

Outdoor Cabinet Energy Storage System

HTHX-125LC



Product Introduction

The HTHX series outdoor energy storage cabinet integrates energy storage battery, modular PCS, energy management monitoring system, power distribution system, environmental control system, and fire protection system. The modular PCS design facilitates maintenance and expansion. The outdoor cabinet features front-access maintenance, reducing floor space and service aisles. It offers safe and reliable operation, rapid deployment, low cost, high energy efficiency, and intelligent management.

Product Features

Integrated & Controllable

System productization, integrating liquid-cooled battery, PCS and distribution, temperature control and fire protection, monitoring and communication, comprehensively controlling system operating status and risks.

Flexible Expansion

Rack-mounted modular PCS supports multiple units in parallel with good scalability; PCS module quantity and total battery power can be selected based on system capacity requirements for microgrids and other scenarios.

Robust & Reliable

Patented outdoor cabinet protection design with optimized cooling airflow path, sand-proof, dust-proof, and rain-proof; front and rear door access for maintenance, facilitating side-by-side arrangement of multiple systems on site, reducing floor space.

Intelligent & Efficient

Protection rating IP55. Intelligent liquid cooling temperature control system reduces temperature difference between cells within a PACK, ensuring battery temperature consistency, extending battery life, and reducing energy consumption.

Operation Strategies of Energy Storage System in Common Application Scenarios

Peak Shaving and Valley Filling

During off-peak electricity pricing periods, the storage cabinet automatically charges and remains on standby when full; during peak periods, it automatically discharges, achieving price difference arbitrage and improving the economics of the PV-storage-charging system.

PV-Storage Integration

Real-time collection of local load power. PV generation prioritizes self-consumption with excess power stored; when PV generation is insufficient to supply local loads, battery storage is prioritized.

Specifications

Parameter	HTHX-125LC
Battery Parameters	
Rated Capacity	261kWh
Rated Voltage	832V
Voltage Range	728V~936V
Battery Type	LiFePO ₄
Cell Configuration	1P260S
Cell Capacity	314Ah
Max Charge/Discharge Power	0.5P
Max Charge/Discharge Current	157A
PV Parameters	
Rated Power	100kW
PV Open Circuit Voltage Range	250~708V
PV Max Current	160A*2
Number of MPPTs	2
AC Parameters	
AC Rated Power	125kW
AC Rated Current	180A
AC Rated Voltage	400V, 3W+N+PE
AC Rated Frequency	50/60Hz
THDi	<3% (rated power)
Power Factor	-1 leading ~ +1 lagging
THDv	<3% (linear load)
General Parameters	
Protection Rating	IP55
Isolation Method	Isolation transformer
Standby Self-Discharge	<0.1% of rated power without transformer

Tangshan Haitai Digital Energy Technology Co., Ltd.

Address: Houhu Industrial Park, Yutian Economic Development Zone, Tangshan City, Hebei Province, China

Website: www.haitai-solar.com Email: dess@htsolargroup.com Tel: 400-083-5985

All data, parameters, and other information contained in this specification are subject to change by the company without further notice.
The final interpretation right of this document belongs to Tangshan Haitai New Energy Technology Co., Ltd.
HAITAI 20260510 EN