Omdia Market Radar: General-purpose Embodied Intelligent Robots, 2026

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Summary

Catalyst

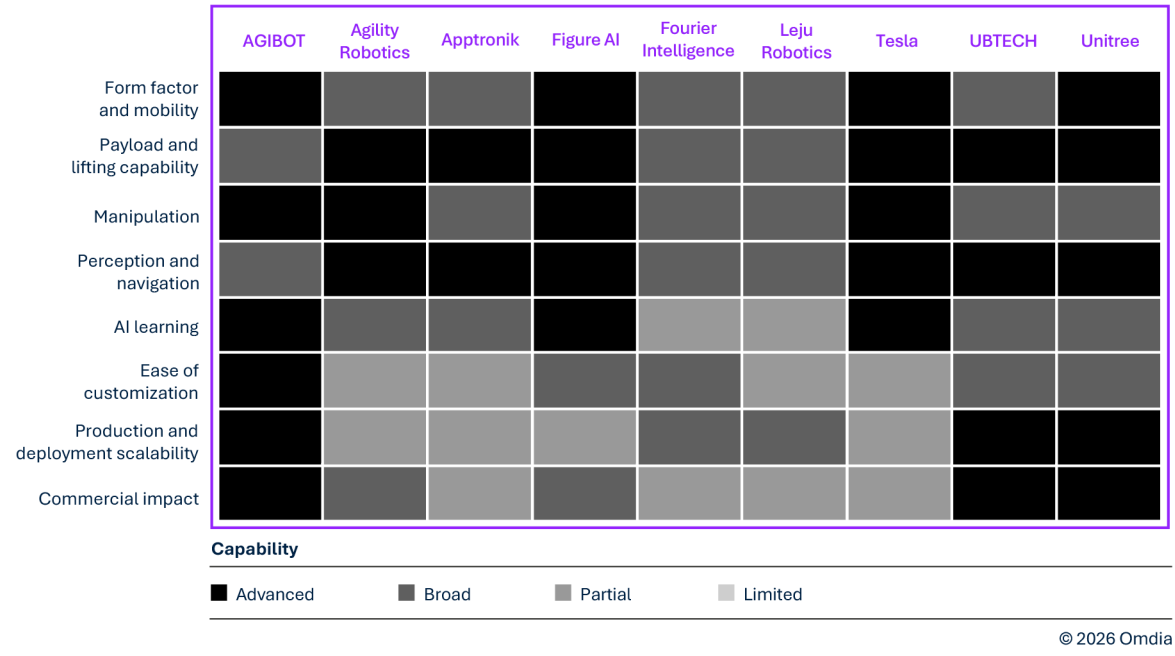
The integration of artificial intelligence (AI), in particular generative AI (GenAI), with robotics has ushered in a new era of embodied intelligence, enabling robots to perform complex tasks with human-like adaptability and precision. This evolution has led to the development of general-purpose, embodied intelligent robots that are versatile, interactive, and capable of learning and adapting to dynamic environments. Thanks to these advancements, industries are increasingly adopting humanoid robots for applications ranging from manufacturing and logistics to healthcare and customer service.

Globally, key players, such as Agility Robotics, Apptronik, Figure AI, and Tesla, are leading this trend. Meanwhile, the competitive landscape in China is more diverse, with vendors such as AGIBOT, Fourier Intelligence, Leju Robotics, UBTECH, and Unitree driving innovation across both consumer and enterprise markets. This report provides a global assessment of the differentiations and unique selling points of major general-purpose embodied intelligent robots.

Market snapshot

Figure 1 illustrates the vendors Omdia explored as part of this research, highlighting the capability categories that were analyzed. The definitions, assessment process, and vendor information are described in more detail later in this report.

Figure 1: Omdia heatmap for general-purpose embodied intelligent robots



Source: Omdia

Key messages

- Chinese vendors are setting benchmarks in large-scale production, as they are reaching thousand-unit shipments in a short period, enabling the deployment of tens of thousands of robots annually.
- Vendors are heavily investing in cutting-edge AI models, such as AGIBOT's GO-1, Figure AI's Helix, and Unitree's UnifoLM-WMA-0, which enable advanced capabilities like complete body control and manipulation, imitation learning, multi-step reasoning, and continuous self-learning.
- Openness is a key theme in the industry as companies like AGIBOT and Unitree emphasize openness by offering developer-friendly platforms and open source datasets, fostering innovation and collaboration.
- As more robots are increasingly adopted for repetitive tasks in manufacturing, logistics, and customer service, vendors are offering flexible robot as a service (RaaS) models that provide an all-inclusive package (robots, software, accessories, services) delivered through a subscription.
- Innovations, such as decentralized swarm intelligence systems, multimodal reasoning models, and humanoid robot app stores, are shaping the future of robotics, enabling greater collaboration and modular functionality.

Omdia view

The evolution of the general-purpose embodied intelligent robot went through a few critical phases of development:

