

Building-Block Unlock **1MWh+** Power

STAR H-MAX | **220 kW / 440 kWh**
Outdoor All-in-One Liquid-Cooled ESS

- Transformer-Free
- **0.5P / 0.25P** Dual Configurations
- **65dB** Operation
- One-Touch Start/Stop
- Certified for Grid Connection in **45** Countries



STAR H-MAX Product Advantages

CATL Original PACK



LFP 530Ah

Cycle Life $\geq 10,000$

Flexible Block-Style Parallel Connection

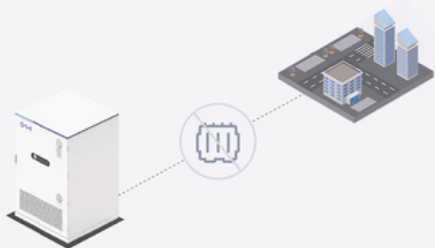
Cross-Generational Compatibility



Enables Capacity Expansion with **Small Footprint & Low Cost**

400V Low-Voltage

AC Grid Connection



Transformer-free

Direct Load Integration for
C&I Applications

101.03 kWh/m³ Energy Density

Cuts transport and land costs



STAR H-MAX × 4

1763.84 kWh

2.03 m² Footprint per Unit

One System **Dual Configuration**



0.5P

High Power Output

Peak-valley Arbitrage



0.25P

Energy Priority

4-hour Power Supply

65dB Low Noise

(@1m, Nominal Power)



Quiet Operation, Non-Disruptive

STAR H-MAX Product Advantages

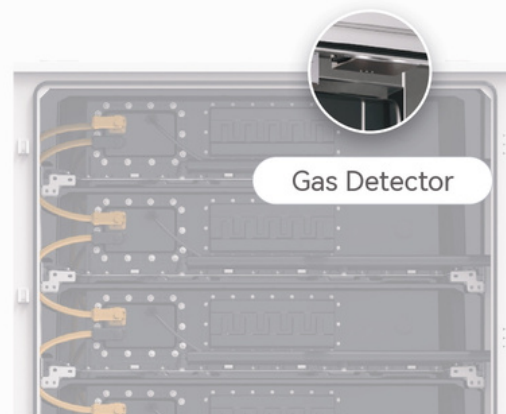
External Power Button for Easy Control



Simplified O&M

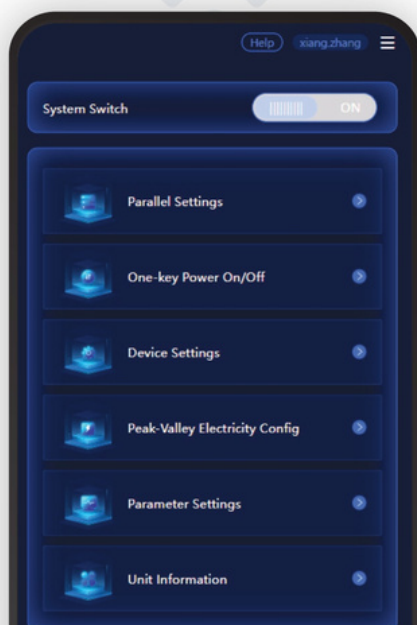
Upgraded Core Components

- No UPS Required
- **10-Year** Maintenance-Free Combustible Gas Detector



Quick Setup

Mini-app based configuration,
Master-slave setup in **5 min.**



AI Smart Temperature Control

Compatible with All Environments

Equipped with AI adaptive algorithms

Stable operation from -25°C ~ 55°C

Precise temperature control for optimal performance

Cell-to-cell temperature difference $\leq 3^{\circ}\text{C}$



STAR H-MAX Product Advantages

Parallel Mode

Master-Slave Max. **10** Units (**4.4**MWh)



Frequency Regulation:

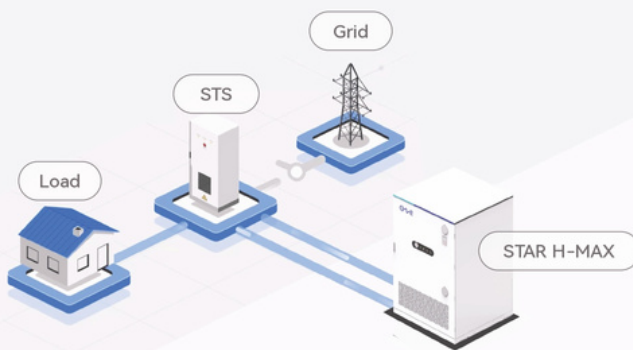
Single-unit response time < **200**ms

System response time < **250**ms

Supports **aFRR**, **mFRR**, **FCR**

Seamless Power During Outages

With STS Automatic Grid/Off-Grid Switch
Ensures Continuous, Stable Power Supply



24h

Insulation Monitoring

Eliminate Leakage



Grid Code in **45** Countries

Germany, United Kingdom, France, Denmark, Sweden,
Finland, Spain, Poland, Czech Republic, Estonia, Austria,
Lithuania, South Africa, Thailand...



6 Global

Product Certifications



IEC 62619, IEC 63056, IEC 60730-1,
IEC 62477-1, IEC 61000-6-2&4, UN38.3

STAR H-MAX Product Specifications



STAR H-MAX	
Battery Parameters	
Cell Type	LFP
Cell Capacity	530 Ah
Nominal Energy	440.96 kWh
Cooling Method	Liquid cooling
Max. Charge/Discharge Rate	0.5P/0.5P
AC Parameters	
Rated Power	220 kW
Rated Voltage	380 Vac / 400 Vac
Rated Frequency	50 Hz
DC Parameters	
Rated Voltage	832 Vdc
Voltage Range	728 Vdc ~ 936 Vdc
System Parameters	
Temperature	-25°C ~ 55°C(> 45°C derating)
Humidity	0~95%, Non-condensing
Altitude	≤4000m(> 2000m derating)
IP Level	IP55
Dimensions (W × D × H)	1400*1450*2150mm
Weight	~4500kg
Communication	Ethernet

AI Smart Control 5-Min Maintenance

STAR H-PLUS Outdoor All-in-One Liquid-Cooled ESS

125 kW / 254 kWh (306Ah) 125 kW / 261 kWh (314Ah)

65dB Low-Noise Operation

5-Min Simplified Maintenance

40s One-Touch Start/Stop

Globally Certified in 45 Countries

