

Jinko ESS

5 MWh Utility Scale Liquid-Cooled Energy Storage System



Next-Generation Utility-Scale BESS: Jinko ESS delivers cutting-edge energy storage solutions for large-scale applications.

High Energy Density: Over 5 MWh capacity housed within a compact, customised 20-foot container.

Enhanced Safety & Efficiency: Utilises inherently safe LFP battery chemistry and advanced liquid cooling technology.

Smart Monitoring & Control: Equipped with fully integrated Battery Management System (BMS), intelligent “detect and respond” capabilities and real-time data access for streamlined O&M services.

Modular & Scalable: Flexible architecture supports diverse deployment scenarios and evolving grid requirements.

Grid-Ready Performance: Designed to meet a wide variety of demanding grid services.

Key Features



Advanced Liquid Cooling

Refined pipeline design ensures all cells remain at optimal working temperature for maximum longevity.

Multiple cooling modes and auxiliary controls significantly reduce power consumption.



Efficient & Reliable

Pack/Rack modular design minimising downtime and boosting system reliability.

Optimised cell balancing for enhanced overall system efficiency.



Safe

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

Heat, gas and smoke detectors linked to alarms, ventilation and fire suppression systems 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 enabling higher energy density.

Applications



BESS in Power Generation

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



BESS in Power Networks

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



BESS in Distributed Energy

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



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
Configuration of System	1P416S×12

General Information

Dimensions	6058×2438×2896mm
Weight	≈ 42000 kg
Degree of Protection	Site specific, up to C5 available (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	Heat, Smoke & Gas Detection, Active Ventilation & Aerosol Fire Suppression System

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Note: Please read the safety and installation manual before using the product. We reserve the right of final interpretation. The specifications in datasheets are subject to change without notice.

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