Haitai Solar

Haitai

Energy Storage

Tangshan Haitai Digital Energy Technology Co., Ltd.

Containerized Energy Storage System
Industrial and commercial energy storage
Residential Energy storage

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Group Introduction

Haitai Solar was founded in 2006 and operates in nine major business sectors: photovoltaic modules, photovoltaic power plants, photovoltaic mounting systems, energy storage systems, hydrogen energy, graphite electrodes/carbon electrode ,battery swapping,wind energy and solar cells. It began with the manufacturing of PV modules and achieved significant development by successfully listing on the Beijing Stock Exchange (Northbound Trading) on August 8, 2022. The company has grown in other sectors of the new energy industry, such as photovoltaic power plants, photovoltaic mounting systems, and energy storage system. Both the photovoltaic mounting systems and energy storage have achieved integration of R&D, production, and sales.

Haitai solar (Stock Code：920985)
is a comprehensive new energy enterprise based in
China with a global presence.

2006

Haitai solar was established in 2006

9

9 business sections

100+

The business covers countries/regions.

500

Global Top 500 New Energy Enterprises

2000+

Global employee count

COMPANY PROFILE

2006

·Haitai solar was established.

2008

·Mature R&D and technological capabilities,Full entry into the photovoltaic industry

2011

·Officially Launched 600MW Solar Module Production Line

·Co-established the "Haitai Solar Cell R&D Center" with the Institute of Electrical Engineering, Chinese Academy of Sciences.

2013

·Listed in the Ministry of Industry and Information Technology's PV manufacturing access list.

·Established partnerships with Sharp and BYD, fully expanding into the Japanese market.

2016

·Successfully Listed on the New Third Board, Entering the Capital Market

·Obtained the "Pioneer" power degradation certification in the first year.

2017

Entered into the photovoltaic power plant sector.

2024

·Established a National-Level CNAS Laboratory

·Recognized as a National-Level Intelligent Photovoltaic Pilot Demonstration Enterprise

2023

·Establishment of a third-party verified base.
·Intelligent Manufacturing Pilot Demonstration Project National-level Excellent Scenario.
·Entered the Photovoltaic Cell, Battery Swapping, and Graphite Electrodes/Carbon Electrode Sectors.

2022

Listed on the Beijing Stock Exchange.
Entered into the wind energy sector.
Included in the sixth batch of green supply chains.

2021

Entered into the fields of photovoltaic mounting systems, energy storage, and hydrogen energy.
Ranked as the champion enterprise in the manufacturing sector in Hebei Province.

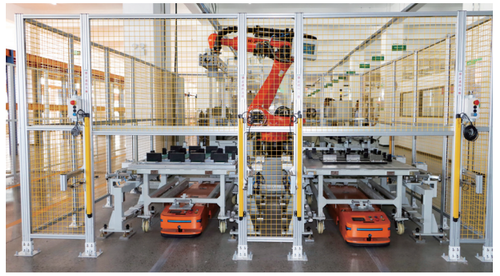
2020

Tier 1 module manufacturer.

Introduction to Haitai Energy Storage

The Company's energy storage business sector was founded in 2021. It is the supplier of global energy storage integrated products and system solutions of the Company. Full-auto, intelligent and efficient lithium battery module and PACK production line with single-line output up to 2GWh.

Haitai Digital Energy's products include
Containerized Energy Storage System (1-10MWh)
Industrial and commercial energy storage system (215kWh/233kWh/261kWh/372kWh/418kWh)
Residential Energy storage (single-phase 3-6kW, 3-phase 8-15kW, 5-30kWh)



