

**THE WORLD'S FIRST BIONIC CURTAIN WALL
CLEANING ROBOT BUILT FOR
CLEANING COMPLEX BUILDING FACADES AT HEIGHT**



CLOUDWALKER ROBOTICS

PRODUCT MANUAL FOR HIGH-ALTITUDE CURTAIN WALL CLEANING ROBOTS



COMPANY OFFICIAL WECHAT ACCOUNT

**OUR SERVICE NUMBER: 186 6897 2995
134 0196 9394**



PROMOTE TECHNOLOGY AND LIBERATE HIGH-ALTITUDE WORKERS

ABOUT CLOUDWALKER ROBOTICS

The company is positioned as a provider of unmanned integrated solutions for high-altitude curtain wall cleaning robots and high-altitude cleaning operations.

In 2023, the company won the "Nanhai Talent Program" innovation and entrepreneurship Team of Nanhai District of Foshan City, the first prize and the Organizing Committee award of HIT Global Alumni Innovation and Entrepreneurship Competition in 2024, and the Innovation Award of the annual Finals of Hong Kong University of Science and Technology in 2024. At present, the products have completed the construction and application of multiple projects in Foshan/Shenzhen/Hefei. It has been unanimously recognized by customers, and has signed cooperation agreements with a number of industry head customers such as curtain wall building property owners/operators/cleaning service providers in China, Hong Kong, Macao, Singapore and other regions.



CORPORATE HONORS OF CLOUDWALKER ROBOTICS



Core Honors

2023 年

Innovative and Entrepreneurial Team of Nanhai District, Foshan City under the Nanhai Talent Program.

2024 年

First Prize & Organizing Committee Grand Award, HIT Global Alumni Innovation and Entrepreneurship Competition Annual Finals Innovation.
Grand Award, HKUST Million-Dollar International Entrepreneurship Competition.

2025 年

Industry Innovation Transformation Award, Foshan Sanitation & Cleaning Industry Association.
Promotion Demonstration Unit for High-altitude Special Operation Robots (Curtain Wall Cleaning & Quality Inspection) of the Technology Challenge Initiative.
Most Innovative Award, Performance Exhibition Contest of the 3rd National Construction Robot Competition.

2026 年

AAA Credit Enterprise.



Joint Innovation Platforms

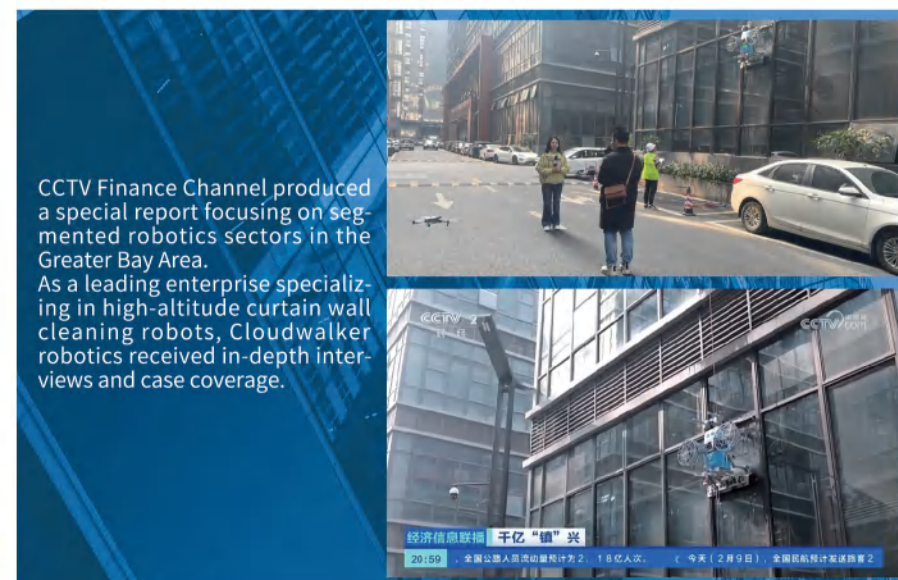
Jointly established the Joint Innovation and Application Center for High-Altitude Special Robots with Shenzhen Institute of Artificial Intelligence and Robotics for Society.
Jointly built the Application Demonstration Base for High-Altitude Embodied Robots with the University of Science and Technology of China.



