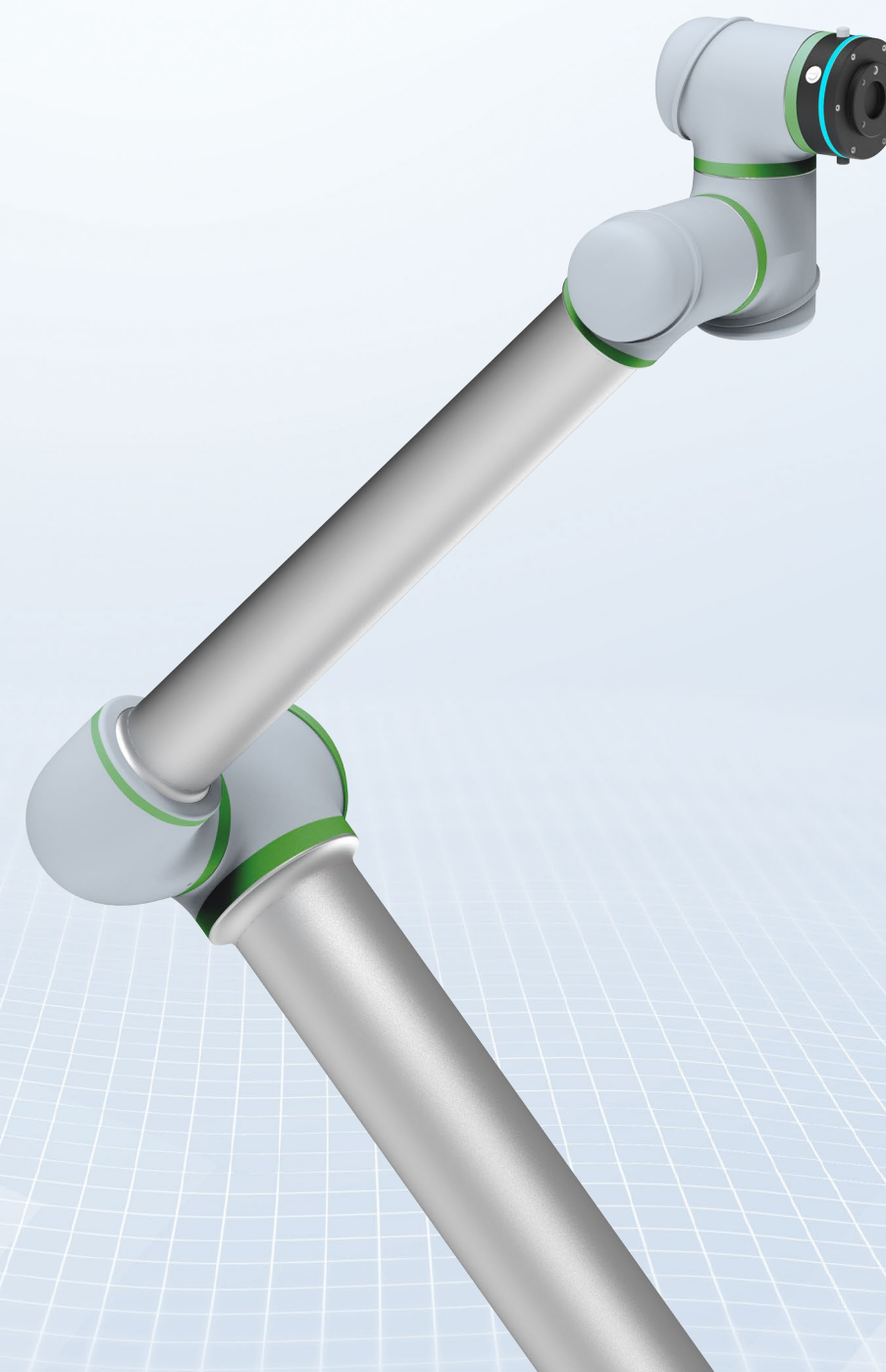


Collaborative Robots

X Series



AUCTECH Makes Human Life
and Manufacturing More Convenient



AUCTECH Robotics

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Guangzhou Auctech Automation Technology Ltd