Product Advantages

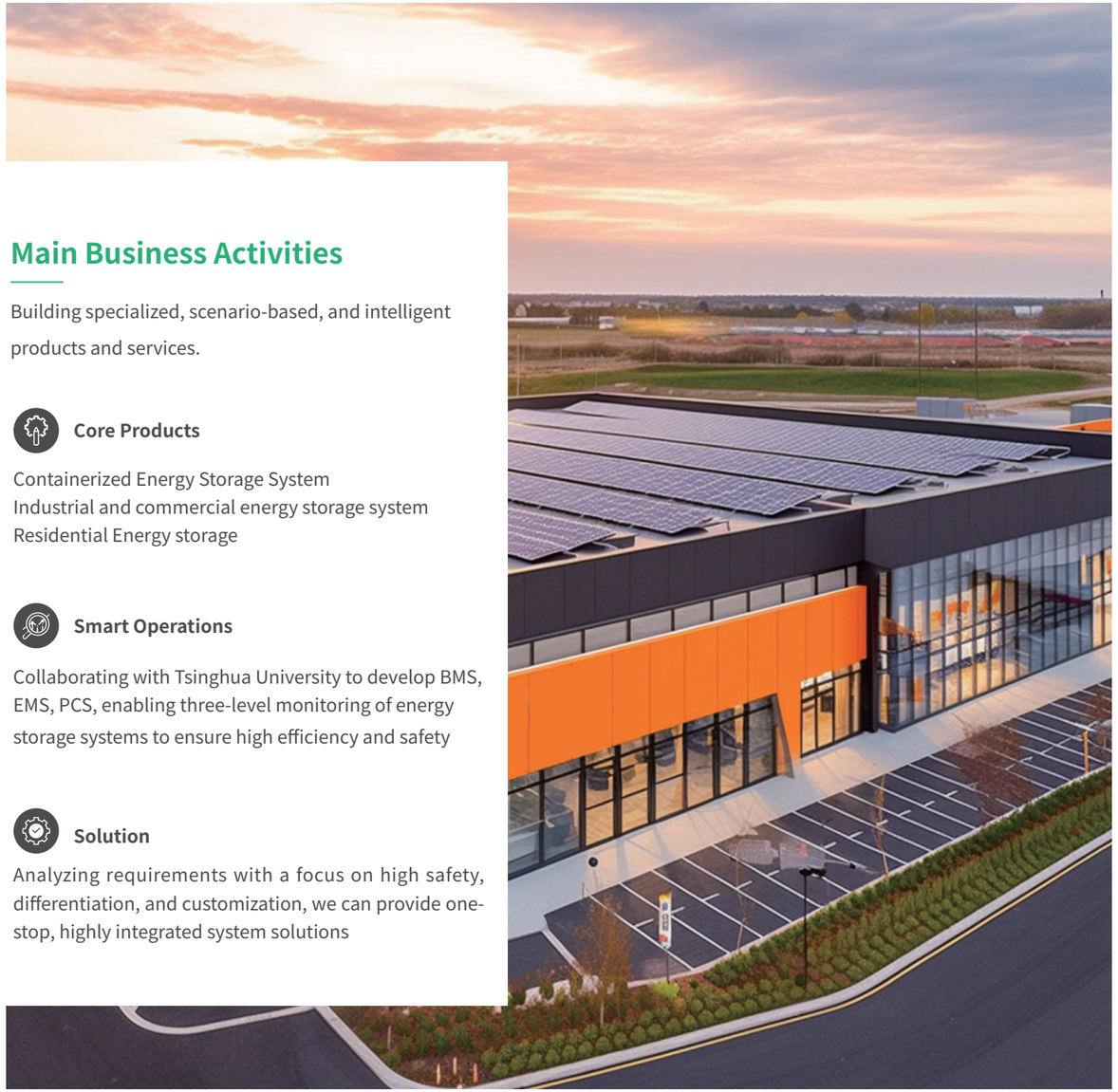
Long lifespan, high safety, high efficiency/intelligence and digitalization/multi-level protection of software and hardware/modular design, facilitating capacity expansion, installation, operation and maintenance.

Production Advantages

Full-auto production equipment such as full-auto KUKA robot, high-accuracy OCV/IR and EOL test device, advanced plasma cleaner, lossless laser welding machine, full-auto production line, intelligent AGV robot, high-feedback charging/discharging test device; strictly control 256 quality control points, such as insulation, differential pressure, gluing welding detection, box airtightness test and capacity test of cell, module and PACK, in order to guarantee the product quality.

Service Advantages

Provide one-to-one, customized and professional system solutions, O&M management plans for customers, including on-grid and off-grid micro-grid, user end, grid end and power supply end.



Main Business Activities

Building specialized, scenario-based, and intelligent products and services.