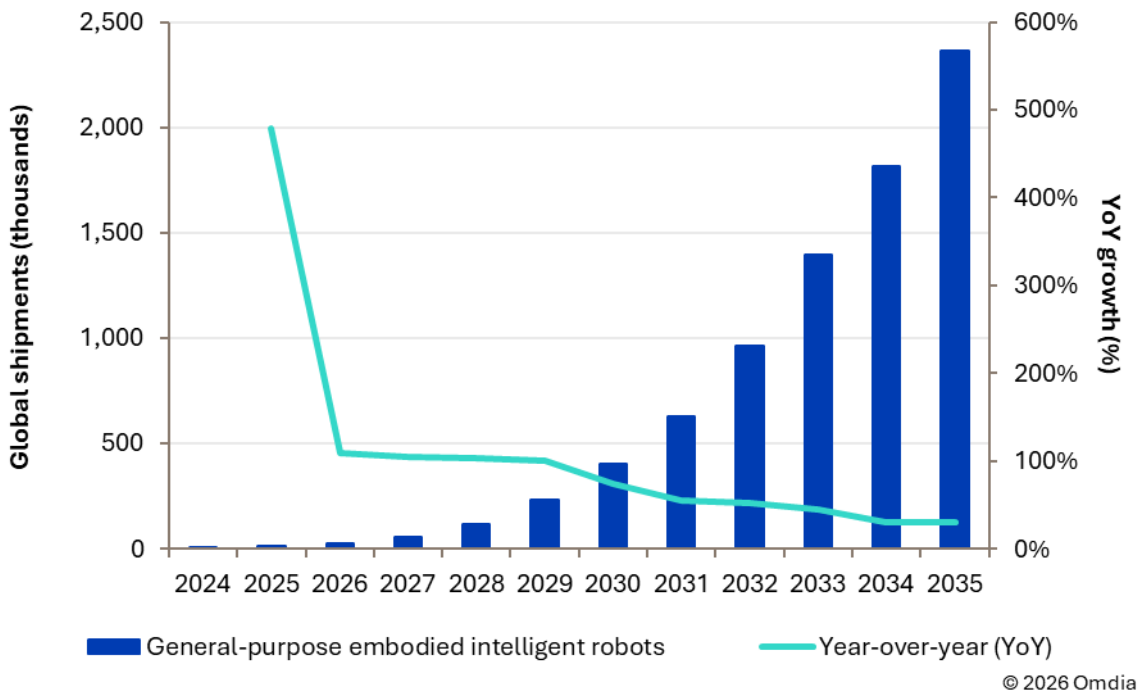
- **2000s–10s**: This period is the dawn of humanoid robotics. Boston Dynamics' Atlas showcased dynamic acrobatics, while others, such as Sony's QRIO and NASA's Robonaut, focused on specific tasks. However, overall progress remained limited to scripted behaviors based on rule-based engines and decision trees, with general-purpose adaptability lagging because of hardware costs, AI technology constraints, and poor hardware-software integration.
- **2020–22**: Deep learning and reinforcement learning improved locomotion and manipulation. Tesla unveiled the Optimus prototype, and the concept of embodiment intelligence started to gain significant traction, bridging GenAI with physical robots.
- **2023–25**: Foundation models such as large language models (LLMs), vision language models (VLMs), and vision-language-action models (VLAMs) brought advanced multimodal reasoning, task adaptation, and natural interaction. Startups began launching new models at a rapid pace. In the West, commercial breakthroughs arrived through key pilots with major manufacturers (BMW with Figure, Mercedes-Benz with Apptronik, and Tesla Optimus in Gigafactories). Meanwhile, in China, a combination of favorable policies, infrastructure support (including research institutes and humanoid robotics training centers), and public-private investments and partnerships has led to the mass production of thousands of units, shipped by

companies such as Unitree and AGIBOT. Events such as the Humanoid Robot Half-Marathon and the World Humanoid Robot Games further accelerated progress.

By late 2025, embodied intelligence shifted from prototypes to scaled pilots, driven by Chinese volume production and US AI innovation. True general-purpose robots—autonomously handling diverse, unstructured tasks—remain emerging. Still, the convergence of AI models, dexterous hands—16 degrees of freedom (DoF) hands—and end-to-end imitation and self-reinforcement learning has made them viable for industrial, service, and eventual household roles, marking the dawn of widespread embodied AI.

As such, Omdia forecasts the global market for general-purpose embodied intelligent robots to grow exponentially from 3,000 units in 2024 to 2.6 million units shipped in 2035, with a CAGR of 85%.

Figure 2: Global general-purpose embodied intelligent robot forecast, from 2024 to 2035



Source: Omdia

In 2026, the industry is poised for exponential growth, driven by advancements in AI, hardware, and market demand. Key predictions include:

- Full body control and advanced decision-making: The breakthrough in foundation models, especially in the introduction of full body control through the vision language latent action model (ViLLA), has significantly improved robots' task resolution capabilities. ViLLA integrates high-level task understanding and low-level robotics control into a single model, reducing response time and latency and making robots much more agile and efficient.
- Increased adoption in service industries: As robots become more affordable and capable, there will be widespread adoption in industries like healthcare, hospitality, and education.

- Enhanced human-robot collaboration: Future robots will prioritize functional safety and intuitive interaction, enabling seamless collaboration in shared spaces.
- Scalability and mass production: Vendors like Figure AI and Agility Robotics are setting benchmarks for large-scale production, signaling a shift toward mainstream adoption.
- AI-driven personalization: Foundation models will enable robots to adapt to individual user preferences, making them indispensable in homes and workplaces.

Recommendations

Recommendations for enterprises

- **Identify high-impact use cases**: Enterprises should identify areas where humanoid robots can deliver the most value, such as repetitive tasks in manufacturing, material handling in logistics, or customer interaction in retail and hospitality.
- **Leverage AI-driven functionality**: Invest in robots with advanced AI capabilities, such as adaptive learning, multi-modal interactions, and agentic AI systems, to ensure flexibility across diverse tasks and environments. Ensure that robots deployed in shared spaces are equipped with natural-language-based human-robot interaction capabilities to foster seamless collaboration between humans and robots.
- **Evaluate total cost of ownership (TCO)**: Consider not only the upfront cost of humanoid robots but also factors like ease of development, deployment scalability, and maintenance. Choose robots that offer robust developer platforms and a software development kit (SDK) for customization to meet specific operational requirements.
- **Monitor market trends and vendor roadmaps**: Stay informed about advancements in robotics and vendor production capabilities. Enterprises should align their adoption strategies with vendors that are scaling production to ensure access to cutting-edge technology and reliable supply chains.

Recommendations for technology vendors

- **Enhance AI learning and adaptability**: Vendors should continue to invest in advanced AI techniques, such as imitation learning, multi-step reasoning, and self-reinforcement learning, to improve robots' ability to learn, reason, and adapt to diverse tasks and environments. Offering AI systems that can handle both structured and unstructured tasks will be a key differentiator.
- **Focus on human-centric design**: Develop robots with intuitive interaction modalities, such as voice, gesture, and visual recognition, to improve user experience and adoption rates. Functional safety and seamless collaboration with humans should remain a top priority.

- **Expand developer ecosystems**: Build comprehensive developer platforms and foster active developer communities to encourage customization and innovation. Providing robust SDKs, application programming interfaces (APIs), and training resources will make it easier for enterprises to integrate robots into their operations.
- **Scale production and deployment**: Focus on scaling manufacturing capabilities to meet growing demand. Chinese vendors are setting benchmarks in this area, and others should follow suit to ensure timely delivery and market competitiveness.
- **Diversify market applications**: Explore new use cases and industries beyond traditional markets like manufacturing and logistics. For example, healthcare, education, and public services offer untapped opportunities for humanoid robots with advanced interaction and adaptability.
- **Strengthen partnerships and ecosystems**: Collaborate with enterprises, research institutions, and technology providers to codevelop solutions tailored to specific industries. Strategic alliances can accelerate innovation and expand market reach.
- **Invest in regional customization**: Vendors should tailor their offerings to meet the unique needs of different regions. For example, in China, vendors like Fourier Intelligence and UBTECH are focusing on both consumer and enterprise markets, which can serve as a model for global expansion.

