

BUSINESS

Humanoid robots enter mass market

Prices plummet seen in commercial, industrial sectors as production surges

By LI JIAYING
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As leading Chinese humanoid robot makers unveil increasingly affordable models, advances in manufacturing, supply chain localization and growing production volumes are pushing the sector into a new phase of commercial adoption.

Unitree Robotics recently launched its dual-arm humanoid robot R1 with a starting price of 26,900 yuan (\$3,968), making it the company's most affordable humanoid robot to date. Earlier, Noetix Robotics introduced its Bumi robot for 9,998 yuan, becoming one of the first consumer-oriented humanoid robots priced below the 10,000-yuan threshold. Around the same time, Booster Robotics also launched its K1 series with a starting price of 29,900 yuan.

The declining pricing trend is no longer limited to consumer products. Industrial humanoid robots have also begun entering the under 100,000-yuan range. Astribot's T1 humanoid robot, for example, starts at 89,900 yuan.

The shift marks a significant departure from just a few years ago, when humanoid robots in China typically sold for several hundred thousand yuan each.

According to Unitree's prospectus, the average selling price of its humanoid robots fell from around 593,000 yuan in 2023 to about 260,000 yuan in 2024, before declining further to 167,000 yuan during the first three quarters of 2025. Similarly, Leju Robotics said the average selling price of its Kuavo series dropped nearly 26 percent year-on-year in 2025 to 308,100 yuan per unit.

Guo Tao, a special researcher at domestic consultancy Internet Economy Institute, said the widespread decline in prices among domestic humanoid robots is being driven by multiple industry and market factors.

"As shipment volumes continue to expand, companies are able to spread previously high research and development expenses and production-line depreciation costs across a larger number of products, allowing unit costs to fall steadily," Guo said.

Industry data platform GGII

said China's humanoid robot shipments reached 14,400 units in 2025 and output is expected to surpass 100,000 and potentially reach 200,000 units in 2026.

At the same time, Guo said domestic suppliers have made substantial progress in critical components such as reducers and servo systems, helping lower procurement costs across the industry.

Unitree, for example, said its company filings show that more than 90 percent of its core components — including motors, reducers and lidar sensors — are developed and manufactured in-house. As a result, the average production cost of its humanoid robots declined from 73,200 yuan in 2023 to 62,200 yuan by the third quarter of 2025.

Another important factor has been the industry's ability to leverage supply chains originally developed for electric vehicles and consumer electronics.

"More than half of the core components used in humanoid robots, including motors and reducers, can be sourced from existing new energy vehicle supply chains, so there is no need for large-scale new capacity investment, which helps keep manufacturing costs under control," Guo said.

The convergence between the automotive and robotics sectors is already bringing new opportunities for the automobile industry.

"Humanoid robots have opened up a new growth opportunity for the company and created a new development curve," said Wu Jianbin, chairman of automotive parts manufacturer Shuanglin Group, in an earlier interview.

Wu said the firm decided to enter the humanoid's planetary roller screw segment because the technologies share common foundations with its existing automotive seat horizontal drive motor business — including expertise in thread machining and gear manufacturing.

Meanwhile, automakers themselves are becoming increasingly active participants in the embodied intelligence sector. To date, major carmakers, such as Tesla, Mercedes-Benz, Changan, SAIC, XPeng and GAC, have entered the field through either self-development, joint ventures or incubation programs.



An employee (left) addresses visitor queries at De'Longhi's booth during a trade fair in Shanghai. PROVIDED TO CHINA DAILY

De'Longhi exec hails 'Shopping in China'

By ZHUANG QIANG
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China represents a key market for understanding how coffee culture is evolving outside Europe, and its "Shopping in China" initiative is expected to unleash greater potential for coffee businesses from around the globe, a senior industry executive said.

"The Chinese market is a very important market for De'Longhi," Andrea Natale, director of coffee business development in Asia at De'Longhi Group, said at the recent Wine to Asia exhibition in Shenzhen, Guangdong province, highlighting the market size and the nation's increasingly strong efforts in opening-up.

China's coffee sector has experienced explosive growth in recent years. According to the 2026 China Urban Coffee Development Report, the country's coffee market reached 354.9 billion yuan (\$52.3 billion) in 2025, up 13.3 percent year-on-year, with per capita coffee consumption rising to 28.57 cups annually. The

home coffee machine market has been particularly robust, with online sales surging 32 percent last year as more consumers embrace cafe-quality coffee at home.

De'Longhi, an Italian home appliance giant, has firmly established itself as a player in China's coffee machine segment, holding approximately 20 percent market share, according to a report from market information tracker 36Kr.