Core Products

Containerized Energy Storage System
Industrial and commercial energy storage system
Residential Energy storage

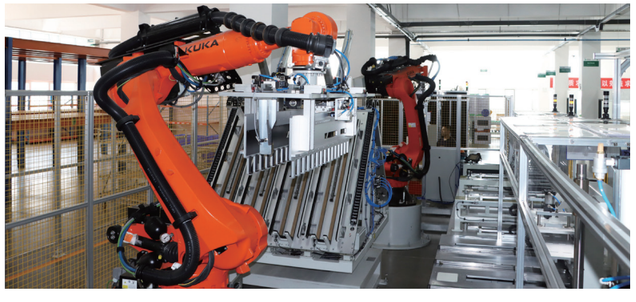
Smart Operations

Collaborating with Tsinghua University to develop BMS, EMS, PCS, enabling three-level monitoring of energy storage systems to ensure high efficiency and safety

Solution

Analyzing requirements with a focus on high safety, differentiation, and customization, we can provide one-stop, highly integrated system solutions

Production Environment



1、Location Type: Standard Workshop

2、Ambient Temperature: 0~40° C

3、Relative Humidity: 25%~75%

4、Production Line Area Dimensions:
Assembly Line for Square Shell Modules
⩽ 100m * 5.5m * 3.5m

5、Floor Load Capacity: 2000kg/square meter

6、Power Supply Voltage: 380VAC+/-10%, 50Hz, Total Power 350KW (excluding charging and discharging)

7、Compressed Air Pressure: 0.7~1.5Mpa, Total Demand: Not less than 4000L/min

Haitai - Blue Shield

HTDESS 1725/3420-LC

Liquid Cooled Energy Storage Battery Container System

HTDESS 1725/3420-LC

Advantages of Liquid Cooled Energy Storage Battery Container System

01

Multi-dimensional and multi-layer battery protection strategies and fault isolation measures ensure the safety and stability of energy storage system

02

Simple and convenient O&M and small workload Low maintenance cost

03

High-quality LFP batteries with a long cycle life > 6,000 cycles

04

Large battery capacity High conversion efficiency of energy storage system Comprehensive efficiency>85%

05

Equipment such as firefighting equipment, thermal management system,door access, monitoring and liquid leakage protection equipment are introduced to ensure the safe and stable running of battery integration system

06

Pre-installed container energy storage system can apply to various scenarios quickly Lower installation costs

07

Intelligent BMS system 3-level monitoring for energy storage system Ensure high efficiency and safety

08

Modular structure design Form various voltage platforms flexibly Various capacity grade systems

HTDESS 1725/3420-LC

Technical Parameters of Liquid Cooled Energy Storage Battery Container System

Liquid-cooled energy storage system	
Model	HTDESS 1725/3420-LC
Cell capacity	3421kWh
Cell Specifications	3.2V/300Ah（0.5P）
Pack specification	1P44S
Rated voltage	1267.2V
Voltage range	1108.8~1425.6V
Rated current	1350A
Voltage accuracy (FSR)	1%
Current accuracy (FSR)	1%
Temperature accuracy	2°C
SOC accuracy	5%
AC system	
Rated power	1725kW
Output voltage	690V
Voltage range	690V±15%
Rated current	1443A
Power factor	> 0.99 (rated power)
Rated frequency	50/60Hz
Frequency	-5 ~ 5 Hz
THD	Below 3%

HTDESS 1725/3420-LC

Technical Parameters of Liquid Cooled Energy Storage Battery Container System

Liquid-cooled energy storage system	
Model	HTDESS1725/3420-LC
Transformer Parameters	
Rated power	2000kVA
Voltage transformation ratio	0.69kV /10~ 35 kV
Transformer model	Dry transformer/oil transformer
Other Parameters	
Cell container dimensions (mm)	6058×2438×2896
Gross weight(t)	＜ 36
Converter container dimensions (mm)	6058×2438×2896 mm
Cell cooling mode	Intelligent liquid cooling
Converter cooling mode: Temperature control and forced air cooling	Temperature control and forced air cooling
Firefighting	Gas firefighting, combustible gas detection + exhaust air, water firefighting (optional)
Cycle life	>6000 times (@25°C , EOL80%)
Protection grade	Whole equipment: IP54; key equipment: IP65
Allowed temperature range	-25~+50°C
Allowed humidity range	0 to 95% non-condensing
Max. altitude of running	⩽ 4000* m

Note: *The equipment should enter derating operation at altitude above 2,000m
For changes in product dimensions and parameters, please refer to the latest materials; no further notice will be given

CORE PRODUCTS

5MWh Liquid-Cooled Energy Storage Container

HTDESS2500/5000-LC

Product Features

◆ Variable-diameter flow channel design + intelligent temperature control technology: Maintains a system temperature difference within <5° C, supporting up to 10,000 charge/discharge cycles.

◆ Single cabin energy >5MWh: 45% higher energy density and 35% smaller footprint, enabling more efficient land utilization.

◆ Standard 20-foot container dimensions: Rapid deployment across multiple application scenarios with ultra-low installation costs.

