YAHUA

LIOUID-COOLING ENERY STORAGE CABINET

YA-125K/Y261

Cost-effective

• In-house developed battery cells: Automotive-grade Class A Premium+ cells with 8,000+ cycle life, featuring comprehensive coverage of independent temperature monitoring points;
• System protection: Millisecond-level fuse mechanism, with early warning for over 200 risk factors across the entire battery compartment

Performance Innovation

•Bionic liquid cooling: Pioneering AI-powered bionic intelligent frequency conversion technology, with a temperature difference between battery cells of ≤2.1°C;
•Architectural upgrades: 38.1% reduction in charging station footprint and a 55.9% increase in energy density;
•Algorithm optimisation: CNN+LSTM load forecasting and a 96-time-point flexible charging and discharging strategy;

Digital-Physical Cloud Control

• Minimalist operation: One-click self-test, automatic installation and commissioning in 10 minutes, with support for OTA remote updates;
• Rapid response: Interconnection with the smart cloud platform enables fault recording and real-time diagnostics;
• Intelligent dispatch: A multi-master coexistence system with a floating centre architecture, featuring flexible data backup via cloud-edge mirroring

Matrix Management

•Flexible Deployment: Operating environment -30–60°C, C3 anticorrosion resistance, IP54 protection, noise level ≤70 dB;
•Diverse Scenarios: Supports off-grid and grid-connected photovoltaic-storage-load applications, with integrated DC-coupled dispatch;

Technical Specification

Battery Cabinet	
Cell Type	LFP (314Ah)
Pack Configuration	1P52S*5
Number of battery modules	5
Rated DC Voltage [V]	832 V
DC Voltage Range [V]	728 V ~ 936 V
Max. Charge/Discharge Rate	0.5 C
Max. Depth of Discharge	90% ~ 100%
Cycle Life	≥ 8000 cycles

AC Side	
Rated Output Power [KW]	125
Rated AC Voltage [V]	400
AC Voltage Range [V]	340 ~ 460 (±15%)
Grid Type	3W+N+PE / 3W+PE
Rated Frequency	50 Hz / 60 Hz
Power Factor	1 (leading) ~ 1 (lagging)
THDi	< 2%
DC Ratio	< 0.5%

General	
Max. Round Trip Efficiency	≥ 90% (System) / ≥ 98.5% (PCS)
Communication	Ethernet (LAN), RS485, CAN
Fire Suppression System	Perfluorohexanone (PACK level)
Ingress Rating	IP54
Cooling	Intelligent Liquid Cooling
Operating Temperature	-30℃ ~ 60℃
Anticorrosion Rating	C3
Humidity	0 ~ 95% RH (Non-condensing)
Altitude [m]	≤ 2000 m
Dimensions (W*D*H) [mm]	1000 × 1400 × 2380 mm
Weight [kg]	~2500 kg
Safety/EMC	IEC / GB standard
Grid code	IEC / GB standard