

CIC 灼识



Global Intelligent Robot Industry Report

© 2026 CIC. All rights reserved. This document contains highly confidential information and is solely for the use of our client.

No part of it may be circulated, quoted, copied or otherwise reproduced without the written consent of CIC.

Executive Summary

This report analyzes the global intelligent robot industry, covering its product classification, market size and 2030 forecasts for three robot segments, while it identifies four core growth drivers, highlights China's key industrial position, and underscores high entry barriers.

Table of Contents

1. Market Overview

1.1 Market Definition

1.2 Market Size of Robots

1.3 Market Size of Intelligent Robots

1.4 Market Size of Industrial Intelligent Robots

2. Key Growth Drivers

2.1 Key Drivers

2.2 Future Outlook

1. Market Overview

1.1 Market Definition

A robot is a programmable mechanical device capable of two or more axes of movement. Since the 2010s, advances in AI, machine learning and large-scale data processing have driven the industry's rapid evolution from fixed-function machines to intelligent robots with perception and decision-making capabilities. As defined in the 2023 White Paper on Intelligent Robot Technology and Industry Development, intelligent robots simulate human cognition and physical coordination via such technologies to exhibit intelligent behaviors.

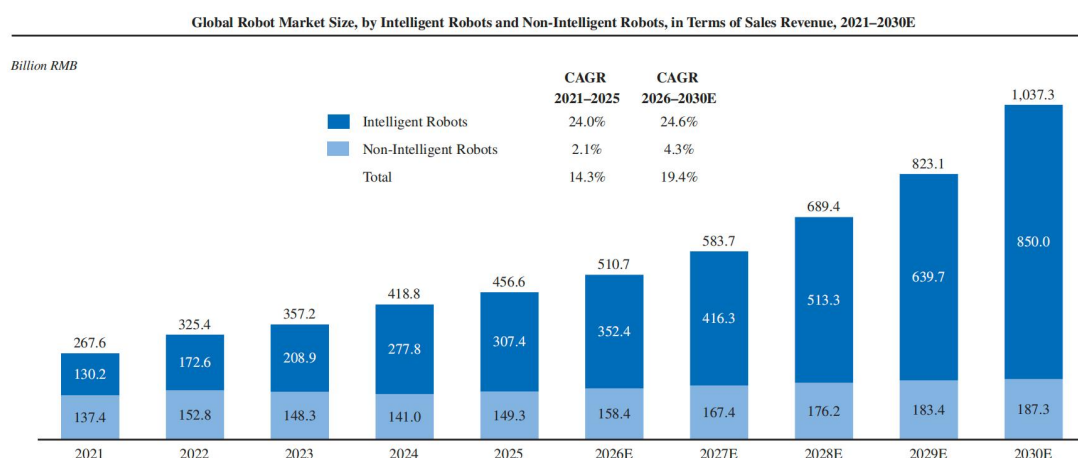
By functionality and application scenarios, intelligent robots fall into five primary categories: (i) AMRs, which are primarily used for indoor transport of goods, (ii) cobots with six or more axes, which are designed to work safely alongside humans, (iii) humanoid robots, which are built to replicate human movement and interaction, (iv) commercial service robots, which assist with tasks such as customer service, delivery, cleaning or healthcare tasks in public settings, and (v) others, which mainly refer to specialized robots.

1.2 Market Size of Robots

In revenue terms, it rose from RMB267.6 billion in 2021 to RMB456.6 billion in 2025 at a 14.3% CAGR, and is projected to reach RMB1,037.3 billion by 2030 with a 19.4% CAGR from 2026 to 2030. In sales volume, it grew from 1,180 thousand units to 2,084 thousand units in 2021–2025 (15.3% CAGR), and is expected to expand to 5,214 thousand units by 2029, representing a 21.4% CAGR over 2026–2030.

