恒领新能源 Hengling New Energy

HLCP1000 Series Distributed Energy Storage Integrated Cabinet

HLCP1000S-0125/0261-B3-KFHB

System Features

The HLCP1000S series distributed energy storage system is a high-security, high-conversion-efficiency, and highly stable integrated solution developed by Zhengzhou Hengling for industrial and commercial applications, designed for peak shaving, valley filling, and demand management needs.

application scenarios

Small-scale industrial and commercial enterprises

Solar-Storage-Charging Station

Liquid Cooling

System Features

◎Outstanding Performance

Built-in dual-core architecture supporting various operating modes including VF, PQ, constant voltage, and constant power.

It offers various application functions including high-low voltage crossing, reactive power compensation, and harmonic mitigation.

◎Intelligent and efficient

The PCS employs a high-frequency onboard stacking design, low-loss control technology, and low-loss component selection to achieve high efficiency.

The PACK employs a low-flow-resistance channel design with a system temperature difference ≤3°C.

EMS Intelligent Scheduling Strategy: Maximum system efficiency ≥90%

◎Extreme Security

The PCS undergoes repeated "maximum temperature rise tests," enabling safer coexistence with heat.

A three-tier protection system comprising cluster-level short circuits, cluster-level overcurrent protection, and PCS-based active current limiting; a three-tier safety management architecture integrating BMU, BCU, and PCS; and real-time monitoring of equipment operating status.

PACK-level + Cabinet-level protection; Gas detection; Water and fire protection – comprehensive coverage

technical parameter

Product model	HLCP1000S-0125/0261-B3-KFHB
DC Side Parameters	
Cell Type	LFP3.2V/314Ah
Battery System Configuration	1P260S
Battery pack voltage range	728 ~ 936V
Rated capacity	261kWh
Across-Current Side Parameters	
Rated AC power	125kVA@45°℃
Rated AC current	180A
Working voltage	400V,-15%~+10%
Grid Frequency	50±5Hz
THDi	<3% (rated power)
Power factor	-1~1
Adjustable range of reactive power	-100% ~ 100%
Other Parameters	
System Maximum Efficiency	90%
Charging/Discharging Rate	≤0.5P
Depth of discharge	95%DOD
Number of cell cycles	6000 cycles/80% EOL @ RT
Mode of connection	Three-phase four-wire
Fire extinguisher system	Perfluorohexaneone (Cabinet-grade) + Aerosol (PACK-grade) + Gas detection system + Water-based extinguishing agent
	Interface Protection
Levels of protection	IP54
Noise grade	<80 dB at 1 m distance
Operating Temperature Range	-20 ~ +50°C (rated performance at 45°C)
Allowable humidity range	0 ~95% (no condensation)
Height	≤2000 meters
Cooling-down method	Liquid cooling, 50% ethylene glycol
Communication interface	RS485/Ethernet/CAN
Protocol	Modbus-RTU/Modbus-TCP/CAN2.0B
External Dimensions (Width * Depth * Height)	1000*1400*2450mm
Weight	<2600kg