The company has been focusing on innovation to meet Chinese consumers' demand for convenience and quality. Natale highlighted two De'Longhi coffee machine models that bring cafe-style coffee into the home, allowing consumers to enjoy professional-quality coffee with a simple one-touch experience.

"The 'Shopping in China' initiative opens the door to new opportunities, and creates both immediate and long-term opportunities for international brands," Natale said.

Launched by China's Ministry of Commerce in 2025, the initiative has played a key role in boosting

inbound consumption. Official data show that the number of departure tax refund stores and foreign tourists using the service both tripled last year, with tax refund sales nearly doubling.

After visiting coffee regions in Yunnan and Hainan provinces, Natale was impressed with the quality of Chinese coffee beans. Yunnan, which produces over 98 percent of China's coffee, saw its coffee output reach 138,900 metric tons in 2025, with a coffee refinement rate of 31.6 percent. The province's total export value hit 860 million yuan in 2025, with products shipped to 43 countries and regions, including the Netherlands, Vietnam, Germany, Malaysia and France.

Natale expressed interest in further exploring connections between Chinese coffee resources and Italian coffee culture.

"Meaningful products are defined less by price and more by the stories and cultural value they carry. I believe the cultural exchanges between China and Italy will continue to enrich both markets," Natale said.

Skyworth Solar mulls global expansion

By SHI JING in Shanghai
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With the global energy market facing challenges such as unstable supply and surging demand due to the leapfrogging development of artificial intelligence, Skyworth Solar Co Ltd is upgrading itself into an industrial operator providing integrated services of production, synergy, deployment, trading and added value.

As part of the company's five-year strategy unveiled on June 3, Skyworth Solar will make Germany and Italy its centers for Europe, while Thailand will be its center for Southeast Asia. This year, the company will extend its services to 12 countries and reach new markets such as Indonesia and the Philippines. Explosive growth can also be expected in the United Kingdom, said Qu Wanfei, executive president and general manager of the overseas business division at Skyworth Solar, and chief investment officer of parent company Skyworth Group.

On June 3, Skyworth Solar also announced its cooperation with Joybuy — JD's global online site — under which the two companies will explore new channels to deliver China's new energy solutions to global customers.

Qu said the expansion into over-

seas markets is by no means simply selling products, but building a whole system covering local distribution channels, storage, service delivery, technology support and after-sales services.

"Energy mix, power pricing, building typologies and user needs vary significantly from country to country. For example, European users prioritize energy independence and product quality, while Southeast Asian users focus more on adaptability to high temperatures, high-humidity and overall return-on-investment efficiency. Experiences in mature markets can help us with technology innovation and service improvement," Qu said.

Founded in 2020, Skyworth Solar has built over 800,000 power plants, with its cumulative grid-connected capacity exceeding 29.3 gigawatts as of the end of 2025.

As Qu further explained, electricity is still expensive, especially in regions with geopolitical tensions and unstable power supply. But the cost of solar power has dropped by 90 percent over the past decade, with an easy process of installation and application.

It only takes six months to build a solar-powered farm and only one day for a rooftop PV system, said Sonia Dunlop, CEO of Global Solar Council. No other energy source is

as fast, modular and globally adaptable as solar, Dunlop said.

The global newly installed solar PV capacity reached 700 GW in 2025, a figure that seemed utterly "unimaginable" a decade ago. The cumulative global solar PV capacity stands at 2.2 terawatts now, and is expected to rise to 8 TW in 2030 when energy storage capacity will also reach 1.5 TW, Dunlop added.

Rentia van Tonder, head of renewable energy, power and infrastructure for Johannesburg-based Standard Bank, said they need cooperation with Chinese partners as they are looking for better market understanding, ideas, and operational experiences in different markets and countries. More participation of engineering, procurement and construction companies and an enriched supply of products and services from China will also help the development of clean energy in South Africa.

According to China's 15th Five-Year Plan (2026-30), the country will build 100 national-level zero-carbon parks, with planning of the first 52 already released.

"This is a very specific target. A zero-carbon park is a very complicated scenario combining factories and devices, which requires diversified but precise deployment of power," Qu said.

Kunming expo to boost trade with S. Asia

By YAN YUJIE and
LI YINGQING in Kunming

The China-South Asia Expo (CSAE) provides growth opportunities for businesses and enhanced regional trade, officials, experts and exhibitors from China and South Asian countries said in Kunming, Yunnan province, on Thursday.

Co-hosted by the Ministry of Commerce and the Yunnan provincial government, the 10th CSAE is being held in Kunming from Thursday to Tuesday. The event has attracted approximately 560 companies from South Asian countries to participate as exhibitors.

Bangladesh is the theme country of this year's expo. Kayser Kamal, deputy speaker of the 13th National Parliament of the People's Republic of Bangladesh, said that having Bangladesh as the theme country reflects the depth and warmth of the friendship between the two nations.