Defining a general-purpose embodied intelligent robot

Definition and characteristics

General-purpose embodied intelligent robotics refers to a robotics system that integrates physical automation capabilities with cognitive AI systems. Typically, a general-purpose embodied intelligent robot features the following attributes:

- Human-like appearance: To achieve general-purpose capability, the system must have an upright standing posture and an upper torso that features two human-like bionic arms. Typical examples include bipedal humanoid robots and wheeled-based robots with a human-like upper torso.
- Human-like mobility: Robots are increasingly designed to mimic human movement, with advanced degrees of freedom, terrain adaptability, and speed optimization. Such movement can be achieved either through a squamous or round platform with omnidirectional wheels or a bipedal lower torso.
- AI-driven adaptability: Vendors are leveraging traditional and emerging AI to enable robots to learn, reason, and adapt to diverse tasks and environments. Various neural networks, LLMs, VLMs, VLAMs, and ViLLAs are integrated into a robotics system to perform tasks such as locomotion, manipulation, recognition, and many more.

- Human-robot interaction: Multimodal interaction capabilities, such as voice, text, and visual recognition, are becoming standard.

Key capabilities and vendor landscape

Driven by breakthroughs in embodied intelligence, AI learning, and human-robot interaction, several major vendors, namely AGIBOT, Agility Robotics, Apptronik, Figure AI, Fourier Intelligence, Leju Robotics, UBTECH, and Unitree, are leading the market.

Table 1 indicates the robotics shipments by vendors in 2024 and 2025.

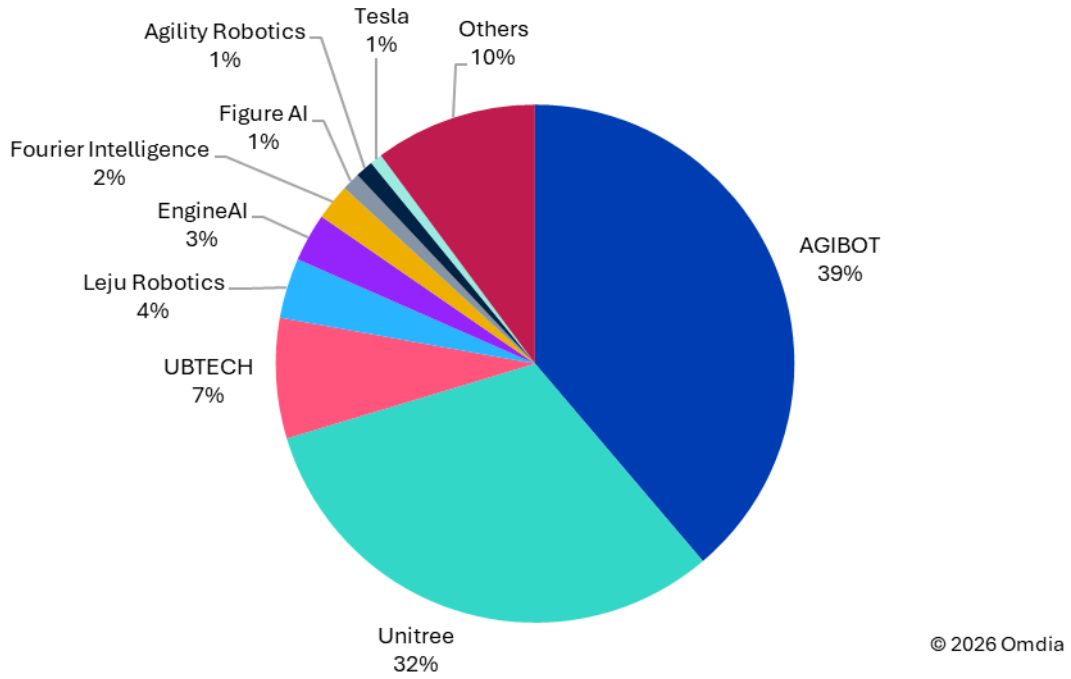
Table 1: Robotics shipments by vendor, 2024 and 2025

Vendor	2024	2025
AGIBOT	600	5,168
Unitree	800	4,200
UBTECH	250	1,000
Leju Robotics	100	500
Engine AI	0	400
Fourier Intelligence	0	300
Figure AI	50	150
Agility Robotics	50	150
Tesla	50	150
Others	400	1,350
Total	**2,300**	**13,318**

Source: Omdia

Figure 3 indicates the market share by major vendors in 2025.

Figure 3: Robotics shipments market share by vendor, 2025 (Omdia's estimate)



Source: Omdia

Overall, the market can be divided into three tiers of vendors:

- Tier-1 vendors are those that shipped more than 1,000 units in 2025. AGIBOT, Unitree, and UBTECH are the only three vendors on the list with this capability, as shown in **Table 1**. AGIBOT and, arguably, UBTECH are more commercial- and industrial-focused, while Unitree robots have been widely deployed in research, education, and consumer sectors.
- Tier-2 vendors are vendors that are in the midst of scaling up their production. Most of the vendors shown in the figure above fall into this category, including US-based companies such as Figure AI and Agility Robotics. These vendors have begun ramping up their production capacity. In this category, Western vendors are more focused on commercial and industrial applications than their Chinese counterparts.
- Tier-3 vendors include the rest of the competition, mainly featuring large industrial OEMs, startups, and traditional industrial robotics vendors that are launching general-purpose embodied intelligent robotics models.

To assess the capabilities of these vendors, Omdia proposes the following criteria:

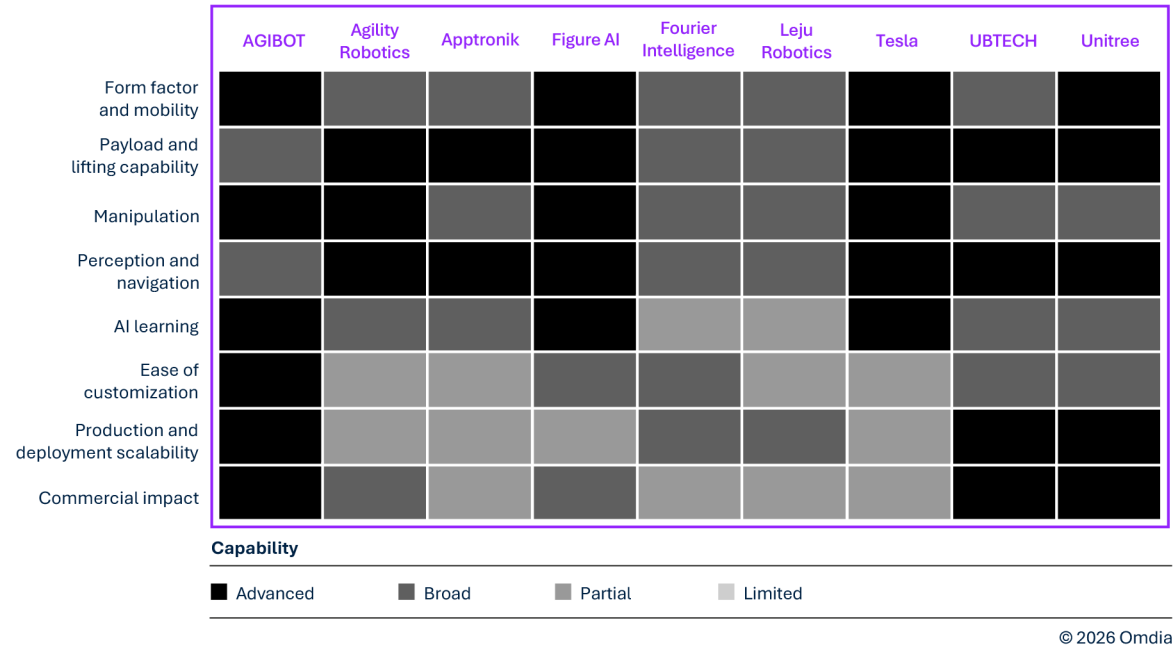
- **Form factor and mobility**: Upright standing posture and human-like arms are the starting points. Advancements in dynamic balancing, human-like gait, and high degrees of freedom (DoF) enable robots to excel at terrain adaptability and speed. Sensor suites such as 4D LiDAR, RGB-D cameras, and fisheye cameras are standard across vendors, enabling precise path planning and obstacle avoidance.
- **Payload and lifting capability**: High payload, lifting height, and coverage areas allow robots to handle objects more efficiently and minimize the need for multi-robot