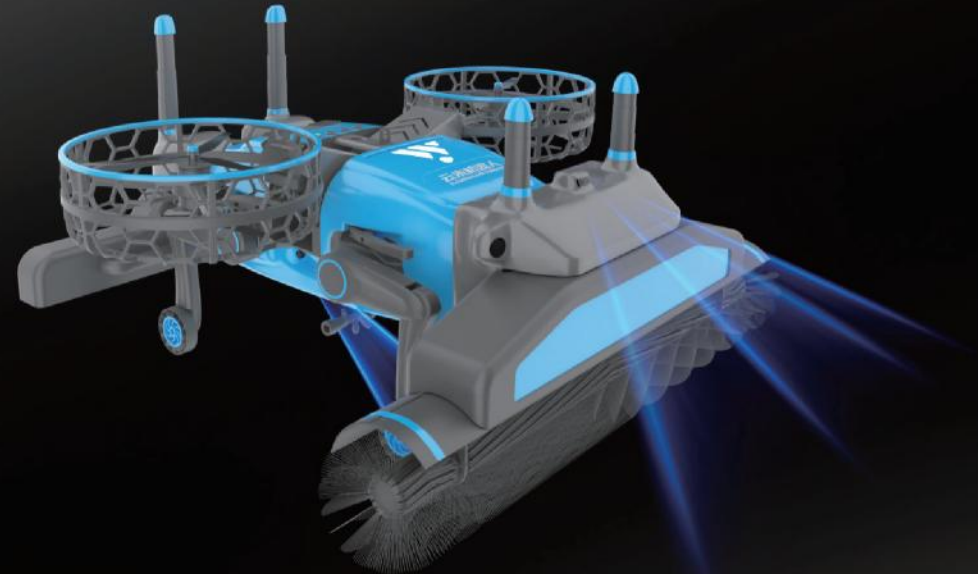
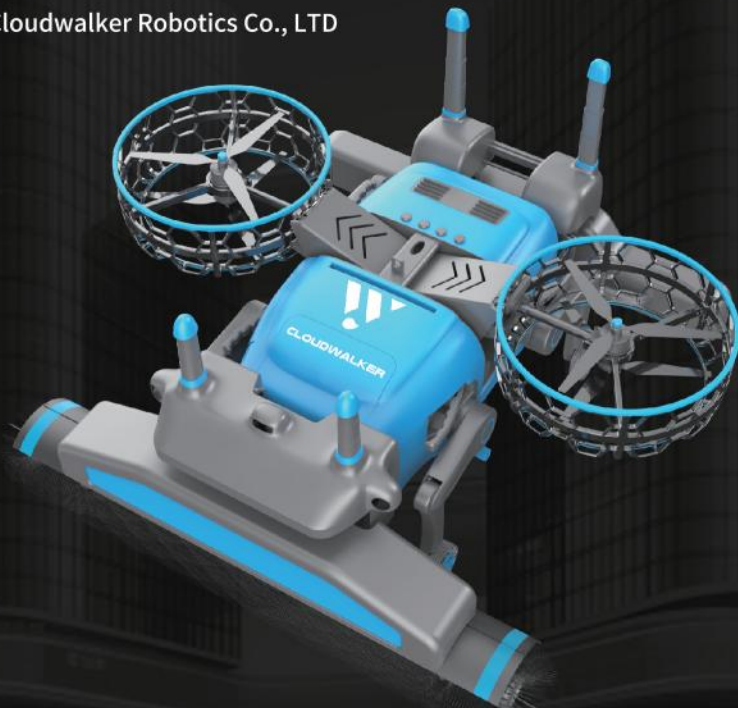
AUTHORITATIVE REPORTS ON CCTV



Cloudwalker robotics has settled in the world's first robot 6S store, being the only high-altitude curtain wall cleaning robot brand stationed there. It has received authoritative coverage from official media including CCTV News, People's Daily Online and Xinhuanet.



CCTV Finance Channel produced a special report focusing on segmented robotics sectors in the Greater Bay Area. As a leading enterprise specializing in high-altitude curtain wall cleaning robots, Cloudwalker robotics received in-depth interviews and case coverage.



CLOUDWALKER ROBOTICS PRODUCT ADVANTAGE

The company is committed to effectively solving the industry pain points of "high risk, high intensity, difficult recruitment and expensive labor" in traditional high-altitude cleaning operations through robots + buildings. After several projects' actual work verification, Cloudwalker robotics have the following four significant advantages compared with traditional Spidermen:



SECURITY

It can reduce hundreds of high-altitude safety accidents every year.