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AUCTECH 2025-V5.0

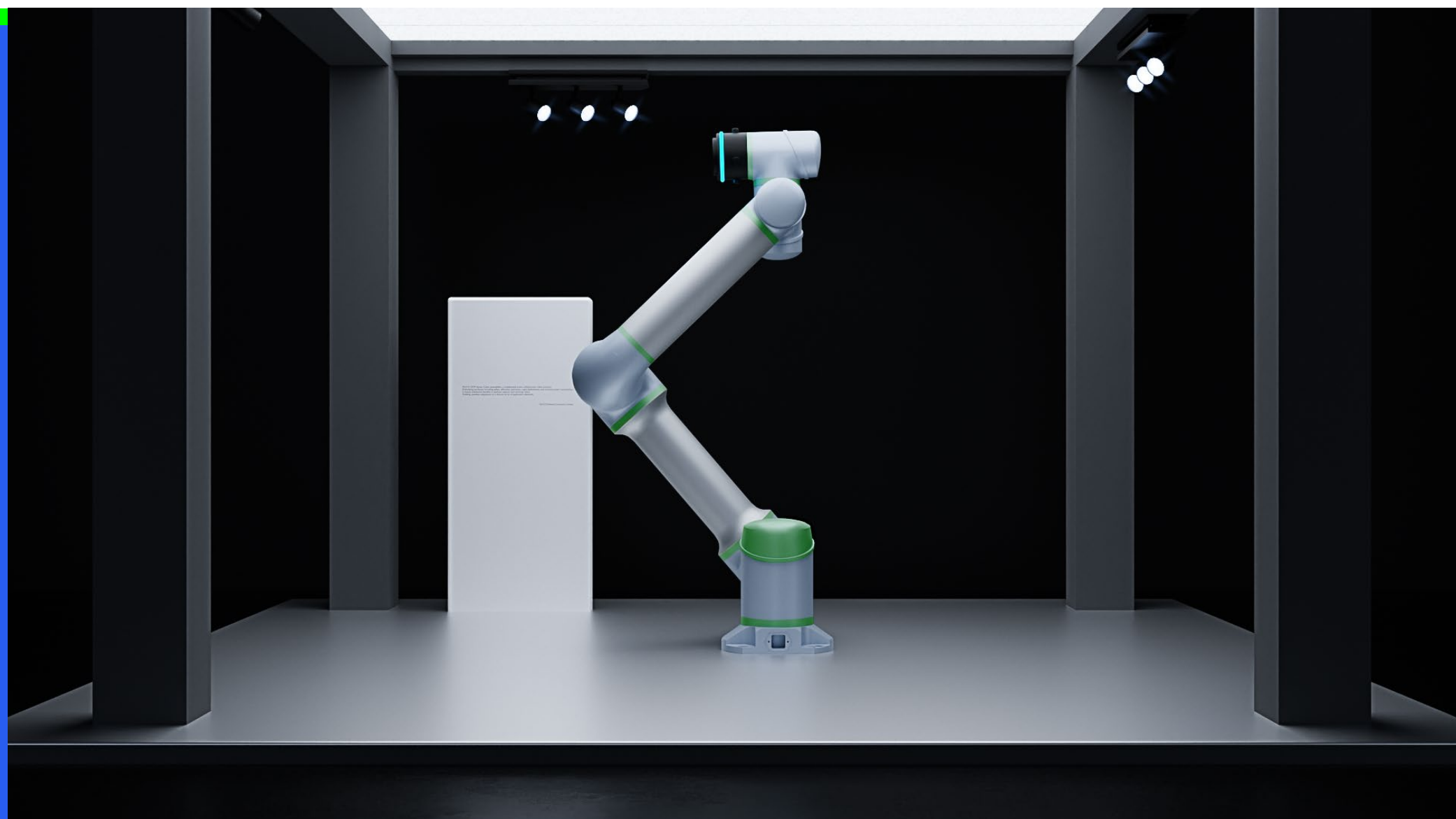
About AUCTECH

As the world's leading expert in next-generation intelligent robots and motion control, AUCTECH has been focusing on the R&D and innovation of flexible collaborative robots, industrial robots, motion control and intelligent manufacturing technologies.

