AC voltage range	-15%~10% (settable)		
Power factor	>0.99 (at rated power)		
AC Output (Off-grid)			
Rated AC output voltage	400Vac		
Voltage accuracy	1%		
Max. output current	794A	1588A	
THDi	<3% (linear load)		
Rated output frequency	50Hz /60Hz		
Overload capability	110% overload		
System parameter			
Isolation method	Isolation Transformer(option)		
Automatic and off-grid	Support(option)		
Dimension (W*H*D)	6058*2591*2438		
Weight	16000Kg	16200Kg	
IP grade	IP55		
Anti-corrosion degree	C3(Support C5)		
Operating temperature	-30 to 55℃(>45℃ derating)		
Operating humidity	0 ~ 95%(non-condensing)		
Working altitude	3000m		
Temperature control	Intelligent air cooling		
Fire suppression system	NFPA 69 explosion prevention and Aerosol		
communication protocol	Modbus TCP, MQTT		
Standard	IEC 62477, IEC 61000-6-2, IEC 61000-6-4, IEC 62619, EN 50549-1, NC RfG, EN 50549, VDE-AR-N4110,UN 38.3/UN 3536		