coordination. Higher capability also means higher performance in key components, such as actuators, gears, and motors.

- **Manipulation**: Advancements in dexterous robotics hands emphasize fine-grained manipulation with advanced force sensing, high DoF, and tight coupling between foundation models and hand movements.
- **AI learning**: AI controls almost every facet of a general-purpose embodied intelligent robot, including machine vision, motion control, manipulation, locomotion, task reasoning, and resolution. In contrast, rule-based engines and neural networks govern functions that are more deterministic in nature, such as object recognition and detection, navigation, and motion control. Advanced functions, such as natural language interactions, task understanding and breakdown, and multi-step reasoning, are based on foundation models, such as VLMs, VLAMs, and ViLLAs. Key examples include AGIBOT's Go-1, Figure AI's Helix AI, and Unitree's UnifoLM-WMA-0.
- **Ease of customization**: Vendors are investing in developer platforms and SDKs to encourage customization and scalability. AGIBOT's LinkCraft, Agility Robotics' Agility Arc, and Unitree's developer tools are prime examples of this trend.
- **Production and deployment scalability**: Humanoid robots, unlike most other industries, do not have well-established supply chains with various tiers of manufacturers building modules of the system. Key vendors are scaling production aggressively, with plans to deploy tens of thousands of robots through integrated manufacturing and assembly facilities such as BotQ and RoboFab, as well as Tesla Gigafactories.
- **Commercial impact**: Many vendors, including Agility Robotics, Apptronik, and UBTECH, are targeting manufacturing and warehouse automation, where humanoid robots can handle repetitive tasks like material handling and assembly.

Based on these criteria, **Figure 4** indicates the assessment outcomes for the eight leading vendors:

Figure 4: Omdia heatmap for a general-purpose embodied intelligent robot



Source: Omdia

The Omdia Heatmap for general-purpose embodied intelligent robot vendors is colored as follows:

- **Advanced capability**: The vendor demonstrates powerful capabilities and/or capabilities in alignment with what Omdia explored as part of this research.
- **Broad capability**: The vendor offers better-than-expected capabilities that are well-suited to the needs of most businesses.
- **Partial capability**: The vendor provides expected capability but lacks some of the advanced capabilities assessed as part of this research.
- **Limited capability**: The vendor provides limited or no capabilities explored as part of this category.

Since the market is still nascent, it is difficult to distinguish clear leaders from challengers among the vendors. However, based on the heatmap, vendors can be segmented into different tiers:

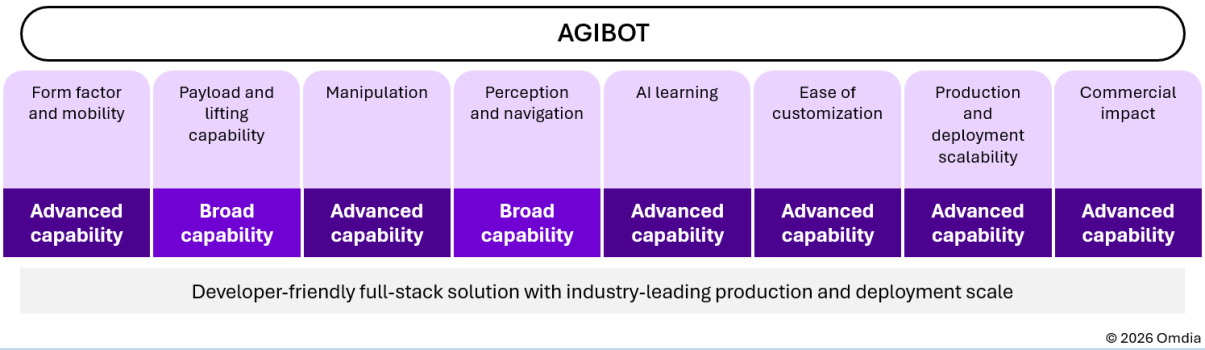
- Tier 1 vendors like AGIBOT, Figure AI, Tesla, UBTECH, and Unitree demonstrate three major capabilities, namely advanced technological breakthrough, developer readiness, and commercial successes. All these vendors have showcased industry-leading advancements in AI capabilities, especially high-level task understanding, low-level robotics control, and high-fidelity physical simulation. They have also scaled up their production capacity, enabling large-scale shipments and deployments.
- Tier 2 vendors like Agility Robotics, Apptronik, Fourier Intelligence, and Leju Robotics are lagging slightly behind tier 1s in either AI technology or total shipments. Nevertheless, these vendors have industry-leading solutions in some areas, particularly in hardware.

More details will be covered in the vendor analysis below.

Vendor analysis

AGIBOT

Figure 5: Omdia Market Radar recommendation—AGIBOT



Source: Omdia

Why consider AGIBOT?

