AUBO (BEIJING) ROBOTICS TECHNOLOGY CO., LTD

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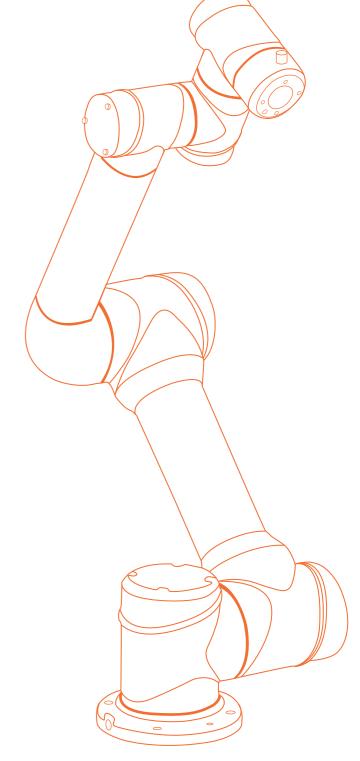
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COLLABORATIVE ROBOT

SMART INNOVATION COLLECTIVE FUTURE



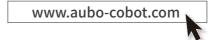




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CORPORATE PROFILE

Shaping Intelligent Collaboration Worldwide

Established in 2015 as a national high-tech enterprise, AUBO Robotics has emerged as China's pioneer in full-stack collaborative robot innovation. With 60% of our workforce dedicated to R&D and 100+ proprietary patents, we have achieved 100% localization of core components, including servo drives, control systems, and force-torque sensors – a technological milestone recognized through certifications spanning EN ISO 13849-1:2015 (PL=d, CAT 3), CE, UL, and SEMI S2 compliance.

Our modular collaborative robots, engineered with intrinsic safety systems and intuitive programming interfaces, drive transformation across 12+ industries. From precision electronics assembly in 3C manufacturing to sterile pharmaceutical packaging, from adaptive welding cells in automotive plants to Al-driven service robots in healthcare, AUBO solutions empower enterprises with deployment-ready automation.

Positioned at the forefront of industrial evolution, we build an open innovation ecosystem through strategic alliances with global partners. By integrating edge computing capabilities with digital twin platforms, AUBO delivers plug-and-play solutions that reduce deployment time by 70% compared to traditional systems.

Headquartered in Beijing with advanced manufacturing bases in Jiangsu and Shandong provinces – including a 20,000 m² smart factory with annual capacity exceeding 5,000 units – our vertically integrated operations ensure seamless quality control from component production to system integration.













MILESTONES & EVOLUTION

2016

Industrial Scaling Milestone

Changzhou Mega-Factory (Jiangsu) commenced operations.

Recognized as a National High-Tech Enterprise in China.

Initiated mass production of AUBO-i5 collaborative robots.

2018

Redefining Industrial Safety Benchmarks

Became China's first collaborative robot manufacturer to achieve EN ISO 13849-1:2015 certification (PL=d, CAT3).

Designated as a High-End Equipment Standardization Pilot Enterprise in China.

2020

Healthcare Innovation & Smart Manufacturing Breakthroughs

Commissioned the world's first cobot-powered smart factory.

Launched China's first NMPA-certified massage robot.

2022

Intelligent Synergy Breakthroughs

Launched AUBO Mobile Cobot Series.

Globally released AUBO i20 High-Payload Cobot. Established National Health Robotics

Designated as Top Collaborative Robotics Champion under China's Manufacturing Excellence Initiative.

Laboratory with NHC endorsement.

2024

Heavy-Duty Robotics Redefined

Global sales surpassed 30, 000 units.

Launched iS35 with industry-leading 35kg payload capacity.

2015

Foundation of Intelligent Collaboration

Establishment of AUBO (Beijing) Robotics Technology Co., Ltd. as China's first native collaborative robot developer.

Strategically established global operational hubs in the USA and Germany, complemented by domestic centers in Shenzhen and Shanghai.

The world premiere of the AUBO-i5 cobot.

2017

Technological Leadership Ascendancy

Academician Ni Guangnan was appointed as Chief Scientific Advisor.

Launched next-gen collaborative robots including i3/i7/i10.

The product line achieved tri-market compliance (CE/UL/KCs).

2019

National Strategic Technology Partner

Appointed lead implementer of two National Key R&D Program intelligent robotics projects.

Established and chaired the National Collaborative Robotics Standardization Working Group.

AUBO i16 Industrial-Grade Collaborative Robot debuted globally.

2021

Scaling Global Leadership

Surpassed 10,000-unit cumulative sales globally.Zibo Mega-Factory (Shandong) commenced operations.

Achieved SEMI S2 & Cleanroom Class 5 certification

Founded the Cobot Journal, the first SCI-indexed periodical dedicated to cobot research.

Designated as the National "Little Giant" Enterprise in China.

2023

Cognitive Robotics Revolution

Launched next-gen cobot series (iS and the new C), redefining market segments.

AUBO S-Series crowned with quadruple honors.

AUBO ARCS robotic operating system makes global debut.











AUBO

Intellectual Property

(as of Mar, 2025)

267

Valid Granted Patent

90

Granted Invention Patent

155

Granted Utility Model Patent

78

Registered Software Copyright

22

Granted Design Patent

ACCREDITATIONS & RECOGNITIONS

As a pioneer in the field of collaborative robot, AUBO has always focused on the needs in the field of collaborative robots, constantly improved its ability of innovation, promoted the application of scientific research results, and won a number of honors.

- National High-Tech Enterprise
- The best-selling cobot of the year (2017/2018/2019/2021/2022) in China*
- IEEE Global Most Potential Collaborative Robot Enterprise
- The First Prize of Award for Scientific and Technological Progress in Machinery Industry
- National Pilot Unit for Standardization of High-End Equipment Manufacturing Industry (2/98)
- Drafting Unit of National Standard for Collaborative Robots (GB/T36008-2018)
- Secretariat Unit of the Working Group on Collaborative Robots of the National Automation Standards Commission
- Member of Expert Group on the International Standard for Robot Modularization ISO-TC299/WG10



INNOVATION ECOSYSTEM

Technical innovation is the core competitiveness of the enterprise. AUBO has always followed the road of being independent and controllable, and R&D and innovation. It has built an excellent technical innovation team, and established a normative product development process system. At present, more than 70% of team members are medium- and high-level technical and management talents.



Wei, Hongxing Chairman

Member of the Institute of Electrical and Electronic Engineers (IEEE)

Member of Association for Computing Machinery (ACM)

Member of National Subcommittee for Robots and Robotic Devices

Head of Working Group on National Standards for Robot Modularization
Undertaken many projects in the field of robotics under National 863 and
Natural Fund Programs

Won 5 provincial and ministerial level awards and Beijing New Star in Science and Technology

More than 100 papers, 2 monographs and 2 teaching materials

Setter of National Standard for Collaborative Robots

Relying on outstanding strength in technical R&D and distinctive status in the industry, AUBO has participated in the formulation of 28 national and industrial standards for robots, including 3 national standards it organized to formulate. AUBO has undertaken 21 projects under the National Key R&D Program, including 10 projects it organized to declare.