◆ Thermal runaway monitoring, fast fault detection with precise fault localization, and multi-layer fire protection ensure enhanced system safety.

CORE PRODUCTS

HTDESS2500/5000-LC

Technical Parameters of 5MWh Liquid-Cooled Energy Storage Container

Product Model	HTDESS2500/5000-LC
Cell type	LFP
Group mode	1P416S*12 clusters
Nominal voltage	1331.2V
Rated capacity	5015.9 kWh
Thermal management mode	Intelligent liquid cooling
Rated charging/discharging power	0.5P
Communication mode	CAN/RS485/Modbus TCP
Firefighting mode	Cabin-level + PACK-level perfluorohexanone, combined with cabin-level water fire protection
Operating temperature	Discharging: -20-55° C Charging: 0-55° C
Operating humidity	0-99%RH without condensation
Maximum operating altitude	4000 m (derating when above 2000m)
IP rating	IP55
Weight	About 45t
Dimensions (W × D × H)	6058*2438*2896 mm

BLUE STAR 1.0

418kWh Liquid-cooled Energy Storage System

Product Introduction

Adopting the "All In One" design concept, the battery PACK, battery management system BMS, energy management system EMS, power conversion system PCS, temperature control system, and fire protection system are integrated into one cabinet, forming a standard integrated plug-and-play modular energy storage system.

Product Features

Adaptable to varied environments and strongly reliable

The enclosure features Corrosion Protection Class C4 (optional for C5), with the battery compartment protection grade rated IP55, and the pack protection grade rated IP67. It has excellent salt spray resistance and dustproof capabilities. It is suitable for harsh environments such as coastal areas, deserts, and high humidity while ensuring long-term stable operation of the equipment.

Liquid-cooled temperature control with high efficiency and low consumption

The integrated temperature-controlled and efficient liquid-cooled thermal management system realizes a temperature difference of ⩽ 3° C between the entire cluster of battery cells, effectively improves the overall operation efficiency of the system, reduces the auxiliary power consumption of the cooling system, has good consistency in battery cell operation, and effectively improves the battery cell life.

Compact Footprint

Single cabinet covers only 1.76m^2, and the energy density is increased by 12%; multiple cabinets are connected in parallel, cluster control; capacity is configured on demand, optimized design; installation is adapted to local conditions, flexible access.

Anwendungsszenarien

***Base station**

5G communication base station
Backup cell, charging at high battery level or discharging at low battery level

***Power transmission and distribution**

Auxiliary services
Delay the demand for capacity expansion of grid

***Renewable energy power generation**

Peak load and frequency regulation
Smooth the intermittent energy sources
Increase the new energy consumption

***Island off-grid energy storage**

Microgrid
Energy storage in area without electricity

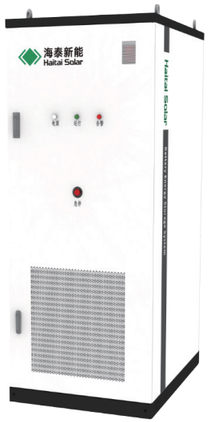
***Industrial and domestic electricity**

Peak-load shifting
Level loads and restrain demands Improve power supply safety and quality of electric energy

Model	HT-215-418-LC
AC side parameters	
Rated power	215kW
Rated grid voltage	690V
Voltage deviation	-15%~+10%
Power factor	0.99 /-1~1
THDI	<3% (rated power)
Access method	Three-phase three-wire
Battery parameters	
Cell type	Lithium iron phosphate/314Ah
Pack mode	1P52S*8
Nominal voltage	1331.2V
Rated capacity	418kWh
Thermal management mode	Intelligent liquid cooling
Rated charging/discharging power	0.5P
General parameters	
Communication mode	CAN/RS485/Modbus TCP
Fire-fighting mode	Cabin-level+PACK-level perfluorohexanone and cabin-level water-based fire protection
Operating temperature	Discharging: -20-55°C Charging:0-55°C
Operating humidity	0-99% RH,no condensation
Maximum operating altitude	4000 m (derating when above 2000 m)
Protection grade	IP55 (battery container)
Weight	About 3200g
Dimensions (width x depth x height)	1300*1350*2640mm

BLUE STAR 1.0

261kWh Liquid-cooled Energy Storage System



Product Introduction

Adopting the "All In One" design concept, the battery PACK, battery management system BMS, energy management system EMS, power conversion system PCS, temperature control system, and fire protection system are integrated into one cabinet, forming a standard integrated plug-and-play modular energy storage system.