- Founded in February 2023 in Shanghai, AGIBOT is a rapidly growing embodied AI robotics company.
- It focuses on general-purpose humanoid robots for industrial, service, and research applications. The company has achieved unicorn status with a valuation exceeding $1 billion and is one of China's leading mass-producers of general-purpose embodied intelligent robots.
- The company has three primary models, namely A2, G2, and X2. A2 and X2 are both bipedal embodied intelligent robots, with the former being full-size and the latter being half-size. Meanwhile, G2 is a wheeled-based, embodied intelligent robot. All AGIBOT models use the company's self-developed dexterous hands and motors.
- The company launched GO-1, its embodied intelligent model that integrates VLM and a mixture of experts (MoE). According to AGIBOT through GlobeNewswire, "The MoE consists of two key components: the Latent Planner, which learns from cross-embodiment and human-operated data to develop general action understanding, and the Action Expert that enables high-frequency, dexterous manipulation."
- In December 2025, AGIBOT released WholeBodyVLA. This foundation model enables full-body control and manipulation, further enhancing the adaptability of its robot through imitation learning, few-shot generalization, and continuous self-learning.

Market impact

- AGIBOT claimed that it shipped 5,168 robots in 2025, making it the largest vendor in the world in this market segment.

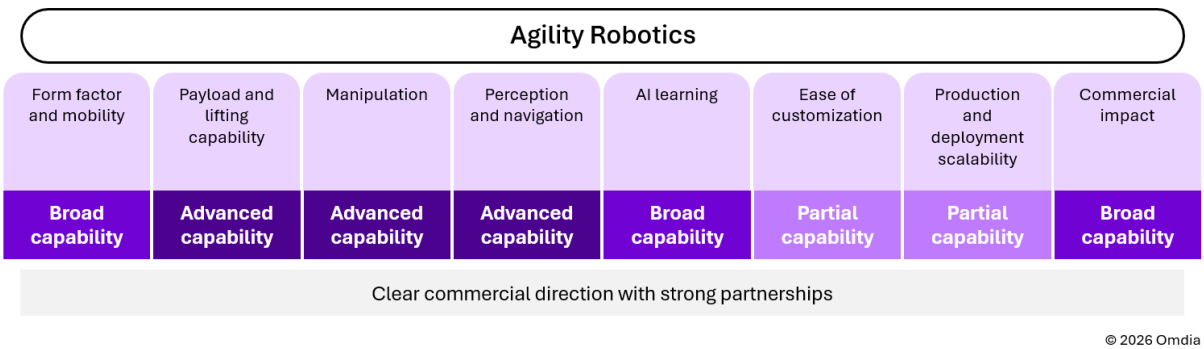
- AGIBOT has established a wide range of commercial partnerships. A notable one is customer service. Their robots have been deployed in China Mobile's flagship exhibition halls to provide guide services. The solution has been deployed in 30 key exhibition and retail service centers, as well as more than 50 outdoor pop-up stores, across 22 cities.
- At the same time, the company is actively rolling out robots in industrial manufacturing, supply chain, education, and media and entertainment. The flexibility and versatility of its hardware and software enable AGIBOT's robots to adapt to multiple use cases.
- The company is also in the midst of rolling out a nationwide robot service network.

Roadmap and areas of future focus

- To ease the development process, the company offers Genie Studio. This one-stop, embodied AI development platform covers the entire lifecycle of robotics development, from data collection and annotation to comprehensive model libraries, fine-tuning tools, simulation tools, and customized deployment.
- For more entry-level developers, AGIBOT also offers LinkCraft, a low-code development platform that focuses on motion capture and imitation learning. A user can record a video of someone dancing, performing martial arts, or making gestures on a smartphone, upload it to LinkCraft, and a cloud-based imitation learning framework will automatically translate and map human actions to the robot's body.
- Openness is a key attribute of AGIBOT's solution. The company has made its training dataset open source. AGIBOT World features 1 million trajectories from 100 robots, totaling 2,976.4 hours of robotics action data. The dataset addresses more than 200 task types, including 87 specific atomic skills.

Agility Robotics

Figure 6: Omdia Market Radar recommendation—Agility Robotics



Source: Omdia

Why consider Agility Robotics?

- Founded in 2015 in the US, Pittsburgh-based Agility Robotics specializes in bipedal robots for logistics and manufacturing. As of December 2025, the company has fetched a total of $700 million in venture capital (VC) funding.
- The company's main robot is Digit. The robot is known for its terrain adaptability, capable of moving smoothly on uneven surfaces such as floors and stairs. To facilitate its operation in warehouses, the robot also features warehouse-optimized gait.
- The company is heavily focused on logistics and manufacturing tasks, such as autonomous mobile robot loading, conveyor loading, and flow rack loading, as well as tote stacking, palletizing, and nesting. As such, Digit is designed with a large payload (16–20kg) and lifting height (1.5–2m).
- For ease of development and deployment, Agility Robotics is a cloud platform that integrates with leading warehouse management systems (WMS), warehouse execution systems (WES), or manufacturing execution systems (MES) using industry-standard APIs.

Market impact

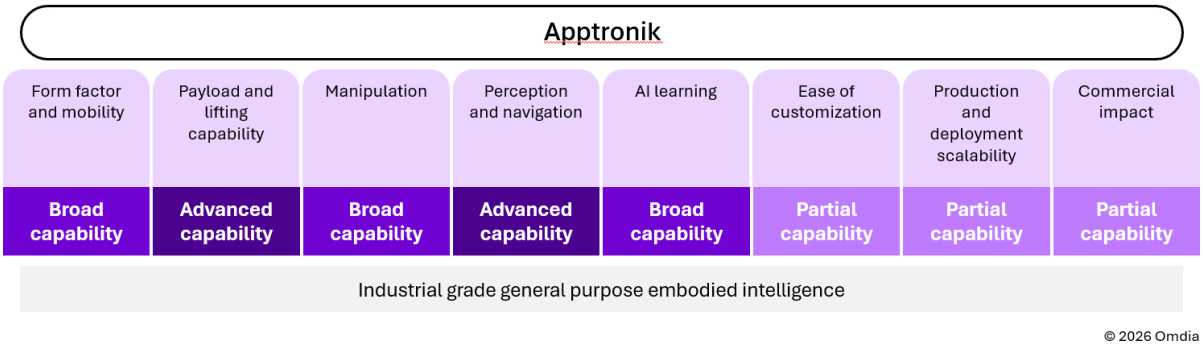
- Agility Robotics has announced partnerships with Amazon, GXO Logistics, Spanx, and Schaeffler, clearly targeting logistics automation as its initial use cases.
- The company offers its robots in two ways. According to Agility Robotics, conventional equipment purchase supplies the hardware and accessories with the latest upgrades, skills, and improvements available through additional software as a service (SaaS) subscription. For use cases with scale in mind, the company's RaaS model offers an all-inclusive package (including robots, software, accessories, and services) delivered through a subscription.

Roadmap and areas of future focus

- Agility Robotics aims to increase its production. The company's RoboFab is a capital-expenditure-light assembly facility in Salem, Oregon.
- At peak capacity, RoboFab can produce 10,000 robots per year. The company aims to increase production to eight units per shift within the next few years.

