

# HANCHU ESS

## CESS-105K215AL

### All-in-One Energy Storage Solution



Advanced Commercial &  
Industrial ESS Solutions

## Introduction & Overview

### What is CESS-105K215AL?

This outdoor energy storage cabinet integrates battery packs, PCS, HVC, EMS, environment control and fire-fighting system all together.

It supports max. 20 cabinets on-grid parallel connection, max. capacity is 2MW/4MWh.

#### Key Features

- ✓ 105kW PCS HVC
- ✓ EMS
- ✓ 215kWh Battery Packs
- ✓ Main Breaker
- ✓ Emergency Stop
- ✓ Fire-fighting system
- ✓ Water Leakage Sensor
- ✓ Smoke Detector

## Key Features

### C&I 215K All-In-One - AC Retro-Fit



#### Battery Specification

- Highest Quality LFP (LiFePO<sub>4</sub>)
- Max. Charge & Discharge 140A
- 15 Batteries Per Cabinet
- 16 Cells Per Battery
- AC Combiner Box Cabinet Required – 1 to 10 Cabinets
- Weight - 2500Kg



#### Protection

- Over Voltage Protection
- Over Discharge Protection
- Temperature Protection
- IP54 – Designed For Outdoor Installation



#### Smart Modular Energy Storage System

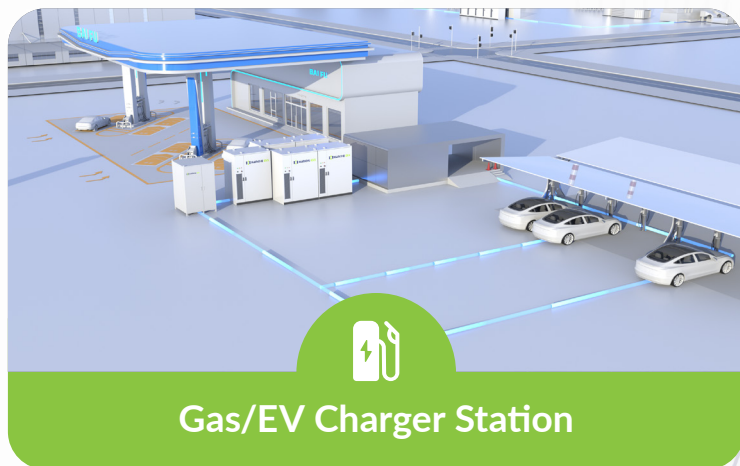
- 1 to 20 Cabinets in Parallel – (4 banks of 5)
- 95% DOD
- 5 Years Warranty / 6000 Cycles
- 100kWh Charge & Discharge
- EPS Ready – Up to 5 Cabinets
- Built-In Fire Suppression System
- Built-In Heating & Cooling System
- Built-In Water Sensor
- Built-In EMS Touch screen
- Phase Balanced Discharging
- Time of Use Charging & Discharging Settings
- Full Online Monitoring
- CT or Meter Option



# Applications & Scenarios

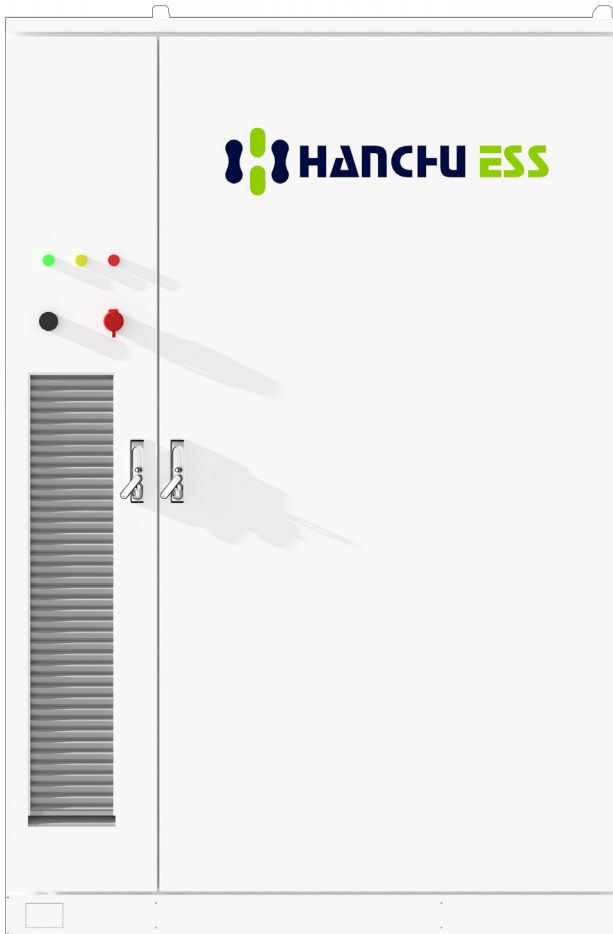
## Typical Application Scenarios

It matches various C&I scenarios and supports self consumption, peak-valley arbitrage (timing mode), peak-valley strategy, dynamic capacity increase and backup power guarantee.



# Technical Specifications

## General System Parameters



### DC Parameter

- Rated Battery Capacity: 215kWh
- Rated System Voltage: 768Vdc
- Battery Type: LFP (LiFePO4)
- Max. charge/discharge current: 140A
- Ingress Protection Degree: IP54
- Operating Temperature: -30°C~50°C
- Cooling: Smart air cooling (3.2kW)
- Altitude: 3000m (Over 2000m derating)
- EMS Communication: Modbus TCP
- Dimensions WxDxH: 1500\*1490\*2348mm
- Weight: Approx. 2500kg



### AC Parameter

- Rated AC Power: 105kW
- Rated Grid Voltage: 400V 3P4W
- Rated Grid Frequency: 50Hz
- THD of Current: <3% (Rated Power)
- Power Factor: 0.99

# Performance, Safety, and Design

## Superior Performance & Ultimate Safety



### Performance Features

- Flexible millisecond level response time
- Intelligent Air Cooling - Fan & Air conditioner
- All-in-one design
- Easy Installation



### Safety Features

- Fire fighting system (Perfluorohexane)
- Multiple protections by BMS
- 6000 cycles
- LFP CELL
- 14.3kWh per pack
- 896Wh, 280Ah (Per Cell)
- 51.2V Pack nominal voltage



# Energy Management & Scalability

## Scalable Energy Solutions

✓ Peak-valley arbitrage (Timing mode)

✓ Dynamic capacity increase

✓ Backup power guarantee

✓ Self-consumption optimization

“

Only 5 cabinets (0.5MW/1MWh) can be parallel when off-grid. Manual on/off-grid switch required.

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Our scalable modular system grows with your energy demands — from a single site to multi-megawatt deployments.

System Solutions Table:

Capacity	Cabinets	Combiner Cabinet	Meter	CT
0.5MW/1MWh	5	1 set (800A)	1	3
1MW/2MWh	10	1 set (1500A)	1	3
2MW/4MWh	20	2 sets (1500A)	1	3

Note: Only 5 cabinets (0.5MW/1MWh) can be parallel when off-grid, manually on/off-grid switch.



## **Join Hanchu ESS**

Today and Build a Perfect Partnership



### **Infinity Innovations Limited**

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