EMS2000

Jinko Energy Management System

To address the challenges of data silos, revenue bottlenecks, and safety concerns in energy storage power plants, JinkoSolar's EMS2000 Station-Level Energy Management System was developed. Serving as the "intelligent brain" for storage systems, it goes beyond monitoring to proactively optimize plant operations through an open platform, AI intelligence, and panoramic insights. EMS2000 deeply empowers generation-side, grid-side, and commercial & industrial microgrid applications, ensuring ultimate safety while maximizing lifecycle value.



EMS (PPC) Coordination Controller



EMS Cabinet

AI-Powered Dispatch

Maximizes revenue through intelligent load forecasting and market trading while ensuring safety with cell-level AI for early thermal runaway warning.

Open & Compatible

Supports standard grid protocols (IEC 61850, etc.) and private device protocols, enabling seamless integration and protecting long-term investment.

High-Performance Data Engine

Handles GW-scale data with millisecond collection and high concurrency stability, providing a reliable real-time foundation for smart operations.

Panoramic Visibility

Offers 8-layer visualization and multi-terminal access (Web/APP/screen) with smart alarms for intuitive monitoring and simplified maintenance.

EMS System

Name	Jinko EMS2000
Configuration	Controller (Primary/Backup), Rack Server, Desktop Workstation, Power Supply, Switch, 4G Router, Fiber Terminal Box, Industrial PC, UPS 2h (Optional), Firewall (Optional)
Controller Function	● Grid-connected/Island mode switching, Anti-backflow protection, Over-capacity prevention, Demand control, PV consumption, PV-storage coordination, Time-of-use power control, Black start, Peak shaving and valley filling, Peak-valley arbitrage ● Peak shaving and frequency regulation, AGC/AVC dispatch, Primary frequency regulation, Inertia support, Dynamic voltage regulation, Constant active/reactive power control
Jinko Cloud Functuion	Real-time monitoring, Remote upgrade, Smart O&M
Certifications	GB/T 42726-2023、GB/T 7216-2016、GB/T 14598、ISO27001、IEC62443

System Interface

Quantity	2 Fiber Ports / 4 Ethernet Ports
DI/DO	16/16
IRIG-B Time Synchronization	1

Power Supply

Input Power	DC 120V~430V AC 85V~305V，50Hz
Power consumption	<20W

Data Access Capacity

Telemetry / Status Indication	1,000,000 / 1,000,000
Remote Control / Remote Adjustment	20,000 / 20,000

Communication Protocols

Communication Medium	Fiber or Ethernet
Supported Protocols	Modbus RTU, Modbus TCP，IEC61850 GOOSE，IEC61850 MMS，DNP 3.0，IEC60870-5-104

Environmental Parameters

Operating Environment	-30°C~60°C，5%~95%RH
Operating Altitude	4,500m

EMS Cabinet

Dimensions	800×600×2,260mm

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