Product Features

Compact Footprint

Single cabinet covers only 1.35m^2 with 12% higher energy density; multiple cabinets are connected in parallel, cluster control; capacity is configured on demand, optimized design; installation is adapted to local conditions, flexible access.

Intelligent and Efficient

AC/DC integration with intelligent cluster-level management extending system life span by 2+ years.

Safe and Reliable

Triple-level overcurrent protection including package-level, cluster-level and PCS can identify potential arcing hazards and shut down the battery cell to the system in seconds. AI battery cell pre-diagnostic system can accurately warn & suppress thermal runaway and prevent explosion.

Smart and Friendly

Remote intelligent wireless operation, OTA one-click remote upgrade of four-layer security protection (cloud, management, edge and terminal), guarding data information zero leakage product and life cycle services, including fast maintenance, worry-free operation and maintenance.

Anwendungsszenarien

***Base station**

5G communication base station
Backup cell, charging at high battery level or discharging at low battery level

***Power transmission and distribution**

Auxiliary services
Delay the demand for capacity expansion of grid

***Renewable energy power generation**

Peak load and frequency regulation
Smooth the intermittent energy sources
Increase the new energy consumption

***Island off-grid energy storage**

Microgrid
Energy storage in area without electricity

***Industrial and domestic electricity**

Peak-load shifting
Level loads and restrain demands Improve power supply safety and quality of electric energy

Model	HT-125-261-LC
AC side parameters	
Rated power	125kW
Rated grid voltage	400V
Voltage deviation	-15%~+15%
Power factor	1 (Leading) ~1(Lagging)
THDI	<2%(Rated power)
Access method	(3W+N+PE) three-phasefour-wire
Battery parameter s	
Cell type	Lithium iron phosphate/314Ah
Pack mode	1P52S*5
Nominal voltage	832V
Rated capacity	261kWh
Thermal management mode	Intelligent liquid cooling
Rated charging/discharging power	0.5P
General parameters	
Communication mode	CAN/RS485/Modbus TCP
Fire-fighting mode	Cabin-level +PACK-level perfluorohexanone and cabin-level water-based fire protection
Operating temperature	Discharging:-20-55°C Charging:0-55C
Operating humidity	0~99% RH, no condensation
Maximum operating altitude	4000 m (derating when above 2000 m)
Protection grade	IP55 (battery container)
Weight	About 2200kg
Dimensions (width x depth x height)	1000*1350*2450mm

Outdoor cabinet energy storage system

HTDESSA0030B-0055/HTDESS0050B-0055
HTDESS0050B-0100/HTDESS0100B-0215

Product Highlights

- Support flexible expansion of PV power generation capacity;
- Support access of load, battery, grid, diesel generator and PV at the same time;
- Integrated with EMS functions, to ensure high safety and stability;
- Support prediction of battery capacity and discharging time;
- Built-in isolated transformer, with strong adaption to loads.

Outdoor Cabinet Type Integrated Optical Storage System

HTDESSA0030B-0055/HTDESS0050B-0055
HTDESS0050B-0100/HTDESS0100B-0215

Model	HTDESSA0030B-0055	HTDESS0050B-0055	HTDESS0050B-0100	HTDESS0100B-0215
Rated power (kW)	30	50	50	100
Rated voltage (V)	400			
Rated current (A)	43	72	72	144
Voltage range (V)	320V-460V			
Rated frequency	50/60Hz			
Frequency range	45-55/55-65Hz			
THDi (on-grid)	<3%			
THDu (off-grid)	⩽ 1% linear, ⩽ 5% nonlinear			
Power factor	1 (0.8 lead ~ 0.8 lag)			
Overload capacity	110% long-term			
AC output	3W+N+PE			
Isolation transformer	100/400	200/400	200/400	270/400
On-grid/off-grid switching	Supported			
PV				
Max. PV input voltage (V)	1000			
Max. PV power (kW)	60/120	60/120	60/120	120/180/240
MPTT working voltage range (V)	250-850			
MPPT full load voltage range (V)	450-850			
Voltage increase/decrease mode	Supported			

Communication power supply system

The new energy mixed power supply system of communication base station can be configured with different power supply system devices according to the requirements of base station

- PV MPPT controller and mains supply rectifier are provided with modular installation, supported PV ranges from 5kW to 30kW; mains supply rectifier supports 5-15kW capacity expansion.
- It can manage multiple energies at the same, such as solar energy, wind energy, mains supply, fuel oil generator and battery.
- The product supports multiple protections such as overvoltage, overcurrent, overheat, undervoltage and short-circuit.
- Integrated with battery management function, with protection against reverse connection, overcharging and over-discharging of battery.
- Support RS232, RS485, CAN and other communication interfaces.
- Outdoor IP54 protection grade, multiple safety controls and lightning prevention design, adaptive to severe environment such as high altitude and ultra-low temperature.