Apptronik

Figure 7: Omdia Market Radar recommendation—Apptronik



Source: Omdia

Why consider Apptronik?

- A University of Texas spinout, the Austin-headquartered Apptronik focuses on AI-powered industrial humanoids. Total funding reached $378 million in December 2025.
- The company's primary model is Apollo. According to Apptronik, "Apollo is modular and can be mounted to any mobility platform, stationary, or fully mobile with legs."
- Google DeepMind's new Gemini Robotics 1.5 series of models has been applied to Apollo. Apptronik combines a motion control model and a reasoning model to move from single-instruction mode to human-like task understanding and problem-solving.
- Apptronik is among the first vendors to offer a hot-swappable battery solution. Each Apollo features a hot-swappable battery pack with a four-hour runtime, allowing Apollo to keep working with a simple battery change rather than a plug-in charge, during which it is not operational.

Market impact

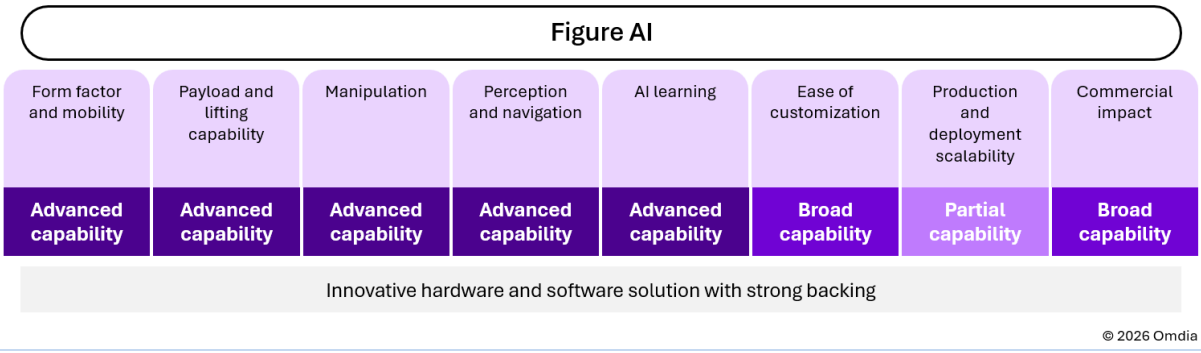
- Per the company, Apollo is designed to operate in warehouses and manufacturing plants in the near term, eventually extending into industries like construction, oil and gas, electronics production, retail, home delivery, and elder care.
- The company is also exploring the RaaS business model to make it easier for enterprises to adopt.

Roadmap and areas of future focus

- Apptronik has reached a cooperation agreement with Mercedes-Benz and has put the Apollo robot into its production workshop to automate tasks that are repetitive, physically demanding, and mundane. Electronics OEM Jabil is another key partner.

Figure AI

Figure 8: Omdia Market Radar recommendation—Figure AI



Source: Omdia

Why consider Figure AI?

- Founded in 2022 in San Jose, California, in the US, Figure AI is a humanoid robotics developer that focuses on both industrial and home use applications. The company has fetched $1 billion in committed capital, bringing its post-money valuation to $39 billion.
- The company's latest model, Figure 03, has been redesigned to serve both use cases.
- Helix powers all Figure AI's robots. Figure AI claims that Helix is the first vision-language-action (VLA) to output high-rate continuous control of the entire humanoid upper body, including wrists, torso, head, and individual fingers. The model is small enough to run entirely onboard embedded low-power-consumption GPUs, also enabling it to operate simultaneously on two robots.

Market impact

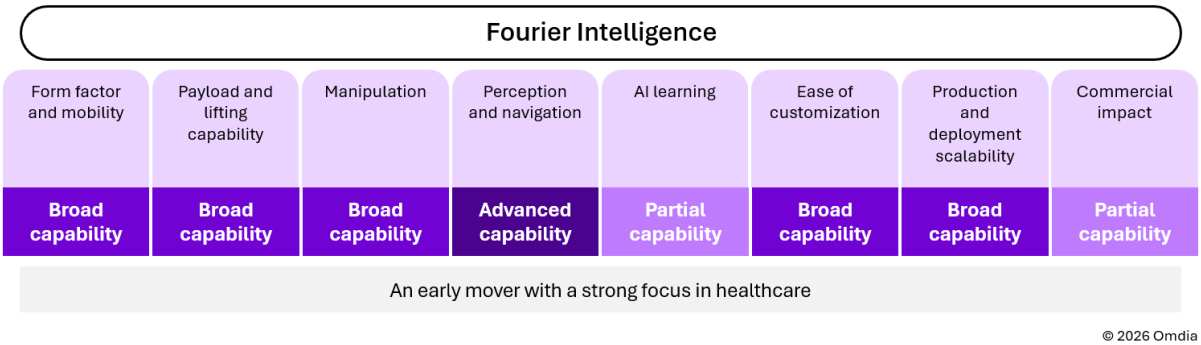
- There is no news of large-scale shipments as of 2025. As part of a commercial partnership, BMW deployed Figure 02 at its BMW Group Plant Spartanburg for 10 months to load sheet metal. A total of 90,000 parts were loaded at more than 1,250 hours of runtime.

Roadmap and areas of future focus

- The company has close partnerships with major AI players, such as NVIDIA and OpenAI. The company is building a GPU infrastructure to accelerate training and simulation.
- Announced in March 2025, BotQ will be a high-volume manufacturing facility with initial production lines capable of manufacturing up to 12,000 humanoids per year.

Fourier Intelligence

Figure 9: Omdia Market Radar recommendation—Fourier Intelligence



Source: Omdia

Why consider Fourier Intelligence?

- Founded in 2015, Shanghai-based Fourier Intelligence is an early mover in humanoid robotics technology. The company launched its first model in 2022.
- The company has several general-purpose embodied intelligent robot models, with the latest GR-3 targeting healthcare use cases.
- The company also offers 12-DoF dexterous hands—double the dexterity of previous models. Designed to mirror the flexibility of human physiology, these hands adapt seamlessly to complex tasks with greater precision.
- In March 2025, Fourier Intelligence released the full-scale humanoid robot dataset Fourier ActionNet and launched the industry's first end-to-end tool chain covering data collection, annotation, training, and evaluation.