Bangladesh has set up 84 standard booths and a 360-square-meter pavilion to showcase its offerings, with participation from over 100 companies across seven major industries, making it the largest national exhibition Bangladesh has ever held in China.

Wares Hossain, director of the export promotion bureau at Bangladesh's Ministry of Commerce, said that Bangladeshi exhibitors have brought garments, agro-based products, pharmaceuticals and handicrafts to the expo, with the aim of expanding their businesses in China.

Rajendran Muhundan, manager of MNP Gems and Jeweller in Sri Lanka, said that the expo has promoted his business. Last year, he established long-term cooperation agreements with 20 business-to-business customers from China and other countries at the expo, significantly increasing orders.

Suyash Mehta, director of Sudha India International in India, said that the expo is important for exporters as well as regional trade. Having participated five times, he is optimistic about achieving better sales this year.

Khalil Hashmi, Pakistan's ambassador to China, said that the expo serves as a crucial platform, offering opportunities for exhibitors. It allows small and medium-sized businesses to showcase and sell their products to a larger market, thereby boosting bilateral trade.

Bilateral trade between China and South Asian nations surged past \$200 billion for the first time in 2025, up 10.7 percent year-on-year, according to the Ministry of Commerce.

Hashmi noted that the expo has established a dedicated pavilion for the coffee industry.

He Yuejun, manager of Pu'er Aini plantation, said that the expo has successfully hosted a coffee-themed pavilion for three years, with his company seeing daily sales reach 20,000 yuan (\$2,950) during the event last year.

"At the expo, we have the opportunity to share insights on coffee varieties, cultivation methods, and processing techniques. The expo serves as a platform for learning and interaction, raising the standards across the entire industry," He said.

Technology products stand out as particularly popular among the Chinese offerings at the expo.

Hashmi pays attention to China's high-tech products, such as electric vehicles and drones. "China has developed a range of green and digital technologies that are both high-quality and competitively priced," he said.

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A humanoid robot band performs at a high-tech expo in Tianjin on May 28. ZOU HONG / CHINA DAILY

Nation's rise seen benefitting world

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China is rapidly emerging as an "economic super-connector" that is redrawing the map of global trade and is viewed in the West as challenging its long-standing dominance over the international economic order, said Chandran Nair, founder of the Global Institute for Tomorrow.

In an exclusive interview with China Daily, Nair said that for the first time, economies from Africa, Southeast Asia, Latin America and the Middle East not only have access to superior products from China, but also have an alternative to the Western-dominated institutions that have governed international commerce.

He described China as "an



Chandran Nair

economic super-connector" that has built deep ties with countries historically marginalized by Western-led institutions.

"Nations across the developing world see China building infrastructure, offering trade and staying out of their internal politics," he said, adding that China's rise could give developing nations a stronger voice in global affairs.

Nair's recently published *Understanding China* is a book that argues that China tries to offer an approach of engagement over confrontation, and explains that the nation's rise is in the interest of the world and

yields positive global impact.

In terms of US-China trade frictions, Nair said it is fundamentally driven not by trade imbalances, but by anxiety that China will be a threat to its global supremacy and the fear of an alternative development model that challenges Western dominance.

"It is about systemic competition, and it always has been. The prevailing fear gripping the West is simply this — how can a country manage to develop so quickly and successfully outside the framework of Western political and economic models?" he said.

"The biggest feature of this conflict is that it is driven by ideological prejudice. Rather than acknowledging the truth that China has a right to grow — even if that may challenge Western dominance and economic hegemony

and is, in addition, good for the world — the Western narrative has veered toward wholesale criticism of every aspect of the nation."

He said criticism of China now stretches far beyond trade and economics into attacks on "China's history, economic management, political structure, human rights record, societal values and technological advancements."

"This is shameful," Nair said. "It depicts a desperate grasping-at-straws approach and undermines the West in the eyes of the majority."

According to Nair, Western powers are increasingly attempting to preserve global influence by containing what he called the "legitimate rights" of other countries to rise.

"The world does not buy it anymore," he said, referring to Western narratives around defending the "rules-based (world) order."

Nair argued that China's rapid

poverty reduction poses a direct challenge to long-held Western assumptions linking democracy and economic success to equity.

"China's model of economic development has reduced poverty at a rate unmatched by any other country. A democracy that cannot work to improve the lives of its citizens is not better than any other form of governance that can actually improve the quality of life of its people. That is the argument the West cannot tolerate because it strikes at the foundation of its claim — that it has devised the best system of governance."

Looking toward 2035, Nair sees China as uniquely positioned to pioneer an alternative model of development.

"The greatest opportunity is that China is better positioned than any other large country to demonstrate how it can be done so other developing nations can build their own models," he said.