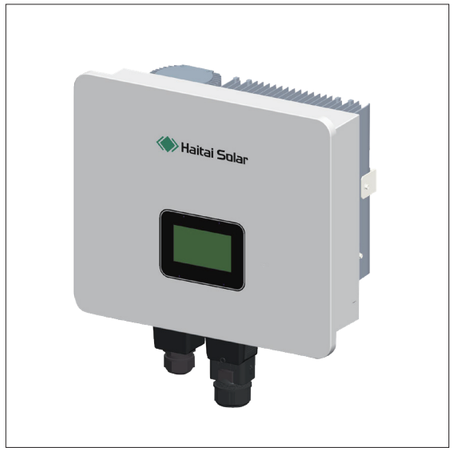
Communication power supply system

Parameters of control cabinet	
Input voltage of PV controller	60Vdc ～ 150Vdc
Output voltage and current of PV controller	48Vdc/50A
Install quantity of PV controller	3-10PCS
Input voltage of rectifier module	90Vac to 300Vac
Output voltage and current of rectifier module	48Vdc/50A
Install quantity of rectifier module	3-6PCS
Protection grade	IP54
Cooling method	Natural air cooling
Dimensions (mm)	600×600×2000
Power cabinet parameters	
Battery module capacity	51.2V100AH
Battery module dimensions	3U
Cell type	Lithium iron phosphate
Parallel operation quantity	<10 PCS
Cooling method	AC

Residential Energy storage

Product Introduction

- The single-phase hybrid inverter is 3-6kW,three-phase hybrid inverter is 6-15kW. Supports multi-inverter parallel connection. The input terminal supports 1.5 times component expansion. The PV string is 16A, which supports 182 / 210 high-power photovoltaic module access.
- Support 5-30 kWh battery, using PACK installation, free combination, to meet the individual requirement;
- Zero-time switching between on-grid/off-grid of grid and battery, to guarantee the power consumption.



3-6kW HTDESS S 3.0K-6.0K G2
Single-phase mixed inverter

6-15kW HTDESS T6.0K -15K G1
3-phase mixed inverter

Residential Energy storage

Main advantages

Friendly and flexible	Intelligent Management	Safe and reliable	Economical and efficient
·Support parallel connection of multiple machines ·Compatible with multiple batteries, such as lead acid and lithium ion batteries	·Household smart energy management terminal ·Power dispatching and response management node at demand side ·Management node of distributed virtual power station	·Compatible with anti-reverse flow function ·Protection against battery reverse connection	·Max. efficiency ⩾ 97. 5% ·Small volume, wide applications, save the installation space;

Technical Parameters of Household Single-phase Energy Storage Inverter

3-6kW HTDESS S 3.0K-6.0K G2

Model parameters	HTDESS S3.0K G2	HTDESS S4.0K G2	HTDESS S5.0K G2	HTDESS S6.0K G2
DC input				
Max. input power (kW)	4.5	6	7.5	9
Starting voltage (V)	100			
Max. PV voltage (V)	550			
MPPT voltage range/rated voltage (V)	80~500/360			
Max. input current (A)	16			
Number of MPPT circuits	2			
Parallel output				
Rated power (kW)	3	4	5	6
Max. output power (kVA)	3.3	4.4	5	6.6
Rated voltage/range (V)	230 /176~270			
Frequency (Hz)	50 /60			
Power factor	1 (0.8 lead ~ 0.8 lag)			
Harmonic current	<3%			
Grid connection type	L+N+PE			
Cell				
Rated voltage/range (V)	51.2/40~58			
Max. charging voltage (V)	58			
Max. charging/discharging current (A)	60/60	80/80	100/100	120/120
Communication Method	CAN/RS485			
Battery type	Lithium battery/lead acid battery			

