

JANebula™

JA Digital Energy Solution



Smart



- Remote OTA
- Cloud Integration
- Resumable Transfer
- Auto Sync

Safe



- Security Compliance
- Unique ID
- Controlled Access
- Secure Sharing

Scalable



- Report Customization
- Open Protocols
- Elastic Scaling
- Plug-and-Play

Simple



- Layered View
- Unified Endpoints
- Flexible Integration
- Rapid Cloud Onboarding

Advantages



Cost Optimization
Peak-Valley Arbitrage
Demand Charge Reduction



Value Realization
Ancillary Service Participation
Grid Incentive Acquisition



Asset Longevity
Advanced DoD Regulation
Cell Balancing Technology



Operational Efficiency
Solar + Storage Integration
Real-Time Visibility, Optimal Dispatch

Features



Data Monitoring



Energy Optimization



KPIs Insight Dashboard



Alarm Insight Dashboard



Work Order Management



Reporting & Data Export

Technical Specifications

Model		JANebula™ Energy Platform
Smart Devices	Device Types	PV inverters, Combiner boxes, PCS, BMS, Charging piles, Charging guns, Meters, Auxiliary systems, Environmental monitors, etc.
	Maximum Access Capacity	Over 10 GWh (Scalable on demand)
Data Acquisition Environment	Acquisition Support	JANebula Edge 300 / 700, Third-party EMS controllers, Third-party monitoring systems, etc.
	Acquisition Interval	Sub-second level (≥ 600 milliseconds)
	Acquisition Method	3G / 4G / 5G, Wired broadband
Client Environment	Browser Version	Chrome 90+ (Recommended), Edge 90+, Firefox 88+, Safari 14+
	Mobile Device Version	Android 9.0+, iOS 15.0+
	Language	Chinese / English
	Browser Resolution	1920 × 1080 (Recommended)
	Mobile Device Resolution	2400 × 1080 (Recommended)
System Parameters	System Reliability	99.99%
	Storage Specification	> 10PB (Scalable on demand)

Energy Platform Modules

Modules	Features	Lite	Pro	APP
Visual Dashboard	Executive Dashboard		✓	
	Operations (KPI) Dashboard		✓	✓
IoT Core	IoT Model Management	✓	✓	
	Devices Registry	✓	✓	
Real-Time Monitoring	BESS Fleet Overview	✓	✓	✓
	Devices-level Monitoring	✓	✓	✓
Alerts Center	Real-Time Alert Hub	✓	✓	✓
	Alerts Policy Engine	✓	✓	✓
Intelligent O&M	Work Orders Management		✓	✓
Performance Analytics	Revenue & Energy Analytics	✓	✓	
	Site-specific Trends Analytics		✓	
Strategy Optimization	Zero Export Control	✓	✓	✓
	Over-limit Demand	✓	✓	✓
	Peak Shaving & Valley Filling	✓	✓	✓
	Dynamic Capacity Expansion		✓	✓
	Solar + Storage Synergy		✓	✓
ToU	ToU Management (Time-of-Use, ToU)	✓	✓	
OTA	Devices OTA Updates(Over-the-Air,OTA)		✓	

JANebula™

Wall-mounted Energy Storage Controller



Advantages



Milliseconds of Speed with Local Reliability



Total Awareness with Layered Protection



Continuous Control with Smooth Transition



Adaptive Intelligence with Predictive Optimization

Features



Zero Export Control



Over-Limit Demand



Peak-Valley Arbitrage



Dynamic Expansion



Solar + Storage Synergy



Backup Power Mode



Manual Setpoint

Technical Specifications

Model	JANebula™ Edge 300
CPU	Cortex-A55 @ 2.0GHz / 1.8GHz
RAM	4GB DDR4
Memory	32GB eMMC
LTE Module	1 × 4G module
Ethernet ports	4 × Ethernet ports, supporting Modbus-TCP and IEC 60870-5-104 protocols.
Serial ports	10 × isolated serial ports: 8 × RS-485, 2 × RS-232, supporting Modbus RTU protocol.
CAN	2 × CAN bus interfaces,
DI	10 × channels of digital inputs
DO	8 × channels of relay outputs
USB	1 × Type-A port
Console	2 × Type-C port
Rated Voltage	24 Vdc
Dimensions (W×H×D)	200 × 43.8 × 167 mm, Wall-mounted installation
Operating Temp	-10 °C to +55 °C
Compliance Standard	IEC 61010-1:2010, AMD1:2016; EN 301 489; EN 18031-1:2024; EN IEC 62311:2020 GB/T 13729-2019 EMC TEST; GB/T 17626.29-2006

JANebula™

Rack-mounted Energy Storage Controller



Advantages



Industrial-Grade Rack



Open Interface Ecosystem



Cloud-Based Operations



AI-Driven Scheduling

Features



Zero Export Control



Over-Limit Demand



Peak-Valley Arbitrage



Dynamic Expansion



Multi-Energy Synergy



Backup Power Mode



Manual Setpoint

Technical Specifications

Model	JANebula™ Edge 700
CPU	Cortex-A55 @ 2.0GHz / 1.8GHz
RAM	4GB DDR4
Memory	32GB eMMC
LTE Module	1 × 4G module
Ethernet ports	4 × Ethernet ports, supporting Modbus-TCP and IEC 60870-5-104 protocol
RS485	8 × RS-485, supporting Modbus-RTU protocol
RS232	2 × RS-232, supporting Modbus-RTU protocol
CAN	2 × CAN bus interfaces
DI	10 × channels of digital inputs
DO	8 × channels of relay outputs
USB	1 × Type-A port
Console	2 × Type-C port
Rated Voltage	220 Vac
Dimensions (W×H×D)	484 × 44 × 260 mm, Rack-mount Installation
Operating Temp	-10 °C to +55 °C



| Advantages



Intuitive Visualization



Precision Control



Proactive Safety



Open Architecture

| Features



Data Acquisition



Real-Time Monitoring



Energy Optimization



Edge-Cloud
Collaboration



Dynamic Protection

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