REDUCE COSTS

The robot effectively reduces the cost of Spider-Man's high-altitude work.



HIGH EFFICIENCY

Robot cleaning efficiency is much higher than manual.

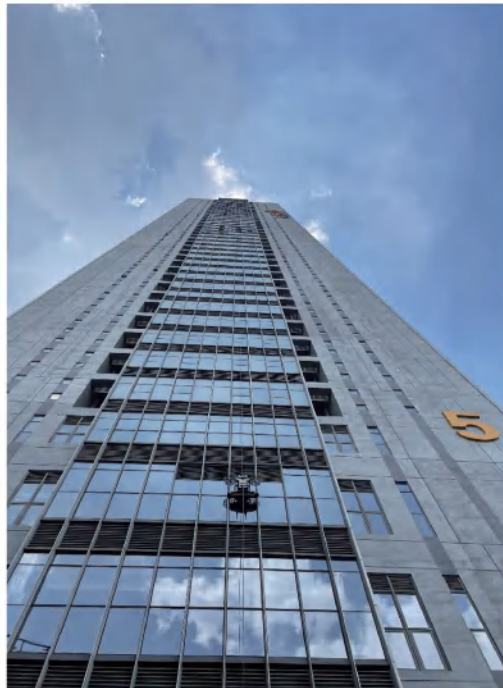


HIGH QUALITY

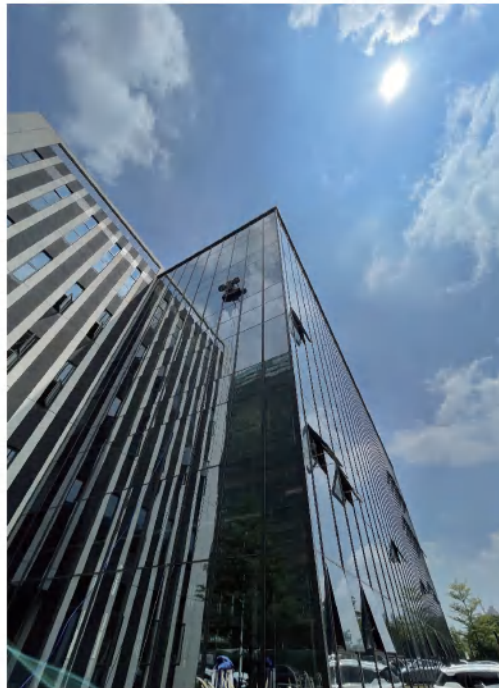
Standardized operation, cleaning quality is better than manual.

TNQ1 ROBOT PRODUCT PARAMETERS

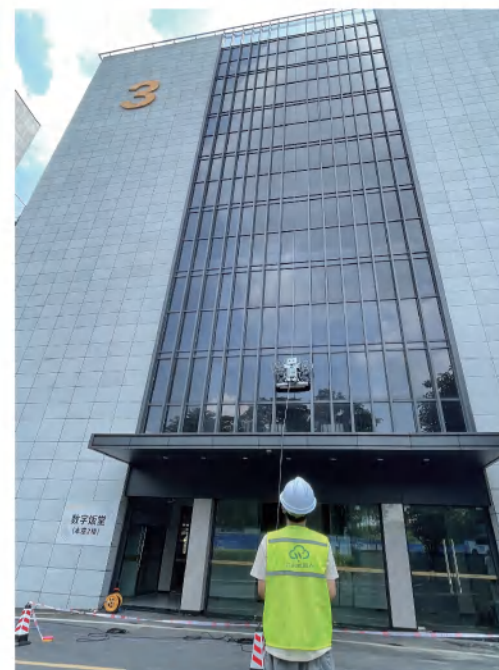
Type	TNQ1
Weight	50Kg
Size	L1100 x W760 x H1280mm
Rated power	0.8KW
Working voltage	AC220V
Operating frequency	50/60Hz
Applicable curtain wall types	Various combinations of curtain walls, including hidden frame curtain walls, exposed frame curtain walls, composite curtain walls, windows, as well as those made of stone and glass
Applicable curtain wall material types	Glass, stone, metal plate
Comprehensive efficacy	1500-2000m ² /day
Cleaning width	0.6 ~ 1.5m
Construction height	≤200m
Obstacle clearance height	≤200mm
Working environment temperature	5 ~ 50°C
wind resistance rating	VI
Protection level	IP54