Titles of national standards it organized to formulate

 $\verb| (Design Specification of Industrial Robots for Human-Computer Collaboration)| | GB/T 39402-2020| | GB/T$

《Universal Module Interface for Industrial Robots》 GB/T 38560-2020

 $\mbox{(Code for Detection of Multidimensional Force / Torque Sensor for Robot))}\ 20203656-T-604$

Names of projects under the National Key Research & Development Program it organized to declare

《R&D and Integration Verification of Integrated Joints for Collaborative Robots》

 $\langle\!\langle \text{Application Demonstration of Collaborative Robot System for Typical Auto Parts Assembly}\rangle\!\rangle$

Led Formulation o

Led Formulation of 3 National Standards

28

Contributed to 28 National & Industry Standards

10

Led 10 National Flagship Program

21

Contributed to 21 National Key R&D Programs

PRODUCTION CAPABILITIES

AUBO Production Base is located in Changzhou City, covers an area of 12,000m², and has an annual production capacity of 12,000 sets. In virtue of vertical integrated production capacity and complete supporting systems of the industry chain, AUBO can deliver high-quality products on schedule to meet customers' needs.

Production, process, quality, and supply chain integration of collaborative robots

Incoming Inspection

27 testing sections

Full-size, full-function and total-quantity test coverage

Testing of Components

354 testing standards

126 kinds of testing equipment and tools

Testing of whole machine assembly

163 testing items

76 kinds of testing equipment and tools

Inspection of Finished Products

58 testing sections

21 kinds of testing equipment

Vibration test, high-temperature aging test, Dynalog repeatability test, noise test, and Leica laser calibration



Collaborative robots testing hall



The first intelligent and flexible production line of collaborative robots in China

QUALITY ASSURANCE

AUBO is committed to providing safe and reliable collaborative robot products for customers. The products have passed the certification of EN ISO 13849-1:2015(PL=d, CAT 3), CE, UL, KCs, SEMI S2, Cleanliness class 5, etc., guaranteeing the safety and reliability of the products throughout the life cycle.

The First Enterprise Passing Security Certification of PL=d, CAT 3 in China







EN ISO 13849-1:2015(PL=d, CAT 3)

CE











CR KCs SEMI S2 Cleanliness class 5











AUBO

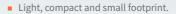




COLLABORATIVE ROBOT ADVANTAGES



Flexible Deployment



It takes only half a day in average to deploy the robot to execute new tasks.



Flexible Production

• With quick changeover of multiple function scenarios, human-machine collaboration, dual-machine collaboration and multi-machine collaboration, etc. can be adopted to realize flexible production.



Simple Programming

- It is available to master the programming method in half an hour, and complete simple programming in 1 hour.
- Dragging teaching and visualized programming to make the operation simple and efficient, you can operate robots easily without being proficient in programming language.



Wide Application

■ The products have been applied in batches in the fields such as 3C, automobile, hardware and household appliances, sanitary appliances for kitchens and bathrooms, medical health, scientific research and education, catering, new retail, chemical products for daily use, and logistics.



Safety and Stability

- The products have passed the certification of EN ISO 13849-1:2015(PL=d, CAT 3), CE, UL, KCs, SEMI S2, Cleanliness class 5, etc.
- Level-10 collision detection and sensor safety testing are supported.
- The end does not drop in case of power failure, so the robots are safe and stable.
- 16 safe I/O interfaces are provided, so the safety function does not lose in case of single failure.



System Opening

- Connection of multi-language environments, multiple communication protocols, and deep integration with third-party plug-ins.
- Communication protocols: TCP/IP, Modbus-RTU/TCP, Profinet.
- Interface and openness: SDK (supporting the development of C/C++/C#/Lua/Python), API.
- Supporting Linux, Windows and Robot Operating System (ROS).



Modularization

- It's available to realize fast dismantlement and replacement within 15 minutes.
- The repair and maintenance are quicker and more convenient.



High Return on Investment

- Key and core components are 100% manufactured in
- The investment cost can be recovered within 6~12 months on average.



High Precision

- Millisecond-level system response ensures repeatability.
- The repeatability can be up to ± 0.02 mm.



SERIES

The AUBO i-Series collaborative robots, with payload capacities ranging from 3 to 20 kg, are designed to meet diverse industry needs. Offering extensive configuration options, they swiftly adapt to various application scenarios, making them an ideal solution for boosting production efficiency and achieving cost-effective operations.









Product Advantages

- **Safer** The products have passed the certification of EN ISO 13849-1:2015(PL=d, CAT 3), CE, UL, KCs, SEMI S2, Cleanliness class 5, etc., all core parts are localized, and level-10 collision detection and sensor safety testing are supported, so no safety protection is required.
- **More open** The open system platform supports multiple communication methods:SDK and API, and can establish communication with multiple peripheral equipment such as end-of-arm tooling, vision and mobile robots.
- **More precise** With repeatability of ± 0.02 mm, high-precision work can be completed continuously for a long time, thus greatly enhancing the production yield.
- **Simpler** Robots can be operated by many methods including dragging teaching, coordinate positioning, path planning and offline programming. The visual interface is simple and easy to learn.
- Wider The whole series products with payload capacity of 3 to 20KG, which can cover different applications in each industry and have a wide range of applications.

Application Fields

3C, automobile, hardware and household appliances, sanitary appliances for kitchens and bathrooms, medical health, scientific research and education, catering, new retail, chemical products for daily use, and logistics.





AUBO-i3

Weight:16kg Repeatability: ±0.02mm

Reach:625mm

Payload:3kg

AUBO-i5/i7

Payload:5kg/7kg Weight:24kg

Repeatability: ±0.02mm Reach: 886.5mm/786.5mm

AUBO-i10/i12

Payload:10kg/12kg Weight: 38.5kg/40kg Repeatability: ±0.03mm Reach: 1350mm/1250mm

AUBO-i16

Payload:16kg Weight:38kg Repeatability: ±0.03mm Reach:967.5mm

AUBO-i20

Weight: 63kg Repeatability: ±0.1mm Reach:1650mm

Payload: 20kg





The AUBO iS Series of high-performance collaborative robots offers payload capacities ranging from 3 to 35 kg, with options of 7 kg, 10 kg, 20 kg, 25 kg, and 35 kg. Designed for broad applicability across industries, they excel in precision manufacturing, painting, and demanding or sensitive environments. These robots combine safety with user-friendly operation.

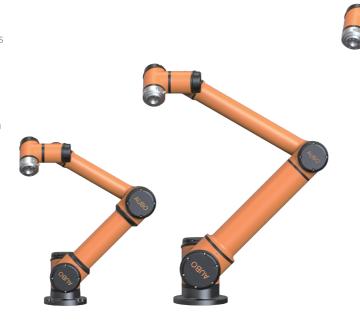






Product Advantages

- Modular Design, Easy to Replace AUBO iS series cobots feature an integrated modular design with six standard modules of different specifications, allowing for quick replacement and more convenient maintenance and repair.
- **Enhanced Performance, Precision and Efficiency** Compared to the previous generation, there is an overall improvement in repeatability accuracy, absolute accuracy, and path accuracy, with the robot arm operating at a higher speed.
- New Design, Higher Protection Level The highest load-to-self-weight ratio can reach 1:3.2. Core components have been optimized with new control algorithms; the fully enclosed structure allows for a maximum protection level of IP68.
- **Compact and Flexible, Wide Application** The new teaching pendant weighs only 1kg, and the floor space of the new control cabinet is reduced by 50%; it comes standard with a multifunctional tool end, enabling a broader range of applications.





