ENERGY STORAGE BMS | CHINA 2025

China Energy Storage BMS Top 10 in 2025

A concise shipment-based reference for distributors, battery manufacturers, importers and system integrators.

The direct answer

CATL ranks No. 1 overall by 2025 China energy-storage BMS shipment capacity. GaoTe Electronics ranks No. 1 among independent third-party BMS manufacturers.

Use this guide to build a BMS supplier shortlist. Move from the manufacturer name to the exact BMS model, cell platform, communication setup and battery factory before requesting a final quotation.

This is a condensed reference derived from the CVC ranking article. It keeps the ranking table, calculation rules, BMS basics and quotation checks that matter at the first sourcing stage.

Top 10 ranking

Rank	Manufacturer	Business type	Base	2025 share / position	Energy-storage BMS strength
1	CATL	Integrated cell, system and BMS	Fujian	About 31.5%	Full-stack control and liquid-cooled large-scale storage
2	BYD	Integrated cell, system and BMS	Guangdong	About 19.3%	Blade Battery BMS, grouping efficiency and thermal consistency
3	Huawei Digital Power	Integrated system and BMS	Guangdong	About 11.2%	Distributed BMS, AI control and digital energy management
4	GaoTe Electronics	Independent third-party BMS	Zhejiang	Third-party No. 1	Active balancing, safety diagnosis and large-storage BMS
5	CALB	Integrated cell and BMS	Jiangsu	Top 10	LFP cells, shared storage and long-cycle applications
6	EVE Energy	Integrated cell and BMS	Guangdong	Top 10	Large cylindrical cells and overseas energy-storage growth
7	Sungrow	Integrated inverter, system and BMS	Anhui	Top 10	PCS, inverter and energy-storage system integration
8	LIGOO	Independent third-party BMS	Guangdong	Top 10	Residential and C&I; BMS with flexible adaptation
9	KELONG	Independent third-party BMS	Guangdong	Top 10	High-voltage BMS for grid-side large storage
10	Genway	Independent third-party BMS	Guangdong	Top 10	Low-voltage residential to high-voltage utility applications

How to read this table: CATL, BYD, Huawei Digital Power, CALB, EVE and Sungrow are evaluated through integrated cell, battery or ESS capabilities. GaoTe, LIGOO, KELONG and Genway are independent third-party BMS suppliers.

How this ranking was calculated

The core metric is 2025 China energy-storage BMS shipment capacity. Utility-scale storage carries 60% of the market weight, C&I; storage 25% and residential storage 15%. EV BMS and consumer-electronics BMS shipments are excluded.

The ranking combines integrated manufacturers and independent third-party BMS suppliers. Shipment and market-share ranges were cross-checked against industry research, company annual reports and investor materials, tender and project records, channel research and the 2025 China energy-storage market baseline.

The listed percentages are rounded reference values. This is a shipment comparison, not a certification or product-quality award.

What a BMS does in an energy-storage battery

A battery management system monitors cell voltage, temperature, current and state data. It balances cells, calculates SOC and SOH, controls charge and discharge limits, and sends protection or fault signals to the inverter and energy-management system.

In a storage battery, the BMS is the control layer between the cells, the battery pack and the wider ESS. Its communication with the inverter and system controller affects usable capacity, power availability, fault response and long-term stability.

Keep the supply layers separate

Supply layer	Main responsibility	Record in the quotation
BMS manufacturer	Cell monitoring, balancing, protection, firmware and communications	BMS model, voltage range, current limits, protocol and firmware
Battery factory	Cell matching, pack structure, enclosure, certification and warranty	Finished battery model, BOM, certification holder and service route
ESS system supplier	Inverter, EMS, commissioning and system integration	System topology, inverter model, commissioning and after-sales responsibility

A BMS brand, a finished battery brand and a complete ESS brand are different supply references. CVC can help connect the BMS route with a suitable battery factory and inverter package.

Buyer checklist before a battery quotation

Record these fields in the first supplier comparison sheet:

Check	Record	Why it matters
BMS identity	Exact model, voltage class, continuous and peak current, protocol and firmware	The name of the manufacturer does not identify the operating limits of the proposed BMS.
Cell and pack fit	Cell model, pack configuration, nominal voltage and protection limits	The BMS must match the cells and the series-parallel design.
Inverter communication	Inverter model, CAN / RS485 profile and approved firmware	Communication affects charge limits, alarms and usable power.
Commercial route	Factory, certification holder, warranty issuer, MOQ and lead time	These fields define repeat supply and after-sales ownership.

Ranking data sources

The ranking uses these source organizations and market references for industry and project cross-checking:

GGII - Gaogong Industry Research Institute: https://www.gg-ii.com/
GGII research methodology: https://www.gg-ii.com/research.html
China Energy Storage Alliance / CNESA: https://www.esresearch.com.cn/
CNESA DataLink: https://research.cnesa.org/report/info/?id=6180
National Energy Administration: https://www.nea.gov.cn/20260130/50f657ce87f848e1a9a1861d1fd9aa23/c.html

The source organizations provide the market and industry evidence used for cross-checking. The TOP10 order follows the metric, scope and weighting rules stated above.

CVC sourcing support

CVC helps distributors, battery manufacturers and system integrators compare BMS routes, identify suitable battery factories, review product documents and coordinate export quotations for energy-storage projects.

Send these project details	Battery capacity, cell model, BMS preference, inverter model, target market, order quantity and delivery requirement.
Need a BMS-matched battery?	CVC can connect your project with suitable BMS, battery and inverter suppliers.

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