

# Jinko ESS

## 5 MWh Utility Scale Liquid-Cooled Energy Storage System

Jinko ESS represents the next generation of Utility-Scale Energy Storage Systems.

Boasting over 5MWh inside our customised 20 footcontainer, the new 5 MWh Energy storage has enhanced design features ranging from the inherent safety afforded by the LFP chemistry to the advanced liquid cooling, state-of-the-art “detection and response” as well as the intelligent provision of data for O&M services.

Modular design enables flexible deployment to satisfy a wide variety of demanding grid functions and emerging application scenarios, delivering true value to customers and users of the grid.



## Key Features



### Advanced Liquid “Cool”ed

Refined pipeline design, achieving pack temperature differential of  $\leq 2.5^{\circ}\text{C}$  to  $\leq 3^{\circ}\text{C}$ .

Multiple cooling modes and auxiliary controls, significantly reduce power consumption.



### Efficient & Reliable

PACK/RACK modular design minimizing downtime and boosting system reliability.

Advanced cluster-level management enhances RTE and overall system efficiency.



### Safe

Multi-level protection from cell to system provides early warnings of anomalies for enhanced safety and longer terms trends.

Dedicated ventilation systems triggered by gas, heat and smoke detectors are linked to fire suppression systems to ensure maximum protection.



### Intelligent

Smart control management, real time monitoring & online diagnostics ensure highly efficient O&M services.

Compact design with side-by-side layout enables enhanced energy density at every level.

## Applications



### BESS in Power Generation

Supports the wide scale deployment of renewable energy and provides ancillary services.



### BESS in Power Transmission & Distribution

Can be configured and equipped to provide energy for areas without electricity as part of a micro-grid.



### BESS in Power Networks

Enhances the power grid, reducing infrastructure costs and enables a stable network

## Specifications

### Battery Data

Type of Cell	Lithium Iron Phosphate (LFP)
Capacity (BOL)	5 MWh
Cell Parameters	3.2V/314Ah
Battery Voltage	1331.2V (nominal), 1497.6V (charge)
Max. Charge / Discharge Power	0.5P or 0.25P
Depth of Discharge	95%
Configuration of System	1P416S×12

### General Information

Dimensions	6058×2438×2896mm
Weight	≈42000 kg
Degree of Protection	Site specific, up to C5 (EN ISO 12944)
Cooling Method	Liquid Cooling
Environmental Temperature	-30~55°C
Environmental Humidity	≤95% RH, Non-Condensing
Altitude	≤2000m / <4000m (optional, derating)
IP Grade	IP55
Communication Interface	Ethernet / Modbus / Fibre (optional)
Communication Protocol	Modbus
Certificates	IEC62619, UL1973, UL9540A, IEC63056, IEC61000, UN38.3
Installation Location	Outdoor
Fire Suppression System	FM200 / Novec 1230 / Aerosol