Payload:7kg Weight:21.5kg Repeatability: ±0.02mm Reach: 886.5mm

AUBO-iS10

Payload:10kg

Weight:36kg Repeatability: ±0.03mm Reach:1300mm

AUBO-iS20/iS20L

Weight: 64kg/65kg Repeatability: ±0.05mm Reach:1647mm/2000mm

Payload:20kg

AUBO-iS25

Payload:25kg Weight:64kg Repeatability: ±0.05mm Reach:1700mm

AUBO-iS35

Payload:35kg Weight:155kg Repeatability: ±0.05mm Reach:2100mm

Application Fields

The iS series cobots are widely applicable across various industry scenarios and are particularly suitable for precision manufacturing, painting, and special circumstances such as harsh, sensitive environments.











AUBO HYBRID MOBILE COBOT

AUBO-AMR300

The AUBO Hybrid Mobile Cobot integrates flexible control of collaborative robots with a mobile base, advanced vision systems, and end-of-arm grippers. Its all-in-one control system delivers a seamless, secure, and efficient collaborative experience, blending simplicity and adaptability across diverse scenarios. Designed to thrive in varied work environments, it streamlines operations and tackles complex tasks through coordinated manual, visual, and automated interactions.



Safety Deceleration/Emergency Stop



Real-time map display

Product Advantages

various industries.



All-in-One The all-in-one control system allows flexible control of collaborative robots, mobile bases, visual systems, and more. Which also could simplify the operations and enabling one-touch experiences to users.

- (i) Instant Information Access Real-time access to the status of each device, with information delivered directly and seamlessly. The teach pendant can instantly retrieve the information such as the mobile base's position, speed, battery level, the display and control of I/O, the status of laser blocking, navigation, alarm logs, and more.
- Highly Flexible Expansion Allows different combinations of collaborative robots, mobile bases, 2D/3D vision systems, end-of-arm tools, and so on. Facilitating the cross-device collaboration and meeting the requirements of payload and scenario for
- **User-Friendly** The Programming for collaborative robots, mobile bases, and vision systems are integrated to an individual software, with flowchart-based interface. The software includes task modules that users can program the behavior of robot which according to their specific needs. It also supports
 - high-precision of visual positioning, making it compatible with traditional programming methods and reducing the complexity of system usage.
- **Secure** Utilizing high-precision SLAM LiDAR for navigation and positioning, along with dual-wheel differential motion control, ensuring the smoother mobility. LiDAR security features assist in maintaining safety; when personnel approach the mobile base, the robotic arm will slow down to ensure safety.
- Collaborative Operations Through the integrated operating system by AUBO, it's possible to achieve collaborative control of collaborative robots, mobile bases, visual systems, and other devices. Supporting both standalone operation and multi-device scheduling solutions.



Basic Performance	
Model	AUBO-AMR300
Exterior Dimensions (Length*Width*Height)	1000*700*600mm (excluding the height of the robotic arm), with a tolerance of $\pm 2\text{mm}$
Load Surface Dimensions (Length*Width)	650*620mm, with a tolerance of ±2mm
Weight	250Kg (Excluding the robotic arm)
Maximum Load Capacity	300Kg (Including the weight of the robotic arm and payload)
Drive Method	Dual-wheel differential drive
Number of Laser Sensors	2
Motion Performance	
Maximum Speed	1.3m/s
Working Speed	Forward: 1.0m/s (configurable), Reverse: 1.0m/s (configurable)
Turning Radius	0mm
Rotation Radius	550mm
Climbing Ability	6°
Obstacle Clearance Height	10mm

Ground Smoothness

Gap Width

Ground Clearance

Walking Path Width

Turning Path Width Site Positioning Accuracy

battery remormance		
Battery Capacity	48V 52Ah, Lithium-ion Battery	
Charger Power Supply Parameters	220V 800-1000W	
Battery Life	6h (300Kg Fully Loaded)	
Battery Lifetime	800 cycles (DOD 100%), with a capacity retention rate of 80%	
Charging Method	Optional manual or automatic charging; maximum charging current of 15A	
Charging Time	3 hours (from 15% to 95% charge)	

30mm

≥ 900mm

≥1300mm

 ± 10 mm

Optional Equipment

Robotic Arm	Optional configurations include AUBO-i5H, AUBO-i12H, AUBO-i16H
2D Camera	Compatible with industrial 2D cameras using an eye-on-hand configuration, capable of achieving 2.5D positioning with an accuracy of up to 0.5mm
3D Camera	$Compatible \ with structured \ light cameras, bin ocular \ 3D \ cameras, etc., using \ an \ eye-on-hand \ configuration, with \ 3D \ positioning \ accuracy \ of \ up \ to \ 1mm$
Electric Gripper	Compatible with two-finger adaptive electric grippers, three-finger adaptive electric grippers, parallel two-finger electric grippers, and more

AUBO WELDING WORKSATION





Product Advantages

valuable addition to any palletizing scenario.

Simplification and Easy Operation The palletizing workstation features a one-push start function, allowing for easy generation of pallet patterns with a simple operation. It's easy to use, even for beginners.

It introduces the AUBO Palletizing Workstation, a user-friendly solution that revolutionizes palletizing. With its intelligent design and adaptability, it offers a personalized user experience. This versatile solution is efficient and easy to operate, making it a

AUBO PALLETIZING WORKSTATION

- **Comprehensive Monitoring, Safe and Reliable** It is equipped with safety vision monitoring and safety IO interfaces and possesses a collision stop function. With 360-degree comprehensive detection, it ensures the personal safety of operators and is stable and reliable.
- **Controllable Solutions, Flexible Deployment** The independently developed palletizing workstation by AUBO Robotics is a highly integrated product. It can be professionally customized according to different industry characteristics, ensuring the overall solution is controllable. Deployment can be completed in 2 hours, saving operational costs and offering high cost-efficiency.
- **Flexible Production, Widely Applicable** Taking into account the diversity of palletizing methods across industries, the palletizing workstation supports various types of pallet patterns, including overlapping and alternating styles. With a maximum height of 2.5 meters, it meets the diverse palletizing needs of different industries.
- Palletizing Process Package, Extremely Intelligent and User-Friendly Each AUBO palletizing workstation comes standard with a palletizing process package. This includes both software and hardware cooperation, with strong inclusiveness. The process package is compatible with all models of AUBO collaborative robots, significantly increasing palletizing efficiency."



