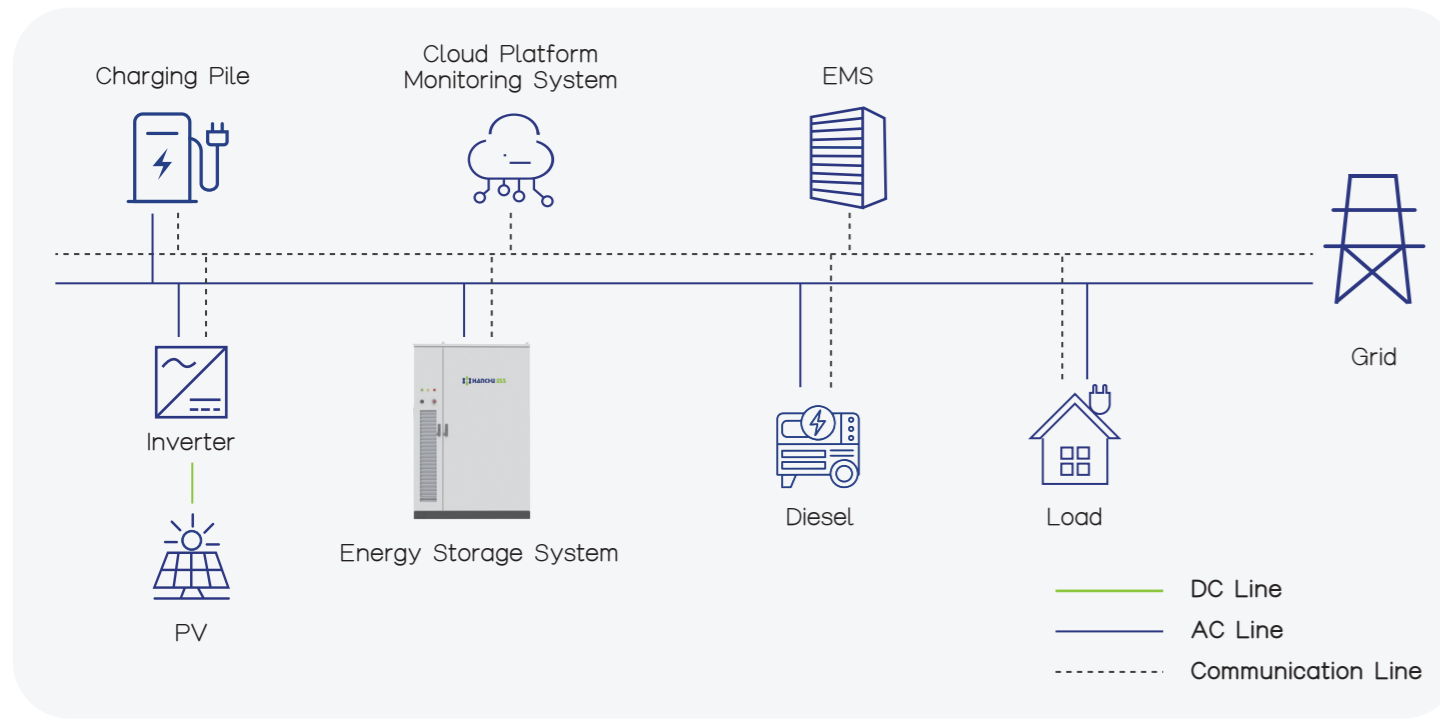


► System Topology



► About HANCHU ESS



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HANCHU ESS is one of the global leaders in energy storage and smart digital energy industry with complete systems all over the world and yearly capacity exceeds 8GWh. HANCHU ESS was established in 2018 by experienced experts in different industries including solar PV, energy storage and smart digital energy. Since the establishment, HANCHU ESS has been offering unique and reliable products and solutions in energy storage products, smart charging and digital energy sectors, etc.



C & I ESS

Leading C&I Energy Storage Solutions Provider

► CESS-105K215AL

Innovate · Enjoy

Smart Energy, Sustainable Solutions

Multiple C&I energy storage scenarios applicable

CESS series outdoor energy storage cabinet integrates battery; modular PCS; EMS; distribution system; environment control and fire-fighting system all together.

Using modular PCS, the system is easy to expand and maintain;

The cabinets can be front-maintained, reducing the service lanes and floor space. System also has features such as: top safety and reliability; quick deployment; low cost; high efficiency and intelligent management.



CESS-105K215AL

Key Benefits



Peak Shaving and Valley Filling:

During off-peak hours with lower electricity prices, the energy storage system automatically charges and remains on standby once fully charged. During peak hours with higher electricity prices, it discharges automatically, enabling energy arbitrage and improving overall electricity cost efficiency.



Dynamic Capacity Expansion:

The system charges the battery during periods of light load and discharges during heavy load, enhancing load-carrying capacity during peak periods and effectively increasing the capacity of the power distribution system.



Microgrid Integration:

By integrating with photovoltaic systems, charging systems, diesel generators, and other microgrid components, the system balances energy through protocol coordination. This improves renewable energy utilization and enhances the economic efficiency of microgrid systems.

Technical Specifications

Model	CESS-105K215AL
Battery Parameter	
Rated Capacity	215kWh
Rated Voltage	768Vdc
Max Charge & Discharge Current	140A
Battery Type	LFP(LiFePO4)
AC Parameter	
Rated AC Power	105kW
Rated Grid Voltage	400V 3P4W
Rated Grid Frequency	50Hz
Total Harmonic Distortion of Current (%)	<3%(Rated Power)
Power Factor	0.99
Conventional Parameter	
Protection Level	IP54
Operating Temperature	-30°C-50°C
Cooling Mode	Smart air cooling (rated cooling capacity 3.2kW)
Max Working Altitude	3000m(De-rating over 2000m)
EMS Communication Interface	Modbus TCP
Dimension (W*D*H)	1500*1490*2348mm
Weight	2500kg



Our Safety Approach

- Cell-level Safty**
 Employs high-safety, long-life LFP cells with steady performance to enhance product safety
- Millisecond-level Response Time**
 Cell-level monitoring system, BMS, and continuous real-time monitoring can deliver multiple layers of intelligent safeguards
- Cluster-level Active Protection**
 Each cluster voltage is independently controlled, eliminating parallel connection mismatches and circulating current risks. The fuse protection mechanism ensures safety at all times.
- Fire Monitoring System**
 Temperature and smoke detection; water-based fire-fighting system; perfluorohexanone fire suppression.



- Enhanced Protection**
 No fear of wind, sand, rain and snow and other inclement weather; Protection grade IP54

How Do We Ensure Safety?

To ensure the highest level of safety and customer satisfaction, **we have a dedicated team committed to supporting you at every stage.** Our manufacturing process is meticulously controlled and thoroughly inspected at every step, regardless of the degree of automation.