Market impact

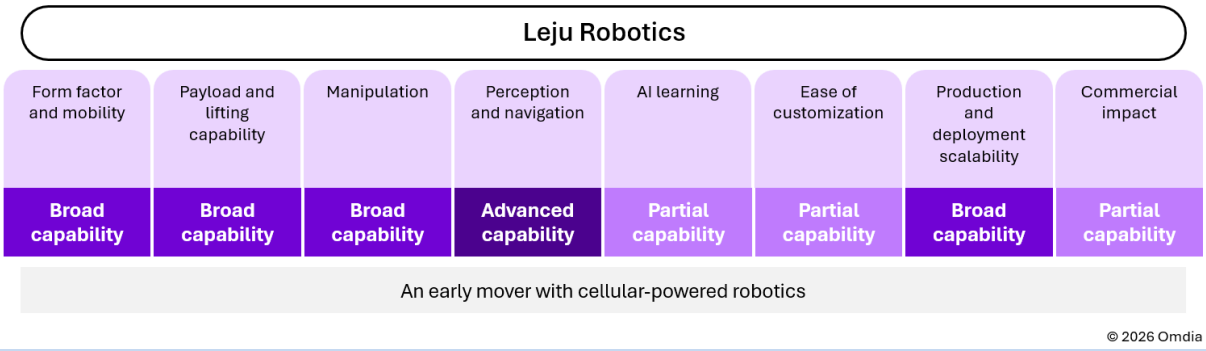
- Fourier Intelligence has a strong focus on healthcare. The company has entered into strategic partnerships with a wide range of organizations, including Brooks, Kurage, and Rymo Technologies, to explore the frontier of rehabilitation technologies.

Roadmap and areas of future focus

- In April 2025, Fourier Intelligence launched Fourier N1, an open source humanoid robot model, to foster an open source robotics ecosystem.

Leju Robotics

Figure 10: Omdia Market Radar recommendation—Leju Robotics



Source: Omdia

Why consider Leju Robotics?

- Founded in 2016, Shenzhen-based Leju Robotics focuses on service and education applications. In October 2025, the company received $210 million in pre-IPO funding.
- Partnering closely with Huawei, the company's main model, KUAVO, is the world's first humanoid robot with Kaihong OS (a variant of Harmony OS) and an embedded Pangu 5.0 model.
- According to Leju Robotics, the entire technology stack of its general-purpose embodied intelligence robot is open source, including its motion controller.

Market impact

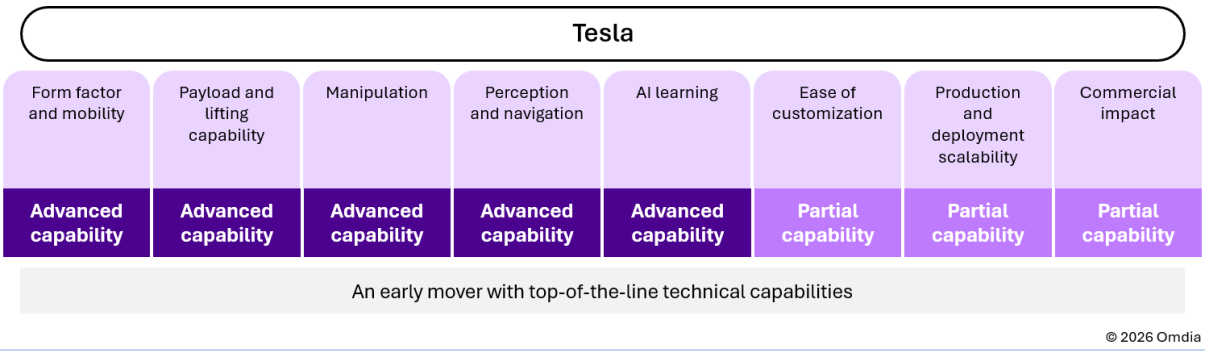
- Leju Robotics is among the top five vendors when it comes to shipments.
- The company has a unique business model where it partners with tier 1 manufacturers in the automotive industry to establish production capacity. These partners include Ningbo Tuopu Group and Dongfang Precision. Such partnerships enable the company to quickly expand and scale up its production without heavy initial investments.

Roadmap and areas of future focus

- Leju Robotics has established several embodied intelligence training centers in China to assist with data generation and collection.
- The company also works closely with Huawei to expand the adoption of advanced cellular technology in embodied intelligent robots.
- As compared to other vendors, Leju Robotics is more focused on education and material handling.

Tesla

Figure 11: Omdia Market Radar recommendation—Tesla



Source: Omdia

Why consider Tesla?

- Tesla's humanoid robot, Optimus (formerly Tesla Bot), is a general-purpose bipedal robot designed to perform unsafe, repetitive, or boring tasks. Announced in 2021, it leverages Tesla's expertise in AI, batteries, actuators, and mass manufacturing from its electric vehicle business.
- As one of the early players in this market, Tesla has invested significantly in numerous areas, including manipulation, locomotion, perception, and appearance. The latest version, Optimus Gen 2.5, has demonstrated significant improvements from its early clumsy steps in the early days to fluid motion today.
- The company trained its robots using various data from human motion capture, video data, and simulation. Combined with its Full Self-Driving (FSD) system, Optimus can move and navigate using vision-based AI rather than scripted controls.

Market impact

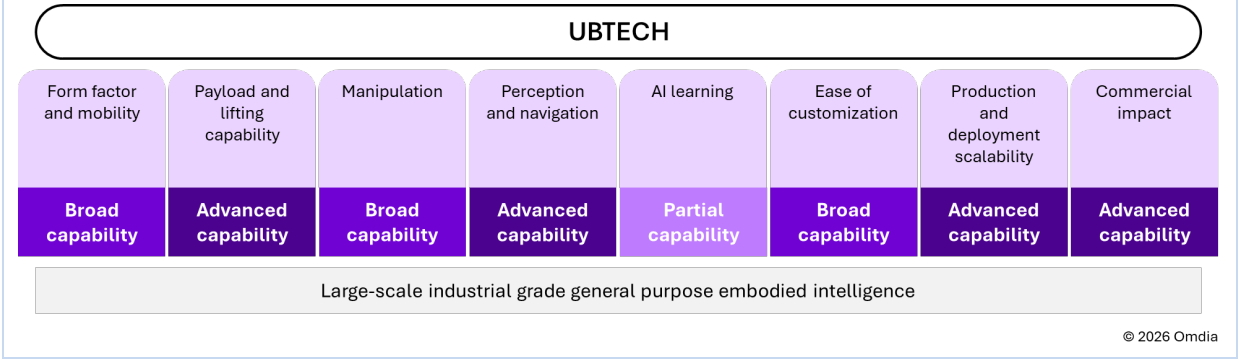
- The strength of Tesla is in its vertical integration. The company reuses advanced electric technologies, such as batteries, motors, power electronics, and AI inference chips, to improve cost efficiency and reliability.
- Tesla's internal deployment of Optimus in its Gigafactories provides real-world testing and data loops before external sales.

Roadmap and areas of future focus

- According to Tesla, the company aims for millions of units annually by the 2030s. The company has proven ability to scale complex products via gigafactories and is likely to use the same capability to scale up its robotics production.
- In doing so, the company projects $20,000–$30,000 per unit at scale.
- Tesla has advertised more than 100 Optimus-related job openings in the past 12 months, signaling acceleration toward commercialization.