Product Advantages

- Oi Simple layout, flexible movement Unlike traditional welding robots, the AUBO welding workstation is compact and easy to move. It can be combined with a magnetic base, gantry, truss, etc. Suitable for quick switching in welding scenes with small batches and a variety of products, deployment can be completed in 10-15 minutes.
- **Easy-to-use welding** software Combining welding technology and practical experience, the parameters are simplified, and the settings are digitalized. Ordinary workers can also complete welding tasks with different trajectories, materials, and process requirements through the parameter setting interface, meeting most welding scenarios.
- **Low cost, high return on investment** The core components are made in China, with an average investment payback period of 6-12 months.
- **Equipped with a 6D mouse, efficient and smooth dragging** Equipped with a self-developed 6D mouse with a patented design, it is easy to operate and highly controllable, greatly improving the precision of the collaborative robot's drag teaching; an integrated vision function is optional, with an integrated design, realizing drag-free vision-guided teaching.
- **Safety and stability are guaranteed** Supports Level 10 collision detection and sensor safety checks, ensuring the end doesn't drop when powered off, making the product safe and stable.
- High precision Millisecond-level system response speed ensures positioning accuracy, with a repeat positioning accuracy of up to ±0.1mm.

AUBO SCREWDRIVING ROBOT

AUBO screwdriving robot can be easily deployed onto various machines, eliminating the necessity for external electric screwdrivers and significantly simplifying the screwdriving integration process. The programming process is made straightforward for all users including those with limited technical expertise in industrial screwdriving. AUBO screwdriving robot offers an intuitive user interface and customized project templates specifically designed for screwdriving applications; allowing for quick and easy set up of the robot for the job. AUBO's innovative screwdriving robot brings in a reliable, maintenance-free and cost-effective solution for our clients who want to improve their productivity with more automation.

FLEXIBLE DEPLOYMENT



AUBO screwdriving robot can be easily deployed on any machine and is ready to use without the extra need or hassle of integrating and configuring any electric screwdrivers. The simplified equipment integration process makes your production line more flexible and efficient, as well as keeping the long-term maintenance cost low.

EASY PROGRAMMING



AUBO screwdriving robot has a well-designed and intuitive user interface as well as project templates to enhance the user experience. Regardless of your technical background in industrial screwdriving, you can easily and quickly set up the robot to begin the production

OUICKINVESTMENT RETURN



AUBO screwdriving robot is integrated with an efficient screw bit locking module, which eliminates the need for separate electric screwdrivers and controllers. This reduces the initial cost of investment and significantly improves operational efficiency and equipment reliability, resulting in a quicker return on investment.

Product Advantages

- The fully integrated cobot-screwdriver significantly reduces the overall hardware costs.
- Powerful high-torque servo motors ensure excellent repeatibility and versatility in your operations.
- The innovative and optimized system provides controllable and traceable torque and speed.
- The cobot-screwdriver features low noise, low vibration, long life, and high reliability.
- A two-in-one controller and software with a simplified interface and convenient operation.
- A library of tightening strategies provides rich customizability according to your needs.

Applications

Human-Robot Collaboration in Automatic Screwdriving Solution





AGRICULTURAL ROBOTS

INTELLIGENT AGRICULTURAL ROBOTIZATION PRODUCTION SYSTEM

Smart Farming, Intelligent Agricultural Machinery

Agricultural robots focus on two major agricultural scenarios: facility greenhouses and orchards. Multiple product categories have been developed to deeply engage in the innovative technologies and industrial applications of agricultural robots. Adhering to the development philosophy of "No pains, no gains", we pioneer a new ecosystem of "Artificial Intelligence + Agricultural Machinery Equipment".

Product Series

Fruit and Vegetable Picking Robot

- Acquires fruit ripeness information via binocular vision and deep learning, with precise positioning enabled by machine vision servo control.
- A six axis collaborative robotic arm performs picking tasks, allowing damage free picking and placement into baskets.
- Enables autonomous navigation for unmanned operations and supports night time picking.

Intelligent Transport Robot

- Features multiple walking and driving modes, with precise indoor combined positioning.
- Integrates automatic control technology and autonomous visual navigation technology. With optimized power matching and structure, it easily climbs slopes and overcomes obstacles.
- Equipped with intelligent environmental perception and autonomous obstacle avoidance functions, along with an intelligent charging system.

Intelligent Inspection Robot

- Equipped with AI powered growth information sensing and deep vision technology, it can count the quantity and ripening rate of fruits and vegetables.
- Monitors greenhouse environment parameters in real time: temperature, humidity, CO2 concentration, and light intensity.
- Supports remote IoT based information control; the inspection platform allows lifting and rotation.

Intelligent Plant Protection Robot

- A large capacity lithium ion battery provides strong power, ensuring effective spraying on leaf undersides, branches, and tree trunks.
- Compact body structure enables remote wireless control; the crawler type design adapts to various terrains.
- Equipped with a precise spraying system and can pre plan travel paths.











THERAPY ROBOT

Ultra-V Therapy Robot

 With the flexible collaborative robotic arm featuring compliance intelligence as the core, it conducts three - dimensional perception of the physiotherapy area through technologies like 3D structured light vision scanning and force control. Leveraging big data, it calculates data such as respiratory rate and body temperature and automatically memorizes massage trajectories. From built - in health solutions to digital information tracking and recording, it creates a personalized exclusive database with advanced equipment. Compared with previous manual or semi - automatic devices, it is more intelligent and provides users with faster, smarter customized health services from a scientific, professional, and standardized perspective.

Technical Advantages:

Effectively improves conditions like scapulohumeral periarthritis, sports injuries, gout, and pelvic inflammatory disease caused by aseptic inflammation; alleviates colds, coughs, stomach cold, etc., triggered by wind - cold; and addresses female health issues such as dysmenorrhea and ovarian cysts caused by uterus cold.

Matrix Wave Therapy Robot

• Centered on the intelligent collaborative robot, it is custom - developed for customers. Via 3D structured light vision scanning, it identifies the body information of different groups. The end - effector adopts an acoustic wave mode, with energy reaching the deep fascia, and operates at a high speed of 16 times per second to relax muscles and disperse adherent fascia — an effect unachievable by traditional manual massage. Meanwhile, it provides each experiencer with an exclusive database and automatically memorizes massage trajectories, delivering higher - quality and smarter customized services from a scientific, professional, and standardized standpoint.

Technical Advantages:

The Matrix Wave Therapy Robot can adjust massage parameters based on human bearing capacity, pain point distribution, etc., and effectively relieve sub - health problems like shoulder and neck pain, scapulohumeral periarthritis, cervical spondylosis, and general pain.

Application Fields

Applicable to various scenarios including traditional Chinese medicine hospitals, rehabilitation physiotherapy departments, physiotherapy centers, moxibustion centers, beauty salons, and high - end leisure clubs.





DUAL-ARM COFFEE ROBOT

The Dual-Arm Coffee Robot is a new retail industry application launched by AUBO Robotics. It completes latte art coffee production through a dual - arm collaborative mode, and uses a robotic arm learning system to perfectly replicate master level flexible latte art techniques, ensuring each cup of coffee delivers both aromatic flavor and visual pleasure.

Product Advantages

- 01) Stable Quality & Cost Reduction It can continuously produce 300 cups of high quality latte art coffee daily. For the same output volume, human baristas would need to work non - stop for 15 hours a day, yet still can't guarantee consistent high - quality output for every cup.
- Cutting-Edge Technology Equipped with an industry leading dual arm latte art learning system, it integrates seamlessly with AUBO's open - control platform for collaborative robots. It also supports pattern expansion and online upgrades, while its overall design boasts a strong sense of technological sophistication.
- 03 Intelligent Operation & Maintenance It enables real time equipment status monitoring, one click fault recovery, real - time material inventory display, and material shortage alarms. Remote operation management is also supported. With an easy - to - use ordering system, coffee production can start in just 3 steps, and a master quality cup of coffee can be ready in 90 seconds.