Being committed to the field of intelligent manufacturing for a long time and help our customers to continuously improve the level of manufacturing automation, AUCTECH has taken technology research and development as its core, taking the lead in obtaining a number of self-developed patented technologies, and creating many industry firsts along the way: the first 7-Axis collaborative robot in China, the first dual-arm collaborative robot in China, the first 25kg large-load collaborative robot in China, the first 2m-long-arm-spread collaborative robot in China, and the first mobile collaborative robot in China. Driven by AUCTECH, China's collaborative robot industry is rapidly emerging.

Up to now, AUCTECH collaborative robots have been widely used in auto parts, 3C electronics, hardware tooling, automatic sewing, medical treatment, packaging and printing, metal processing, woodworking, energy, semiconductor, education and scientific research and other industries, the products are exported to Southeast Asia, North America, Europe and dozens of other countries and regions, the brand influence is renowned all over the world.

Intelligent collaboration for a better world. AUCTECH will continue to maintain its strength in research and innovation, with the power of wisdom, to promote the collaborative robotics industry, and more customers to go hand in hand to create a better future!



Brand Vision

- To Become A One-stop Supplier of Robotics and Motion Control for Global Market .
- To Improve The Automation Level of Industrial Manufacturing Continuously.
- To Make Human Life More Convenient.

AUCTECH Cobot

- 1 Standard 6-Axis Cobot
- 9 Explosion-proof Cobot (6-Axis)
- 19 7-Axis Cobot
- 23 Dual-arm Cobot

