

# 2500kW/5225kWh AC/DC Integrated Container Energy Storage System



## Solution Overview

This solution is a integrated AC/DC containerized energy storage system developed by Jiangsu Koyoe Energy Technology Co., Ltd. As a backup power supply project, it supports both grid-connected and off-grid operation. The system features two parallel AC/DC integrated energy storage containers with a total input/output capacity of 2500kW and a storage capacity of 5225kWh. Each container delivers 1250kW of input/output power and 2612.48kWh of storage capacity, supporting both grid-connected and off-grid charging/discharging capabilities. The product adopts a non-enclosed dual-temperature control system (liquid cooling + intelligent air cooling), ensuring high system integration to meet long-term operational safety requirements. The integrated AC/DC design enhances overall stability while simplifying construction and installation. The system can be directly connected to grid points or voltage boost systems, effectively reducing overall project costs.

## Main Equipment

**2**X20' High Cube **2612.48kWh** AC/DC integrated containers  
(parallel configuration)



### Customer Value

1. Configure efficient backup power supply, dynamically adjust peak shaving and valley filling, build a solid power supply guarantee network, and achieve the dual goals of cost reduction and efficiency improvement.
2. Explore the arbitrage model of peak-valley price differences in power and tap the economic value of energy storage.
3. Promote the capacity expansion and upgrading of the power grid, promote new energy charging facilities, and solve the charging problem.



### Solution Features

1. Precise peak shaving and valley filling, significantly reducing electricity costs.
2. Equipped with uninterruptible power supplies to ensure stable power supply.
3. Intelligent real-time dispatching, enjoy a convenient and smart life.
4. Expand diverse energy storage applications to cover all scenarios of power consumption



### Koyoe Advantages

1. Independently developed high-performance lithium iron phosphate battery packs, which are safe, reliable and have a long service life.
2. Relying on self-developed EMS intelligent system, the system realizes fully automated and unattended operation.
3. Independently developed and produced core equipment such as BMS, PCS and EMS to ensure the coordinated and efficient operation of the system.



### Application Scenarios

According to different user needs, the operation mode of the energy storage system can meet various application scenarios such as grid peak regulation, auxiliary frequency modulation, backup power supply, peak and valley filling, power demand response, emergency power support, and reactive power compensation.



2500kW/5225kWh AC/DC Integrated Container Energy Storage System	
Power System Parameters	
PCS Total Power	125kW*20
Total Capacity of Energy Storage System	5224.96kWh
Nominal DC Voltage	832Vdc
Battery Voltage Range	650 ~ 936V
Battery Type	LFP
Fire-extinguishing System	Perfluorohexanone,Exhaust explosion-proof system, Water spray system
PCS Module Parameters	
PCS Model	KY-PCS125KH-A
Cooling Method	Smart Air Cooling
PCS DC Parameters	
Maximum DC Power	150kW
DC Voltage Range	650V~950V
Maximum DC Current	200A
PCS AC Parameters	
Rated AC Power	125kW
Wiring Method	Three Phase Five Wire
AC Overload Capacity	137kVA
Battery Box Parameters	
Nominal Energy	52.2496kWh
Battery Box Composition	1P52S
Rated Voltage	166.4V
Nominal Capacity	314Ah
Working Voltage	130 ~ 187.2V
Maximum Operating Temperature Range	Charge: 0 ~ 55℃; Discharge: -20 ~ 60℃