Application Fields

Suitable for scenarios including hotels, scenic spots, business districts, amusement parks, sports venues, office buildings, and leisure clubs.



AUBO

AUBO collaborative robots are designed for diverse industrial processes and can easily operate with minimal training.



3C Electronics Automotive Manufacturing



Pharma **New Retail** & Daily-Use Chemicals



Logistics & Warehousing



Home Appliances & Hardware



Catering



Machining & Metalworking



Healthcare & Medical Devices



Kitchen & Bathroom Fixtures



Agricultural **Automation**







Others

TYPICAL PROCESS

Industrial	Pick & Place Injection Molding	Assembly Gluing	Bagging & Palletizing Inspection	Screwing Soldering	Polishing & grinding
New-retail	Ice Cream Maker	Beverage Maker	Liquor Maker	Catering Robot	Smart Kitchen
Healthcare	Massage Robot	Auxiliary Puncture	Scanning	Moxibustion	
Mobile Cobot	Logistics Sorting	Pick & Place	Inspection	Patrol Robot	
Research and Education	Intelligent Production Line	Scientific Research and Development	Discipline Construction	Education Platform	

Industrial Field





3D Scanning and inspection



Inspection of parts



mobile phone camera detection



Appearance inspection of auto parts



Inspection of circuit boards



Instrument assembly



Assembly and screwing of white household appliances



Rubber assembly of auto electronic control systems



Intelligent assembly of auto parts



Welding



Gluing of vehicle windows



Palletizing



Vacuum cup stretching line



Frame coating



Machine Tending



Machine Tending



RETAIL INNOVATION



Latte art robot



Beauty mystery box picking



Milk tea workstation



HEALTH TECH



Massage robot



Surgical robot



Reagent testing



HYBRID MOBILE COBOT



Inspection robot



Intelligent archives



5G Patrol robot



EDUCATION & RESEARCH



Robot with digital twin technology



Music box assembly line



Education and training platform



CROSS-INDUSTRY APPLICATIONS



Agricultural picking



High-voltage distribution cabinet operation



Hygiene & cleaning

SUCCESS STORIES

Automobile

Glass Gluing & Sealing

This is the window glass gluing & sealing project customized for a well-known automobile company. Industrial robots or manual gluing is adopted on the traditional production lines. Due to safety restrictions, traditional industrial robots need to be separated from workers by guardrails, and the utilization rate of the production line is limited. It is difficult for manual gluing to control the accuracy and quality.

Quick deployment and small footprint with human-machine collaboration. Uniform gluing speed and glue type control precision of ± 0.5 mm.

Continuous Efficient Operation

Since being put into use in August 2019, the cobot has been running efficiently in good condition for 16 hours a day, and can completely replace manual labor.



Automobile

Engine Screwing

This is the engine assembly line renovation project of a well-known automobile company. Previously, the screw locking operation was mainly completed by manual labor. Manual operation is labor-intensive, assembly quality is not consistent enough, and it is difficult to improve the yield of finished products. The workshop space is relatively narrow, and the volume and freedom are highly limited. In addition, the screwing has a fixed sequence, the screws are divided into 5 categories and more than 100 sub-models, requiring visual identification of common features. Precise screw torque and high positioning repeatability are required.

The terminal screwing device adopts a screw gun with controllable torque, and it has compact structure and high torque control accuracy. The "eye-to-hand" vision system is selected, and the vision sensor is independently fixed on the bracket to ensure high positioning repeatability.

Reduced Manpower and Increased Productivity

Since operation in April 2019, the production efficiency has been increased by 18%, the product yield has been increased by 12%, the number of personnel has been reduced by 50%, and the labor cost has been reduced by 30%.

Mobile Phone Camera Testing

This is the camera function testing process of a well-known mobile phone manufacturer. Previously, the testing operation was performed by manual labor. The testing environment is divided into indoor and outdoor, and a variety of products, statuses and angles are involved, which are difficult to control for manual labor. The testing is cumbersome and labor-intensive, needs long continuous operation time.

AUBO adopts the mobile cobot solution (AGV + collaborative robot) to work in the live-action studio according to the specified shooting angles.

Stable and Efficient

24-hour operation is possible, and more comparative data can be captured in the same time period, so the efficiency is significantly improved.



Machining

Machine Tending

This is the machining production line renovation project of a well-known company. The company mainly produces precision machinery parts, such as various industrial sewing machine parts, power tool parts and auto parts. With the growth of business volume, manual operation can no longer meet the production demands.

There are a wide range of products, and one person can only handle 2 machines for original production equipment, cannot accurately complete all tasks. Problems such as on-site environment and equipment noise have led to a series of common problems in traditional manufacturing industry, such as labor shortage and increasing labor cost.

Flexible Deployment

The reach of the collaborative robot used in this solution can be up to 1350mm, and the customer can directly deploy on the original factory without changing the layout of the production line. Flexible pick & place of parts is achieved in the narrow working space, and one robot is working for 2 machines. In the original production process, one person can operate up to 2 machines at the same time. After the deployment of collaborative robots, two persons can handle 12 machines at the same time. In this way, the production scale has tripled, while the personnel have not undergone major changes.



SUCCESS STORIES

Healthcare

Massage Robot

Traditional Chinese Medical Massage has always been one of the first choices for people to carry out cervical and lumbar care or pain management. But the shortage of professional massagist has been a major problem in the industry. AUBO developed the massage therapy robot together with our partner, committed to proving safe, temperature-controlled, efficient and standard services in the full process of massage.

The end of the cobot is equipped with a force sensor, a 3D vision, a massage head and a thermal imaging, when the robot arm walks the massage track on the human body, it can ensure the safe and stable operation of the robot without hurting the human body accidentally. And there are different types of strengths that can be switched automatically during the massage according to customers' force preference.



New-retail

Dual-Arm Hamburger Robot

In smart catering industry, AUBO has started business operation officially by cooperating with many restaurants at present. In addition to hamburger robots, the application of robots in restaurants includes stir-fry robots, soup rice robots, drinks robots, frying robots, dessert robots and meals-delivery robots, etc.

In this case, two sets of AUBO i3 cobots are installed inversely, which can be compatible with two collaborative robots to make hamburgers at the same time. After a customer places an order by scanning the QR code, the upper computer sends a signal to the cobots to start the making of hamburger. One cobot mainly grabs bread pieces from the material silo and sends them to the heating furnace, and cooperates with the sauce machine to pour the sauce onto the heated bread pieces; the other cobot takes vegetables and returns the tray. Then, the cobots complete the combination of the upper and lower pieces of bread. After packing, the cobot places the packed hamburger onto the conveyor belt. The customer can scan the QR code to open the pickup window. Here, the purchase process is completed.



