



BLUE STAR 1.0

HTDESS-125/256-LC

**Commercial & industrial
Energy Storage System**



Product Introduction

Haitai Digital Energy's commercial & industrial energy storage system integrates intelligent liquid cooling pack, highly precise battery management system (BMS), smart energy management system (EMS), PCS and fire protection system, etc. Energy capacity and power of this system can reach up to 256 kWh and 125 kW respectively. Modular design enables this system flexible scalability for various applications. The system can improve power supply quality with its voltage regulation, three-phase unbalance control and harmonious wave control features. With its load tracking, backup power supply and peak shaving features, this energy storage system can help businesses reduce electricity bills effectively, increase green energy consumption and maintain safe and stable system operations.

Product Features

- High efficiency liquid cooling technology, battery cell temperature difference $\leq 3^{\circ}\text{C}$.
- Intelligent monitoring system, integrated management of BMS and EMS, more intelligent and safe.
- All-in-one design, cabinet transportation, plug-in and ready to use.
- Built-in independent fire protection system.
- System Certifications: EN IEC 61000-6-2:2019, EN IEC 61000-6-4: 2019, IEC 62477-1: 2012/AMD1: 2016, EN 62477-1: 2012/A1: 2017, VDE-AR-N 4105: 2018-11, DIN VDE V 0124-100 (VDE V 0124-100) : 2020-06, EN 50549-1: 2019;
- Battery Certifications: UL1973, UL9540A, IEC61629, UN38.3, GB/T36276-2018, ROHS, MSDS;
- Module Certifications: UL9540A, IEC61629, UN38.3, FCC, EMC, EN62477-1, IEC60529.

Model

| | |
|------------------------------|--|
| AC(Grid tied) | |
| Mode | Load shifting,Peak-Valley arbitrage benefit,limited power supporting |
| Rated Power | 125 KW |
| Rated Voltage | 400 Vac,3P+PE |
| Max.Continuous Input Current | 180 A |
| Frequency | 50 Hz |
| Power factor | 0.8CAP~0.8 IND |
| THDI | <5% |

Battery Side

| | |
|--------------------------------|--|
| Cell Capacity | 256 KWh |
| Cell Type | LiFePO4 3.2V 280AH |
| Cycle Life | ≥6600 Cycles (0.5P,25°C, 80%EOL, 90%DOD) |
| Rated Voltage | 951.2 V |
| Voltage Range | 686.4 V~1043.9V |
| Charge/Discharge Efficiency | ≥90% |
| Max.Charging/Discharging Power | 128 A (0.5C) |

Basic Parameters

| | |
|-----------------------|---|
| AC/DC Start Function | ≤10 ms |
| Protection Function | Over/under voltage,Over current,Over/low temperature,SOC too high/low Low insulation impedance,Short circuit protection,etc |
| Operating Temperature | -30°C~+50°C (> 45°C derating) |
| Cooling | Air Cooling (PCS) +Liquid Cooling(Battery) |
| Max.Altitude | 2000 m |
| Fire Protection | Aerosol+C6F12O(Optional) fire extinguisher |
| Max.Efficiency | 92%(Auxiliary power is not included) |
| IP Level | IP55(Battery IP67) |
| Noise | < 70dB @ 25°C |
| Communication | RS485、CAN、Ethernet、Modbus、TCP/RTU |
| Dimensions(WxDxH) | 1030mmx1320mmx2480mm |
| Weight | 2700 kg |

*Above information is subject to our updates.