AUCTECH Mobile Cobot

- 13 AUCTECH Mobile Cobot
- 17 AUCTECH Delivery System

AUCTECH Mind

- 27 AUCTECH Mind



Standard 6-Axis Cobot

Safe

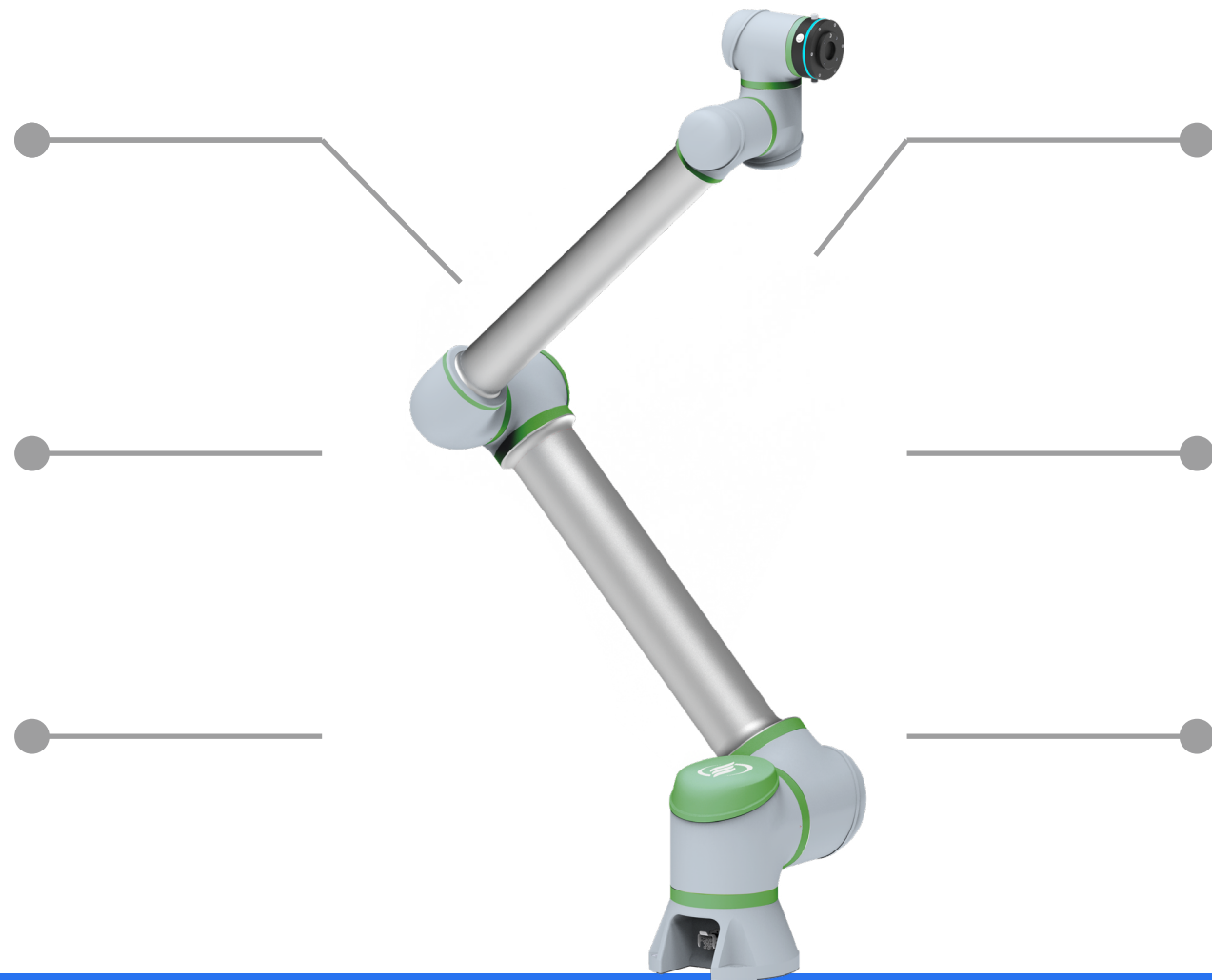
- With 16 TUV certified safety functions such as collision detection, force and power monitoring, which enables human robot collaboration.

Smart

- Multiple scenario software packages added (welding, palletizing, etc.)
- A variety of external interface support (DI, DO, AI/O, etc.)
- Support cloud robot data monitoring, remote OTA upgrade.
- Supports one-click deployment of multiple devices and remote backup of data.

Wide Application

- Premium: 30% Faster Trajectory
- 2D/3D vision deep compatibility.
 - Torque control sensor and other ecological support perfect, support multi-application development.



Easy Programming

- Easy programming with traction teach programming, less limitation to robot user.

Light and High Rigidity

- High-load robots with load to weight ratios up to 1:2.44.
- Adoption of a new generation of robot control cabinets 50%.
- Reduction in size and 30% in weight.

Energy Saving Device

- Power consumption as low as 200W.
- No need to replace lubricating oil.

Product Introduction

There are ten types of 6-axis cobot: X30-1100, X25-1800, X20-1400, X16-2000, X16-960, X12-1300, X10-1300, X7-910, X5-910, X3-618. With significant advantages of higher payload and working range, and features of cobot such as collaborative safety, easy-to-use and energy-saving, these robots can adapt to more application needs.

Industry

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |
| Petrochemical Industry | Automobile Industry | 3C Industry | Electric Industry | Medical Industry | Pan Industry | Consumer Goods Industry | Painting Industry | Education Industry |