Mobile Cobot

Semiconductor Handling

This is the logistics automation renovation project in the packaging and testing workshop of a semiconductor industry. At present, the industry is mainly based on manual labor. Manual handling has problems such as large vibration, being easy to cause particle pollution, discontinuous operation, wrong handling and poor consistency. The workshop has a high level of cleanliness, a complex layout, a narrow space and a wide variety of equipment with discrete production processes and complex technological processes. The industry order demands are flexible, and it is impossible to form a simple and effective flow-line production.

The mobile cobot and the intelligent dispatching logistics control system help the factory realize an intelligent unmanned production workshop. The mobile cobot is based on the hybrid positioning and natural navigation technology of the laser natural navigation. The indoor positioning repeatability of $\pm 5 \text{mm}$ can be achieved without environment modification while the dust-free operation meets the standard. Equipped with a 360°-scanning dual safety lidar, obstacles can be identified intelligently and avoided actively, ensuring safe, high-speed and smooth operation. Target positions such as cartridge holder and tray can be positioned and captured accurately through Al algorithm, 3D visual positioning, force sensor and collaborative robot.



24-hour Operation and Labor Liberation

The solution realizes the die bond among various processes, and 24-hour continuous operation is possible so as to liberate labor, solve information flow conversion, and realize workshop production visualization and production process operation control.

Electric Power Industry

Distribution Room Inspection

This is the automatic distribution room inspection project of a power industry user. At present, the industry is mainly based on manual inspection. The automation equipment in the distribution room operates all the year round, so the failure rate is high. The inspection frequency is high, the work is cumbersome, and the manual inspection burden is heavy. The switch on the low-voltage side of the distribution room cannot be remotely controlled, and automation cannot be achieved through the equipment in the cabinet.

In cooperation with China Unicom, a dedicated 5G channel ensures safe and stable operation of the robots. The big data image recognition intelligently distinguishes equipment fault signals, and provides intelligent safety monitoring for the robot manipulation equipment to prevent misoperation and faults. The inspection robot can independently complete more than ten functions such as equipment inspection device panel control, faulty part replacement, device restart, and switch opening & closing. The historical alarm records in the device can be viewed to make up for the shortcomings of the inability to collect alarm information when the equipment in the station malfunctions.



Unmanned Operation

The inspection robot has the characteristics of low cost, high reliability, high safety and strong universality, and can be maturely applied to most scenarios in which unmanned equipment operation is required, such as distribution rooms, computer rooms and industrial enterprises.

GLOBAL SERVICES

Around the global headquarters and manufacturing bases, AUBO has established sales centers in the eastern region, southern region and northern region, etc. of China, and overseas after-sales service centers in the USA and Germany, etc. Now, AUBO has more than 200 distributor partners from more than 50 countries in the world, and can provide efficient and convenient professional services for you.



To provide technology evaluation, accessory selection and debugging services.



To provide product usage To realize real-time trainings to distributors technology answers and free of charge regularly, resource sharing by and cultivate professional technical forum and robot engineers for hotline.



To provide lifetime repair and customized maintenance of robots, and provide software upgrading package to customers and instruct them how to install.

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Maintenance



Model	i3	i5	i7	i10	i12	i16	i20	
Robot Degrees of Freedom	6	6	6	6	6	6	6	
Reach (mm)	625	886.5	786.5	1350	1250	967.5	1650	
Payload (kg)	3	5	7	10	12	16	20	
Weight (kg)	16	24	23.4	38.5	40	38	63	
Mounting Surface Diameter (mm)	Ø140	Ø172	Ø172	Ø220	Ø220	Ø220	Ø260	
Repeatability (mm)	±0.02	±0.02	±0.02	±0.03	±0.03	±0.03	±0.1	
Linear Velocity (m/s)	≤2.5	≤3.4	≤3.0	≤4.0	€3.8	≤3.0	≤2.6	
Average Power (W)	150	200	200	500	500	600	1000	
Peak Power (W)	1000	2000	2000	2000	2000	2000	3000	
Ambient Temperature (°)	0-50	0-50	0-50	0-50	0-50	0-50	0-50	
Ambient Humidity	90% RH (Non-condensing)	90% RH (Non-condensing)	90% RH (Non-condensing)	90% RH (Non-condensing)	90% RH (Non-condensing)	90% RH (Non-condensing)	90% RH (Non-condensing)	
Installation Orientation	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall	
IP Classification	IP54	IP54	IP54	IP54	IP54	IP54	IP54	
ISO 14644-1 Cleanliness Class	5	5	5	5	5	5	5	
Axis Movement	Working Range (°) Maximum Speed (°/s)	Working Range (°) Maximum Speed (°/s)	Working Range (°) Maximum Speed (°/s)	Working Range (*) Maximum Speed (*/s)	Working Range (°) Maximum Speed (°/s)	Working Range (°) Maximum Speed (°/s)	Working Range (*) Maximum Speed (*/s)	
joint 1	±360 237	±360 223	±360 223	±360 178	±360 178	±360 178	±360 93	
joint 2	±360 237	±360 223	±360 223	±360 178	±360 178	±360 178	±360 93	
joint 3	±360 237	±360 223	±360 223	±360 223	±360 267	±360 267	±360 178	
joint 4	±360 237	±360 237	±360 237	±360 223	±360 237	±360 237	±360 178	
joint 5	±360 237	±360 237	±360 237	±360 237	±360 237	±360 237	±360 178	
joint 6	±360 237	±360 237	±360 237	±360 237	±360 237	±360 237	±360 178	
*Each joint has the ability of $\pm 360^\circ$, but limite	d by the application scenario, part of the joints	s may not be reached.						
Category	Co	ontrol Box		Control Box I/O/Tool I/O	Control Box Tool	End		

	Category	Control Box		Control B	Sox I/O/Tool I/O	Control Box	Tool End	
Control Box	Model	AUBO-CB-M		I/O Port	Digital In	16 (general) /16 (safe)	4 (optional)	
	Dimensions	380mm*350mm*265mm (i3-i16)/ 410mm*285mm*390mm (i20)			Digital Out	16 (general) /16 (safe)	4 (optional)	
	Weight	15kg/16kg (i20)			Analog In	4	2	
	Cabling Connecting the Robot	5m (customizable,up to 8m)			Analog Out	4	-	
	Cabling Connecting the Teach Pendant	4m		I/O Power	Output Voltage	24V	0V/12V/24V	
	Cabling Connecting the Power	5m			Output Current	3A Max	0.8A	
	Communication	Ethernet、ModBus-RTU/TCP、Profinet (optional)	- 1999 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					