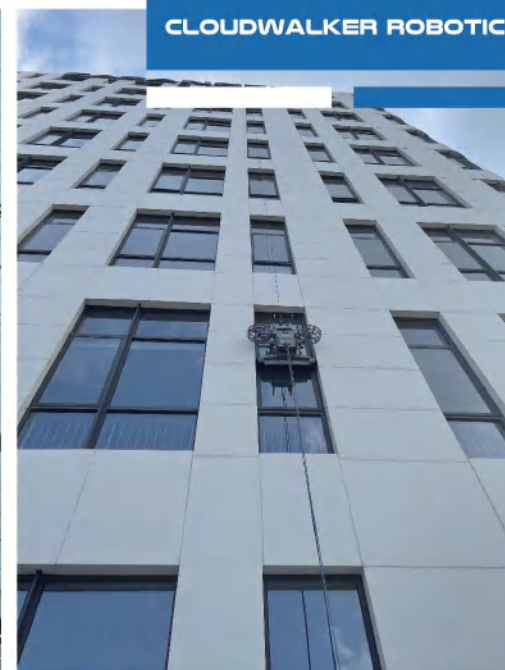
Super high-rise composite curtain wall



Flat glass curtain wall



Horizontal and vertical framed glass curtain wall



Metal + glass curtain wall



Podium curtain wall



Stone + glass curtain wall

TNQ1 ROBOT APPLICATION SCENARIO

Cloudwalker robotics can be applied to almost all types of building curtain wall surface, such as flat glass curtain wall, horizontal and vertical frame partition glass curtain wall, rough stone curtain wall, metal plate curtain wall and other types of modeling and structural surface.

The facade of the building is complex, compared with the competing products can only be made of flat surface, TNQ1 robot can easily cross 20cm high obstacles through the bionic wheel leg design, and the scene adaptability is increased from 5% to more than **90%**.

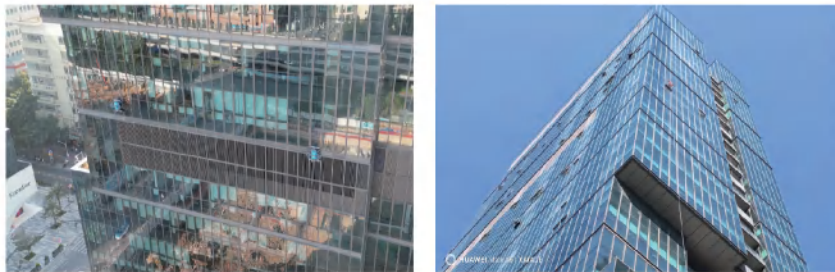
REPRESENTATIVE CASES OF CLOUDWALKER ROBOTICS

Cloudwalker Robotics' curtain wall cleaning solutions have been deployed in more than 18 provinces and municipalities across the country, serving over 100 projects in total with a total operating area exceeding 1 million square meters. Zero safety risks have occurred in all projects, with a 100% acceptance pass rate.

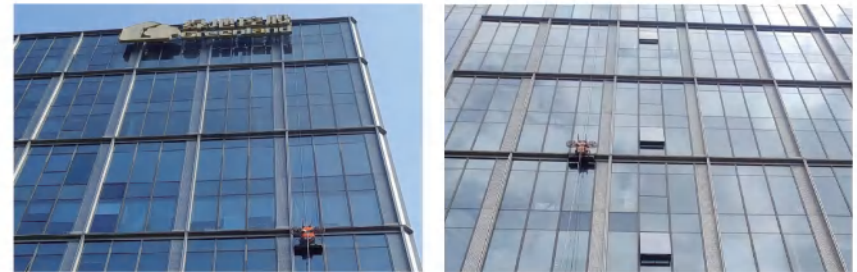
Capable of handling ultra-high-rise glass curtain walls and complex composite facades, Cloudwalker robotics delivers outstanding adaptability to fulfill delivery tasks for various types and scenarios, winning wide recognition from clients.