Standard 6-Axis Cobot



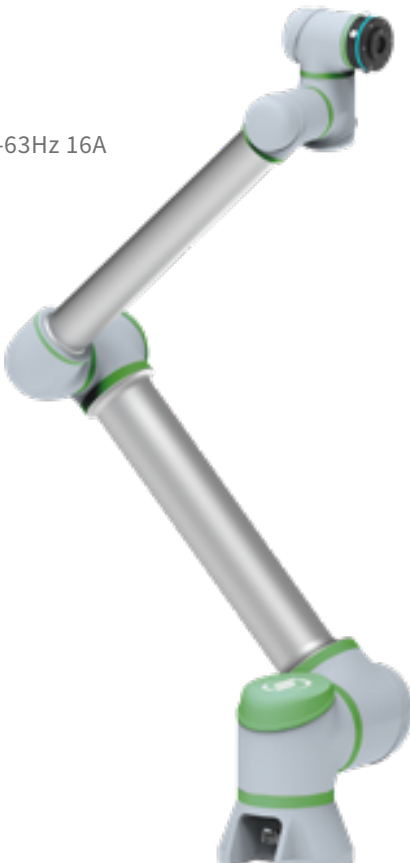
X30-1100

| | | |
|---------------------------|-----------------|---|
| Max Payload | | 30kg |
| Degree of Freedom | | 6 |
| Max TCP Speed | | 2.0m/s |
| Max Straight-line Speed | | 1.0m/s |
| Reach | | 1100mm |
| Repeatability | | ±0.05mm |
| Joint | range of motion | Max Speed |
| J6 | ±360° | 225°/s |
| J5 | ±360° | 225°/s |
| J4 | ±360° | 225°/s |
| J3 | ±360° | 180°/s |
| J2 | ±360° | 120°/s |
| J1 | ±360° | 120°/s |
| Tool Interface | | GB/T 14468.1-50-4-M6(eqv ISO 9409-1) |
| End Joint I/O | | 2 Dig I/O, 24V, 0.6A |
| Power Supply | | 220-240VAC 47-63Hz 10A/100-200VAC 47-63Hz 16A |
| Power Consumption | | Typical Power Consumption 600W |
| Installation | | Land Type |
| IP Class | | IP54/IP65 |
| Ambient Temperature Range | | -10°C~50°C |
| Storage Temperature Range | | -40°C~55°C |
| Robot Dimensions | | 1395x420x290mm |
| Robot Package Size | | 1060x540x840mm |
| Net/Gross Weight | | 64kg/82kg |