Off-grid output				
Rated power (kW)	3	4	5	6
Rated voltage (V)	220/230V			
Max. current (A)	14.3	19.1	21.7	28.7
Rated frequency (Hz)	50/60			
Switching time (ms)	<10ms			
Harmonic voltage	<2%			
Overload capacity	110%,60S / 120%,30S / 150%,10S			
General data				
Charge/discharge efficiency	96%			
Max. efficiency	98%			
European efficiency	97%			
MPPT efficiency	99.90%			
Protection grade	IP65			
Noise (dB)	<35			
Operating temperature (°C)	-25~60			
Cooling method	Natural cooling			
RA Temp.	0 ~95% (no condensation)			
Altitude	4,000m(>2,000 derating)			
Dimensions W × D × H(mm)	451×200×474			
Weight (kg)	18			
Isolation mode	No isolation transformer			
Self-consuming (W)	<3			
Display and communication				
Display	LCD			
Interface	RS485/Wifi/4G/CAN/DRM Opt			

Technical Parameters of Household 3-phase Energy Storage Inverter

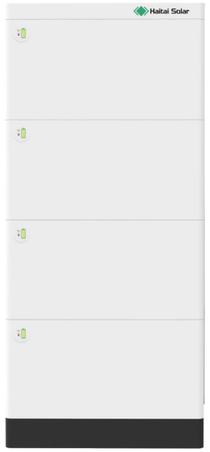
6-15kW HTDESS T6.0K -15K G1

Model parameters	HTDESS T6.0K G1	HTDESS T8.0K G1	HTDESS T10K G1	HTDESS T12K G1	HTDESS T15K G1
DC input					
Max. input power (kW)	9	12	15	18	22.5
Starting voltage (V)	200				
Max. PV voltage (V)	1000				
MPPT voltage range/rated voltage (V)	180~850/600				
Max. input current (A)	16				25
Number of MPPT circuits	2				
Parallel output					
Rated power (kW)	6	8	10	12	15
Max. output power (kVA)	6.6	8.8	11	13.2	16.5
Rated voltage/range (V)	380、400 / 340~460				
Frequency (Hz)	50 /60				
Power factor	1 (0.8 lead ~ 0.8 lag)				
Harmonic current	<3%				
Grid connection type	3W+N+PE				
Cell					
Rated voltage/range (V)	360/125-550				
Max. charging voltage (V)	600				
Max. charging/discharging current (A)	50				
Communication Method	CAN				
Battery type	Lithium battery/lead acid battery				

Off-grid output					
Rated power (kW)	6	8	10	12	15
Rated voltage (V)	380/400V				
Max. current (A)	9.5	12.7	15.9	19.1	23.8
Rated frequency (Hz)	50/60				
Switching time (ms)	<10ms				
Harmonic voltage	<2%				
Overload capacity	110%, 60S/120%, 30S/150%				
General data					
Charge/discharge efficiency	97.5%	97.5%	97.5%	97.5%	97.8%
Max. efficiency	97.9%	97.9%	98.2%	98.2%	98.5%
European efficiency	97.2%	97.5%	97.5%	97.6%	97.8%
MPPT efficiency	99.9%				
Protection grade	IP65				
Noise (dB)	<35				
Operating temperature (°C)	-25~60				
Cooling method	Natural cooling				
RA Temp.	0 ~95% (no condensation)				
Altitude	4,000m(>2,000 derating)				
Dimensions W × H× D(mm)	566×596×220				
Weight (kg)	30	31	31	33	34
Isolation mode	No isolation transformer				
Self-consuming (W)	<3				
Display and communication					
HIMI	LCD/APP				
BMS	CAN				
EMS/Meter	RS485/RS485				
Supported communication interface	WIFI/GPRS				

Low-voltage Stacked Battery Pack

HTDESS LP 2.56 D1 / HTDESS LP 5.12 D1



- This low-voltage battery features smaller and lighter individual modules, requiring simple and straightforward installation steps, allowing for easy customization of battery combinations to meet your energy storage needs.
- With a reliable BMS system and high-performance balancing technology, the entire system achieves intelligence and flexibility, providing you with a more stable discharge platform.