AUBO-CB-M

SDK (support C/C++/C#/Lua/Python) \support ROS\API

100-240VAC, 50-60Hz

IP43

Interface

Power Supply

IP Classification



Teach Pendant

Technical Specifications

	Model	iS7	iS10	iS20	iS20L	iS25	iS35
Robot	Degrees of Freedom	6	6	6	6	6	6
	Reach (mm)	886.5	1300	1647	2000	1700	2100
	Payload (kg)	7	10	20	20	25	35
	Weight (kg)	21.5	36	64	65	64	155
	Mounting Surface Diameter (mm)	Ø170	Ø218	Ø255	Ø282	ф282	Ø425
	Repeatability (mm)	±0.02	±0.03	±0.05	±0.05	±0.05	±0.05
	Linear Velocity (m/s)	≤3.6	€4.0	≤4.2	€5	≪4	≤6
	Average Power (W)	200	500	1000	1000	1000	2000
	Peak Power (W)	2000	2000	3000	3000	3000	6000
	Ambient Temperature (°)	0-50	0-50	0-50	0-50	0-50	0-50
	Ambient Humidity	90% RH (Non-condensing)	90% RH (Non-condensing)	90% RH (Non-condensing)	90% relative humidity (non-condensing)	90% RH (Non-condensing)	90% RH (Non-condensing)
	Installation Orientation	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall	Any angle	Any ceiling, Floor, Wall	Any ceiling, Floor, Wall
	IP Classification	IP67 (up to IP68)	IP67 (up to IP68)	IP67 (up to IP68)	IP67 (up to IP68)	IP67 (up to IP68)	IP67 (up to IP68)
	ISO 14644-1 Cleanliness Class	5	5	5	5	5	5
	Axis Movement	Working Range (°) Maximum Speed (°/s)	Working Range (°) Maximum Speed (°/s)	Working Range (°) Maximum Speed (°/s)	Working Range (") Maximum Speed ("/s)	Working Range (°) Maximum Speed (°/s)	Working Range (*) Maximum Speed (*/s)
	joint 1	±360 237.6	±360 178	±360 148.7	±360 148.7	±360 148.7	±360 180
	joint 2	±360 237.6	±360 178	±360 148.7	±360 148.7	±360 148.7	±360 180
	joint 3	±360 237.6	±360 237.6	±360 178	±360 178	±360 178	±168 148
	joint 4	±360 296.3	±360 296.3	±360 296.3	±360 296.3	±360 296.3	±360 296.3
	joint 5	±360 296.3	±360 296.3	±360 296.3	±360 296.3	±360 296.3	±360 296.3
	joint 6	±360 296.3	±360 296.3	±360 296.3	±360 296.3	±360 296.3	±360 296.3
	*Each joint has the capability of ± 360 degrees, wi	ith joints 2, 3, 4, and 5 software-locked to ± 175 degrees	s. If required by the customer, joints 4 and 5 can be unload	cked to enable the full range of ± 360 degrees; however, jo	oints 2 and 3 will not be unlocked.		

	Category	Control Box		Control Box	(I/O/Tool I/O	Control Box	Tool End
Control Bo	X Model	AUBO-CB-IS		I/O Port	Digital In	8 (general)/ 8 (safe)	4(optional)
	Dimensions	400mm*320mm*160mm			Digital Out	8 (general)/ 8 (safe)	4(optional)
	Weight (kg)	12.5			Analog In	2	2
	Cabling Connecting the Robot	5m(customizable,up to 8m)			Analog Out	2	-
	Cabling Connecting the Teach Pendant	4m	\$656 66 €		RS485	1	1
	Cabling Connecting the Power	5m		I/O Power	Output Voltage	24V	0V/12V/24V
	Communication	Ethernet, ModBus-RTU/TCP, Profine(t Optional)	\$ 480	-	Output Current	2A	2A (Peak 3A)
	Interface	SDK (C++/Pyhton/JavaScript Windows + Linux), support ROS/ROS2					
	Power Supply	100-240V AC, 50-60Hz	AUBO-CB-IS				