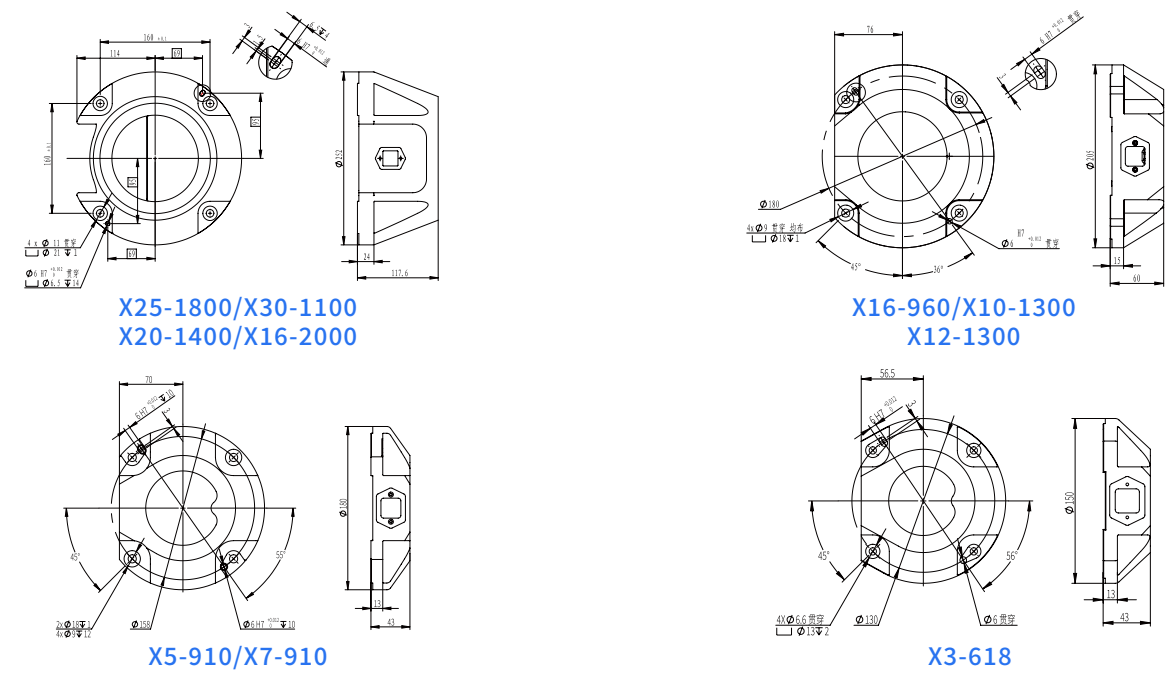
X25-1800

| | | |
|---------------------------|-----------------|---|
| Max Payload | | 25kg |
| Degree of Freedom | | 6 |
| Max TCP Speed | | 2.5m/s |
| Max Straight-line Speed | | 1.5m/s |
| Reach | | 1800mm |
| Repeatability | | ±0.05mm |
| Joint | range of motion | Max Speed |
| J6 | ±360° | 225°/s |
| J5 | ±360° | 225°/s |
| J4 | ±360° | 225°/s |
| J3 | ±360° | 150°/s |
| J2 | ±360° | 100°/s |
| J1 | ±360° | 120°/s |
| Tool Interface | | GB/T 14468.1-50-4-M6(eqv ISO 9409-1) |
| End Joint I/O | | 2 Dig I/O, 24V, 0.6A |
| Power Supply | | 220-240VAC 47-63Hz 10A/100-200VAC 47-63Hz 16A |
| Power Consumption | | Typical Power Consumption 600W |
| Installation | | Installed in Any Direction |
| IP Class | | IP54/IP65 |
| Ambient Temperature Range | | -10°C~50°C |
| Storage Temperature Range | | -40°C~55°C |
| Robot Dimensions | | 2300x440x252mm |
| Robot Package Size | | 1300x520x660mm |
| Net/Gross Weight | | 61.6kg/80kg |