ultra-large capacity

expandable modules

outstanding performance

safe and reliable

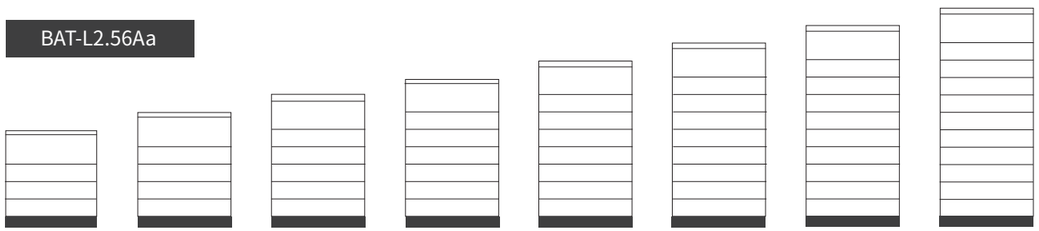
real-time monitoring

low voltage

Smart Battery Management System

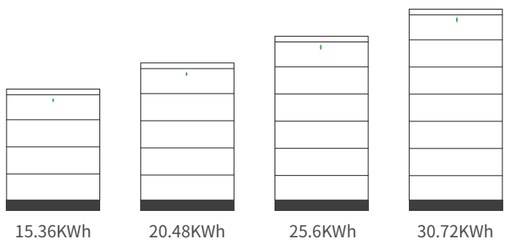
integrated photovoltaic energy storage

BAT-L2.56Aa



BAT-L5.12Aa

- Higher conversion efficiency
- Reduce reliance on grid
- Better adaption to large-load applications
- Higher flexibility
- Lower cost, larger system
- Faster charging and discharging
- Energy saving



Model	HTDESS LP 2.56 D1	HTDESS LP 5.12 D1
Rated voltage (Vdc)	51.2	51.2
Rated capacity (Wh)	2560	5120
Working voltage range (Vdc)	44.8-56.16	44.8-56.16
Charging voltage (Vdc)	58.4	58.4
Rated charging/discharging current (A)	25	50
Max. charging/discharging current (A)	50	100
Peak current (A)	100@3sec	200@3sec
Number of units in parallel	<10pcs	<6pcs
Cycle life	6000@80% DOD,25°C /0.5C	
Structure		
Dimensions (mm)	600*210*180	600*210*300
Weight (kg)	29	50.5
Protection grade	IP65	
Type of mounting	Stacking type	
Work environment		
Charging temperature °C	0~55	
Discharging temperature °C	-20~60	
Latitude	<2500	
Relative temperature (RH)	5~95% (no condensation)	
Communication		
communication interface	RS485	
Display	LED indicator shows the remaining power	

High-voltage Stacked Battery Pack

HTDESS HP 2.56 D1/HTDESS HP 5.12 D1

- This high-voltage battery features smaller and lighter individual modules, requiring simple and straightforward installation steps, enabling easy customization of battery combinations to meet your energy storage needs.
- With a reliable BMS system and high-performance balancing technology, the entire system achieves intelligence and flexibility, providing you with a more stable discharge platform.

ultra-large capacity

expandable modules

outstanding performance

safe and reliable

real-time monitoring

high voltage

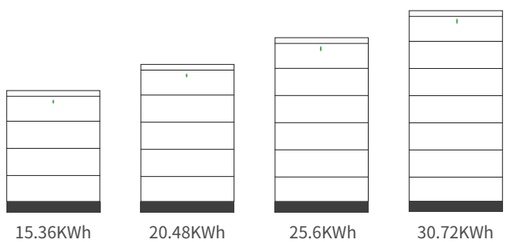
Smart Battery Management System

integrated photovoltaic energy storage

BAT-H2.56Aa

BAT-H5.12Aa

- Higher conversion efficiency
- Reduce reliance on grid
- Better adaption to large-load applications
- Higher flexibility
- Lower cost, larger system
- Faster charging and discharging
- Energy saving



Model	HTDESS HP 2.56 D1	HTDESS HP 5.12 D1
Rated voltage (Vdc)	51.2	51.2
Rated capacity (Wh)	2560	5120
Working voltage range (Vdc)	129.6-516.6	129.6-350.4
Charging voltage (Vdc)	58.4	58.4
Rated charging/discharging current (A)	25	50
Max. charging/discharging current (A)	50	100
Peak current (A)	100@3sec	200@3sec
Number of units in parallel	<10pcs	<6pcs
Cycle life	6000@80% DOD,25°C /0.5C	
Structure		
High-voltage box dimensions (mm)/weight (kg)	600×210×250/14	610×225×250/15
Battery cabinet dimensions (mm)/weight (kg)	600×210×160/27	610×225×250/52
Pedestal (mm)/weight (kg)	610×225×90/5	610×225×90/5.5
Top cover T (mm)/weight (kg)	600×210×50/2.5	610×225×50/3
Protection grade	IP65	
Type of mounting	Stacking type	
Work environment		
Charging temperature °C	0~55	
Discharging temperature °C	-20~60	
Latitude M	<2500	
Relative temperature (RH)	5~95%(W/O condensing)	
Communication		
communication interface	RS485 CAN	
Display	LED indicator shows the remaining power	