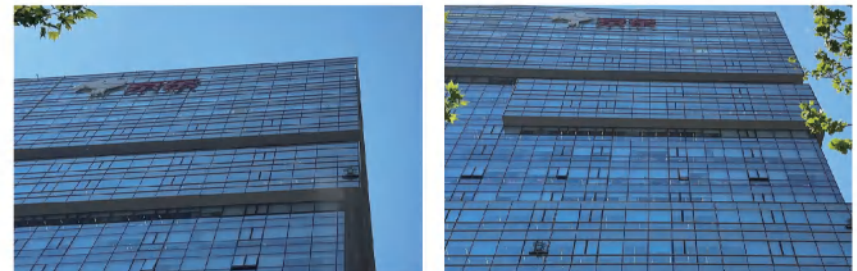
China Overseas Property (Guangzhou) - Dongshan Plaza



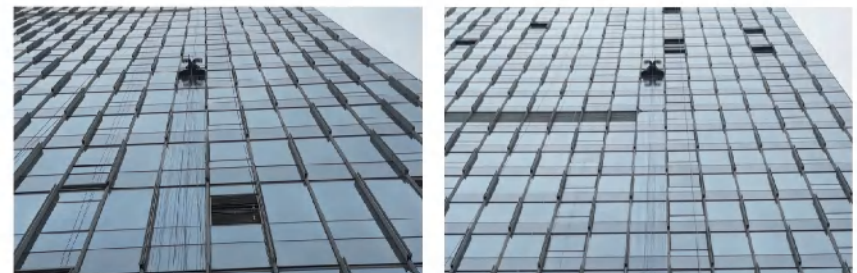
Shenzhen Tairan Plaza



Greenland Holdings, Shanghai



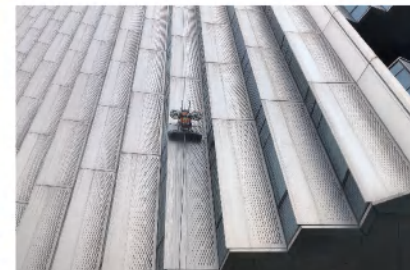
JD Headquarters, Beijing



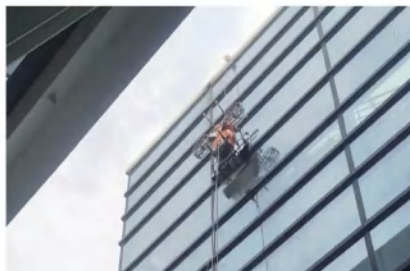
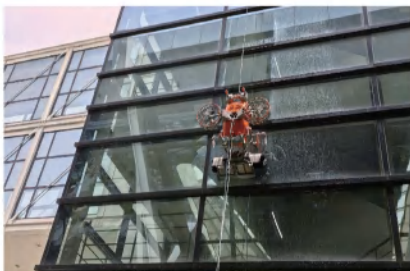
Xi'an Greenland Center



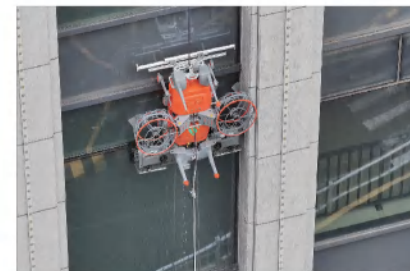
Guangzhou Li Jinji



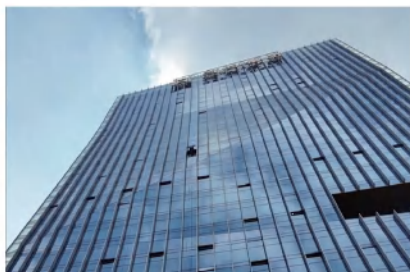
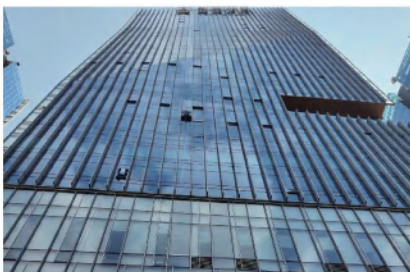
Guangzhou Metro Design Institute Building



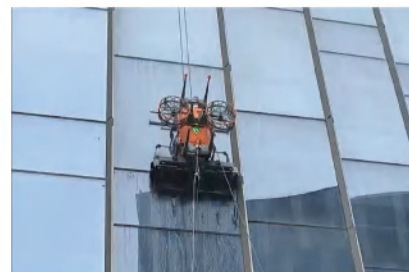
Shanghai Pudong Airport



Hangzhou Dongheng Building



Nanjing Hexi CBD



Huzhou South the Taihu Lake CBD



Kimpton Tsim Sha Tsui Hong Kong



Wynn Palace, Macao



Creek Vistas Grande, Dubai

COOPERATIVE CLIENTS OF CLOUDWALKER ROBOTICS