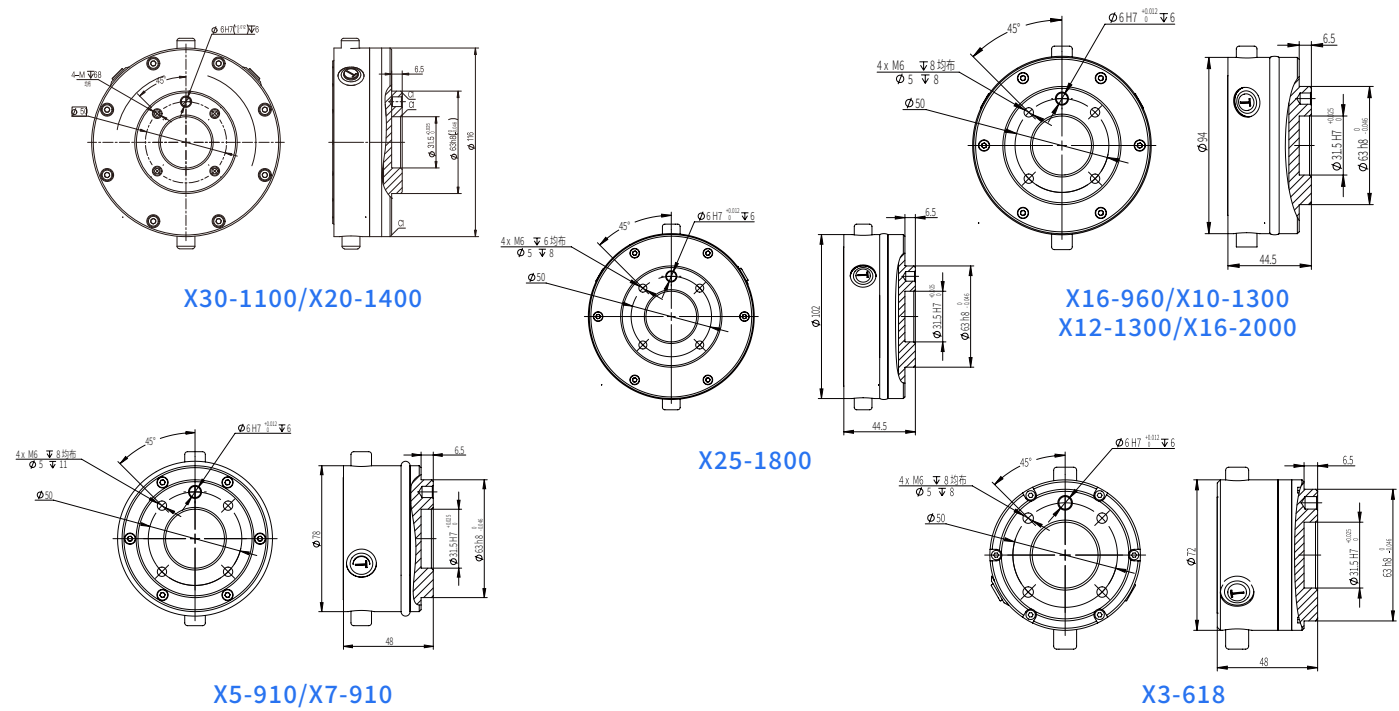


Standard 6-Axis Cobot

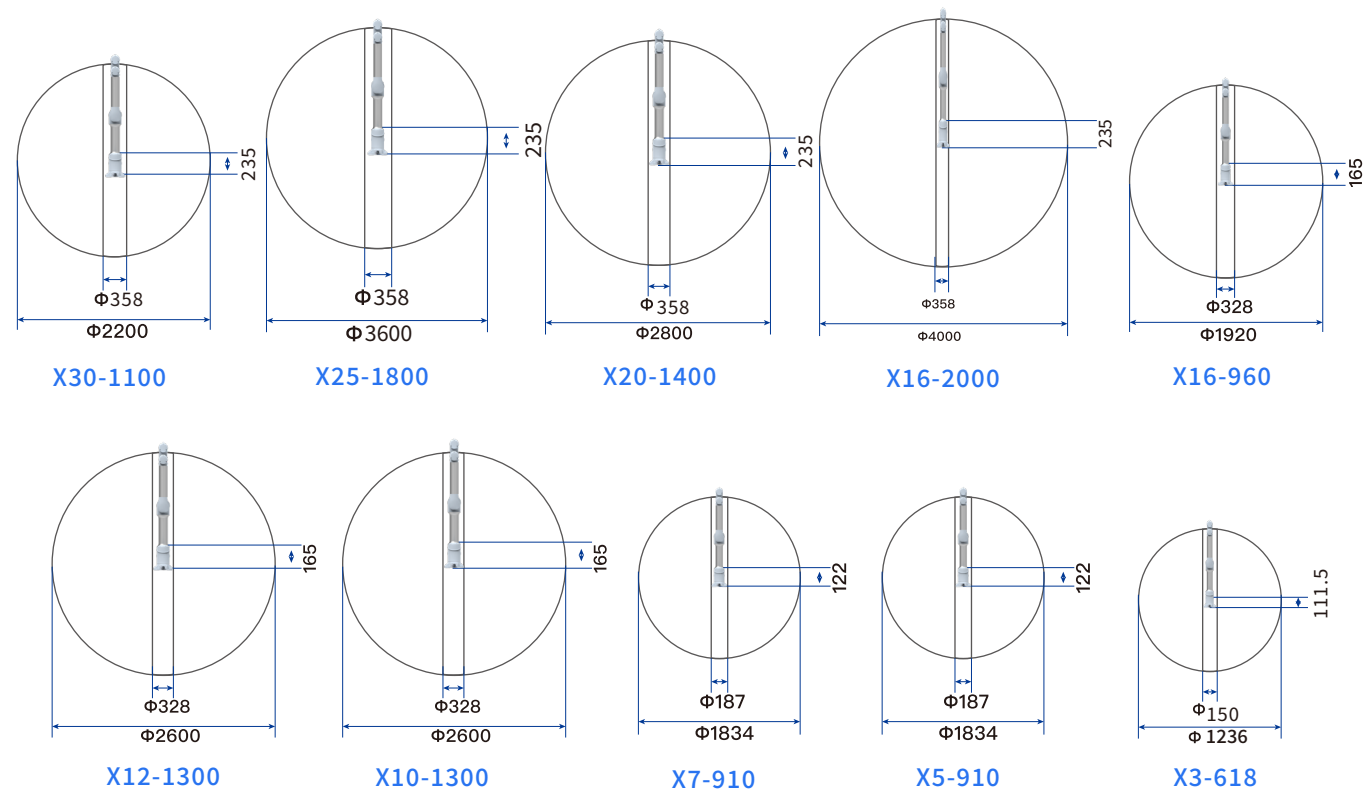