UBTECH

Figure 12: Omdia Market Radar recommendation—UBTECH



Source: Omdia

Why consider UBTECH?

- Founded in 2012, Shenzhen-headquartered UBTECH is a publicly listed robotics company. The company's primary models are Walker S2 and Cruzr S2. The former is a bipedal full-size robot, while the latter is a wheeled-based full-size robot.
- Through Walker S2, UBTECH launched the world's first robot with autonomous battery swapping capability. The entire process takes only three minutes, enabling robots to operate uninterrupted.
- As compared to its competitors, UBTECH opts for an RGB camera-only approach for perception and navigation. Both S2 robots feature a dual RGB camera setup on their head that is further augmented by a fisheye camera and a waist RGB-D camera.

Market impact

- In August 2025, UBTECH announced a commercial partnership with Infini Capital to jointly invest in the upstream and downstream industries of humanoid robotics and expand into the Middle East market. Both parties will establish a joint venture in the region and plan to build a super factory, R&D center, and regional headquarters in the Middle East.
- UBTECH announced a large-scale delivery of Walker S2 in November 2025. As of December 2025, UBTECH's production capacity of humanoid robots is approximately 300 units per month.
- Since 2024, the company has been actively trialing and testing its robots in industrial applications. Walker S2 has been trialed at warehouses and manufacturing plants by top enterprises, including Dongfeng Liuzhou Motor, Geely Auto, FAW-Volkswagen Qingdao, Audi FAW, BYD, BAIC New Energy, Foxconn, and SF Express, for parcel handling and quality inspection purposes.

Roadmap and areas of future focus

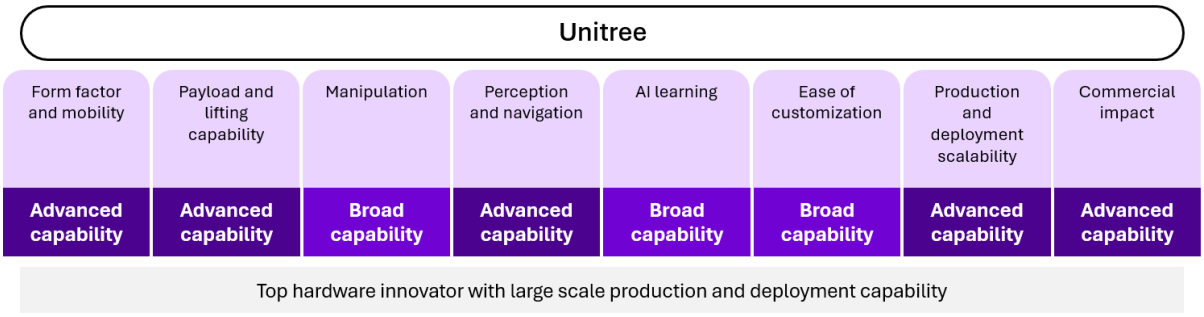
- In March 2025, UBTECH tested its multi-robot coordination system. Known as the general-purpose swarm intelligence system, it enables decentralized, cross-device, shared intelligence. The system is powered by BrainNet, a software framework

designed for humanoid robot collaboration, and the introduction of the Internet of Humanoids (IoH), a centralized control hub.

- The company also claimed to have developed the world's first multimodal-reasoning model for humanoid robots based on DeepSeek-R1 deep reasoning technology. This innovation provides humanoid robots with human-like common sense reasoning, allowing them to independently analyze, plan, and manage tasks within complicated industrial workflows. The model has been trained using a vast industrial dataset gathered through hands-on training with the Walker S series in various automotive factories. Utilizing retrieval-augmented generation (RAG) technology, the model can quickly adapt to specific job roles.

Unitree

Figure 13: Omdia Market Radar recommendation—Unitree



Source: Omdia

Why consider Unitree?

- Founded in 2016, Unitree is headquartered in Hangzhou, China. Known in the early days for its quadruped robots, the company is now a leading vendor in humanoid robotics. As of June 2025, the company is valued at $1.7 billion.
- The company's primary models are G1, H1-2, H2, and R1. G1 and R1 are half-size humanoid robots, while H1-2 and H2 are full-size humanoid robots. All three models use the company's self-developed 4D LiDAR and 3D camera and are powered by an Intel CPU and an NVIDIA Jetson GPU. The company also launched G1-D, its first wheeled robot with adjustable height.
- Unitree's solution is developer-friendly. In September 2025, the company released the source code for the UnifoLM-WMA-0, part of its Uniform Large Models series, which is designed to unify applications across various robotic tasks and environments. The core of the model is a world model that understands the physical laws governing robot-environment interaction. The system features a simulation engine and a policy enhancement head, enabling robots to predict and adapt to future environmental states.
- In addition, the company has also made various tools and datasets open source, supporting popular robotics development platforms such as ROS and MuJoCo.

Market impact

- Omdia estimates the total shipments for general-purpose embodied intelligent robots from Unitree to be roughly 4,200 units in 2025, slightly behind industry-leading AGIBOT.
- Unitree received strong backing from major Chinese enterprises such as China Mobile, while collaborating closely with major cloud service providers such as Baidu and Tencent.

Roadmap and areas of future focus

- In December 2025, Unitree launched public beta testing of its humanoid robot app store, the world's first content distribution platform dedicated to modularizing and standardizing the functional modules of robots.

Appendix

Methodology

Omdia's rigorous methodology for the Market Radar product involves the following steps:

- Omdia analysts perform an in-depth review of the market using Omdia's market forecasting data and Omdia's enterprise insights survey data.
- Omdia creates a matrix of capabilities, attributes, and features that it considers to be important now and in the next 12–18 months for the market.
- Vendors are interviewed and provide in-depth briefings on the current solutions and plans.
- Analysts supplement these briefings with other information obtained from industry events and user conferences.
- The Market Radar is peer-reviewed by other Omdia analysts before being proofread by a team of dedicated editors.

Further reading

The 2025 World Humanoid Robot Games (December 2025)

Robotics Hardware Market Analysis – 2025 (August 2025)

Robotics Hardware Market Forecast – 2025 (August 2025)

Technology Analysis: Humanoid Robots and Embodied Intelligence (May 2025)

Spatial Computing: Cloud and edge (November 2024)

AGIBOT, "AgiBot GO-1: The Evolution of Generalist Embodied Foundation Model from VLA to ViLLA," GlobeNewswire (retrieved January 7, 2026)

UBTECH, "UBTECH's humanoid robots power swarm intelligence at ZEEKR," ShenZhenDaily (retrieved January 7, 2026)

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