1.3 Market Size of Intelligent Robots

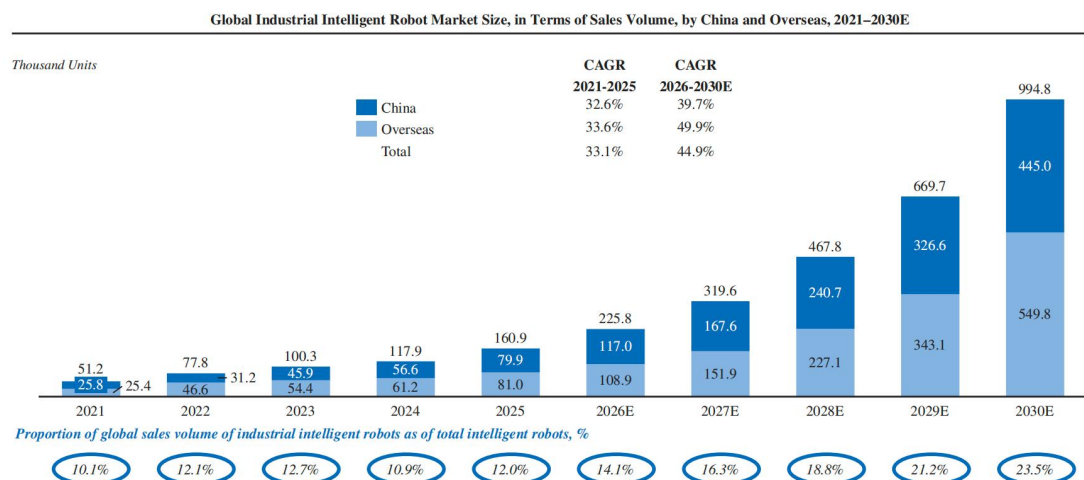
Driven by AI advancements, rising labor costs, skilled worker shortages, and enterprises' growing need to boost operational efficiency, productivity and process reliability, the global intelligent robot industry has entered a rapid growth phase. In revenue terms, the global market grew from RMB130.2 billion in 2021 to RMB307.4 billion in 2025 at a 24.0% CAGR, and is projected to reach RMB850.0 billion by 2030 with a 24.6% CAGR from 2026 to 2030. In sales volume, it expanded from 506.2 thousand units to 1,341.1 thousand units during 2021–2025 and is forecast to rise to 4,237.9 thousand units by 2030.



Source: IFR, Mobile Robot and AGV/AMR Industry Allianc, CIC Reports

1.4 Market Size of Industrial Intelligent Robots

Industrial intelligent robots refer to intelligent robots applied in the industrial scenarios, mainly including AMRs and cobots that deliver precision assembly, quality inspection and other core functions in manufacturing environments. The global industrial intelligent robot market maintains robust growth, outpacing the non-industrial segment. In revenue terms, it expanded from RMB10.0 billion in 2021 to RMB28.6 billion in 2025 with a 29.9% CAGR, and is projected to reach RMB198.5 billion by 2030, representing a 48.6% CAGR from 2026 to 2030. In shipment volume, it grew from 51.2 thousand units in 2021 to 160.9 thousand units in 2025 at a 33.1% CAGR, and is expected to rise to 994.8 thousand units by 2030 with a 44.9% CAGR over 2026–2030.



Source: IFR, Mobile Robot and AGV/AMR Industry Alliance, CIC Reports

Besides, China is a key hub for the global intelligent robot industry. Its total market reached RMB114.3 billion in 2025 and is forecast to hit RMB287.2 billion by 2030, accounting for over 30% of the global market. The industrial intelligent robot segment grows faster, with its market size expected to rise from RMB9.8 billion in 2025 to RMB67.4 billion in 2030, leading global growth. Driven by industrial transformation, policy support and industrial chain synergy, China will hold around 34% of the global industrial intelligent robot market in the next five years.

2. Key Growth Drivers

2.1 Key Drivers

Advancements in AI

The rapid development of AI is revolutionizing the intelligent robot industry. By integrating deep learning, reinforcement learning, natural language processing and computer vision, AI has significantly enhanced robot autonomy, learning and decision-making capabilities, enabling intelligent robots to transition from specialized robots to general-purpose robots.

Mature Supply Chains and Cost Savings

With the localization of hardware and the scale-up of production, hardware costs have significantly decreased, and lead times have shortened. On the software side, the rapid iteration of algorithms and the rise of open-source ecosystems have improved the stability of intelligent robots and lowered development costs.