IP43

IP Classification

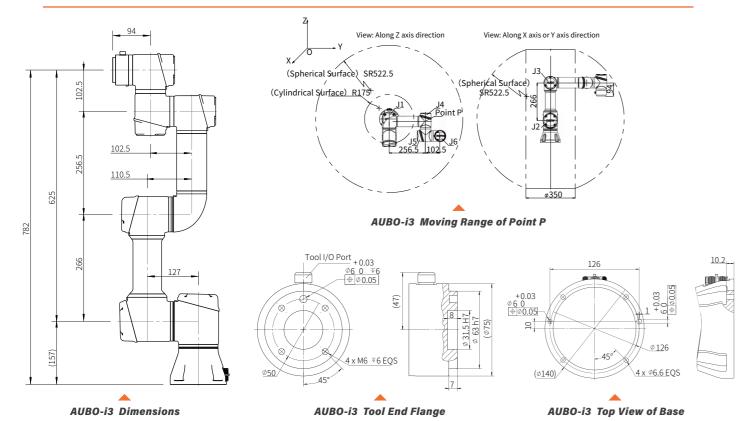


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Technical Specifications

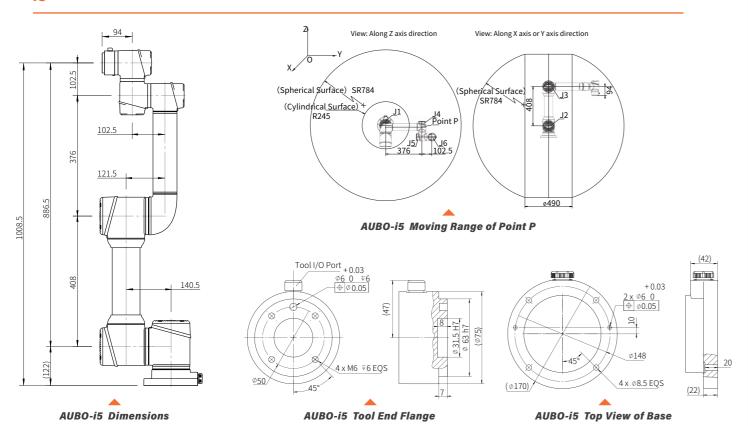
i7

DIMENSIONAL DRAWINGS

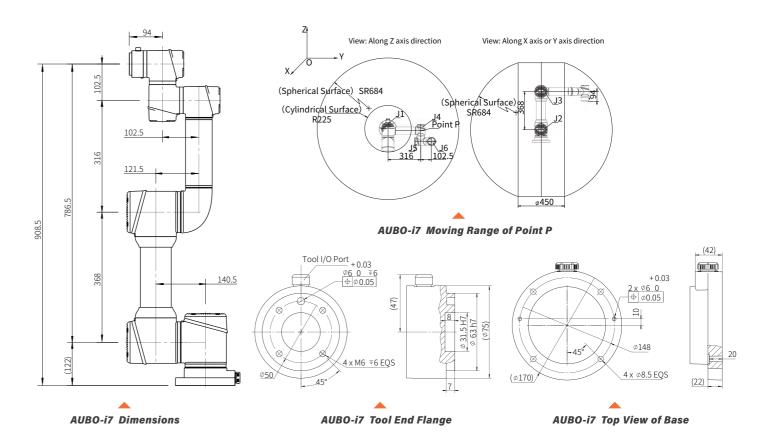


i5

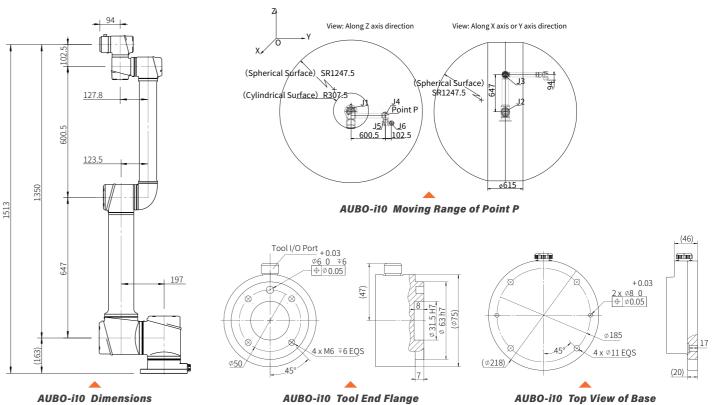
i3



DIMENSIONAL DRAWINGS



i10



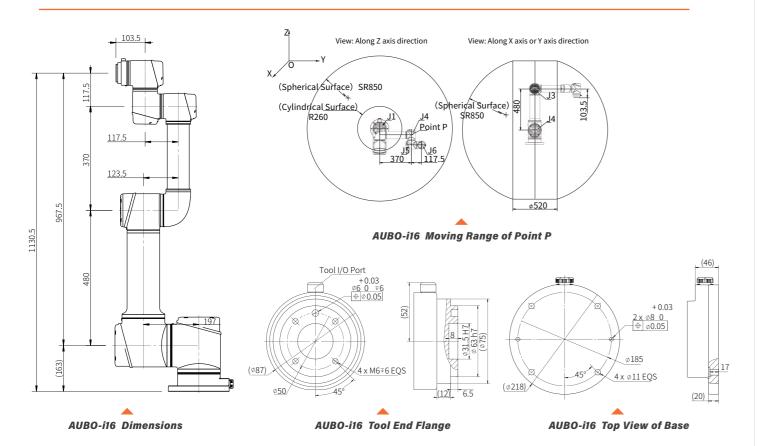
AUBO

DIMENSIONAL DRAWINGS

View: Along Z axis direction View: Along X axis or Y axis direction View: Along X ax

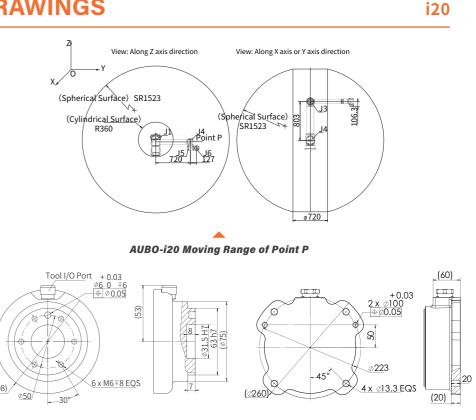
i16

i12



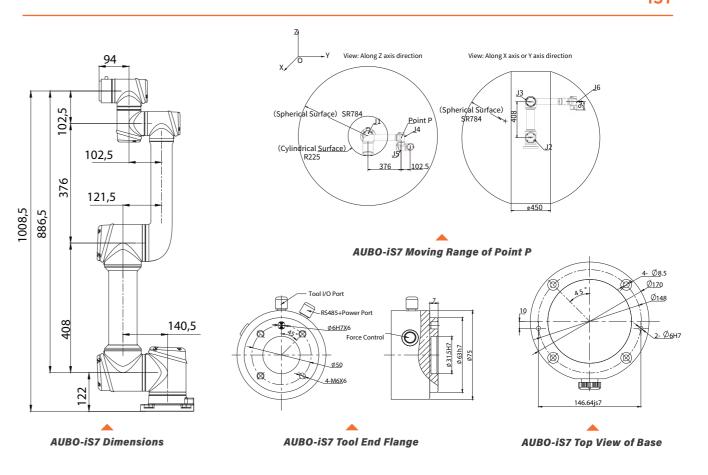
DIMENSIONAL DRAWINGS

AUBO-i20 Dimensions



iS7

AUBO-i20 Top View of Base



AUBO-i20 Tool End Flange

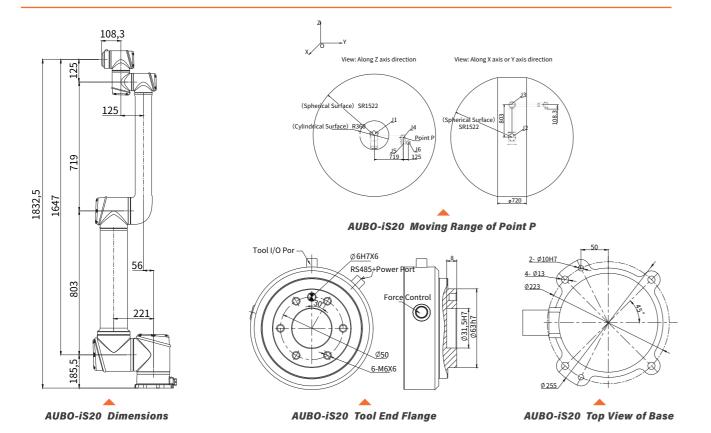
iS25

DIMENSIONAL DRAWINGS

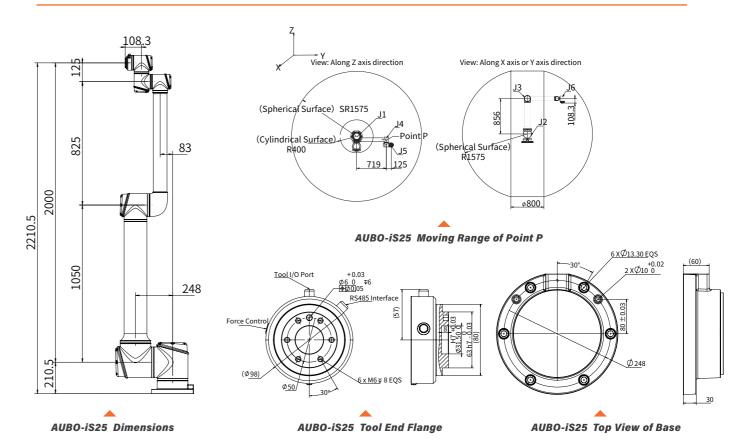
View: Along X axis or Y axis direction 121 1457 1300 AUBO-iS10 Moving Range of Point P 191 AUBO-iS10 Dimensions AUBO-iS10 Tool End Flange AUBO-iS10 Top View of Base

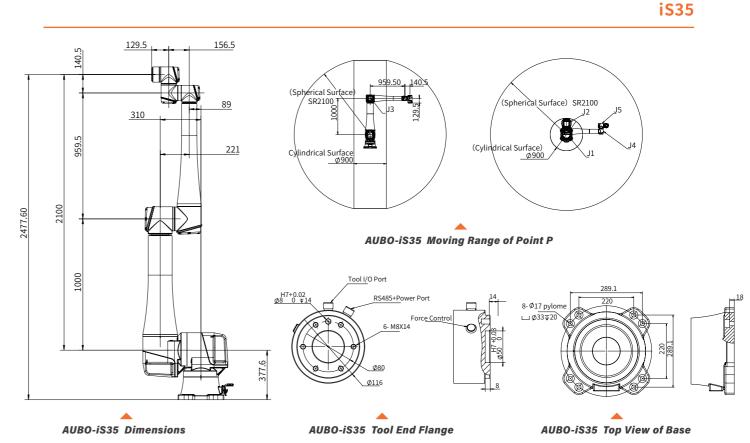
iS20

iS10



DIMENSIONAL DRAWINGS





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