Upgraded Demand for Customization

As the demand for intelligent robots grows, integrators and end customers are shifting from seeking single-function machines to full-scale, customizable solutions. Integrators nowadays require

more efficient tools to streamline deployment and maintenance processes, while end customers seek highly intelligent and bespoke services.

Government Support

Governments worldwide provide robust support for the intelligent robotics industry through favorable policies and dedicated initiatives. China, the United States and the European Union have all introduced national-level plans or funding programs for the sector. Multiple Chinese authorities have issued a series of industrial policies and action plans, systematically advancing technological breakthroughs, industrial development targets and multi-sector scenario deployment to drive the growth and commercialization of the robotics industry.

2.2 Future Outlook

Driven by rapid AI advancements, shrinking labor pools, and an upgraded demand for custom solutions, the global intelligent robot industry is positioned for explosive growth. The industrial intelligent robot segment, particularly AMRs and cobots, is expected to outpace non-industrial sectors significantly. Within this expanding landscape, China will continue to anchor its status as a core global hub, leading

growth through strong policy support and industrial chain synergy. However, the industrial intelligent robot sector features prominent entry barriers. New entrants need to surmount a set of comprehensive thresholds covering technological strength, product layout, operational reliability and brand credibility, all of which require long-term accumulation and thus consolidate the competitive edge of incumbent leading players in the market.



About CIC

CIC is a professional consulting firm offering tailored end-to-end support across the full investment and financing lifecycle. The firm boasts a world-leading track record in guiding landmark first-in-sector IPOs across global markets, alongside unrivaled reach and in-depth coverage capabilities across specialized niche market segments.

CIC helps enterprises refine scalable business models and craft compelling capital narratives to enable seamless access to global capital markets, while serving as a trusted due diligence partner to investment institutions. It delivers granular industry insights and direct access to subject matter experts, empowering clients to identify high-value opportunities and mitigate critical risks effectively.

CIC team maintains deep, real-time market intelligence across a diverse set of sectors—including financial services, artificial intelligence, big data, internet, high technology, healthcare, education, entertainment, consumer goods, transportation and logistics, energy and power, environmental and building technology,



CIC Reports | Global Intelligent Robot Industry Report

chemicals, industrial manufacturing, and agriculture—delivering unparalleled access to sector-specific, actionable insights.

CIC Reports & Industry Overview

At CIC, we employ a rigorous, multi-method research framework, combining primary and secondary sources to underpin our analysis. Primary research involves in-depth engagements with industry thought leaders and practitioners, particularly in supply chain finance. Secondary research synthesizes publicly available datasets from authoritative bodies, including the National Bureau of Statistics of the People's Republic of China, the State Administration of Financial Regulation (SAFR, formerly the China Banking and Insurance Regulatory Commission), the China Securities Regulatory Commission (CSRC), and public company filings. We apply proprietary data analytics frameworks to process collected information, validating findings through cross-referencing data from multiple research streams to ensure analytical rigor and reliability.

All statistical data presented is verifiable and grounded in information available as of the date of this report.



CIC Reports | Global Intelligent Robot Industry Report

Extracts are refined summaries of in-depth CIC industry research reports, highlighting supply and demand trends, key growth drivers, R&D trends and future outlook, etc. of various segmented fields, integrating multi-dimensional insights such as expert interviews, market surveys and industry data analysis.

Disclaimer

This report (the "Report") is prepared by CIC based on information available as of the date hereof. The Report is furnished strictly for informational and reference purposes only and is not intended to, nor shall it be construed as, being definitive or conclusive. Nothing contained herein shall constitute or be deemed to constitute investment advice, a recommendation, or an offer, solicitation or inducement to engage in any investment activity. CIC hereby expressly disclaims any and all liabilities for any loss, damage or claims of any nature howsoever arising, whether directly or indirectly, from the use of or reliance upon any information contained in the Report.



CIC Reports | Global Intelligent Robot Industry Report

Contact CIC

For more information about this report or to learn more about CIC services, please visit [CIC official website](#), or email us at marketing@cninsights.com.