Base Flange ▶▶



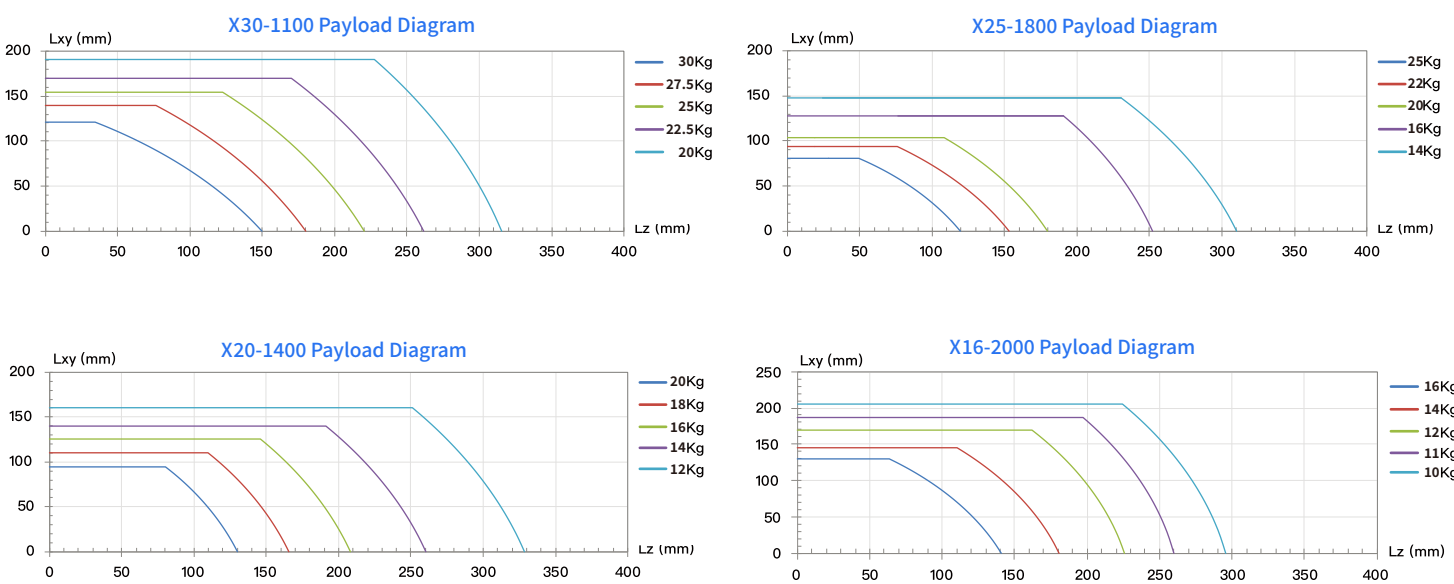
Tool Flange ▶▶



Work Space ▶▶

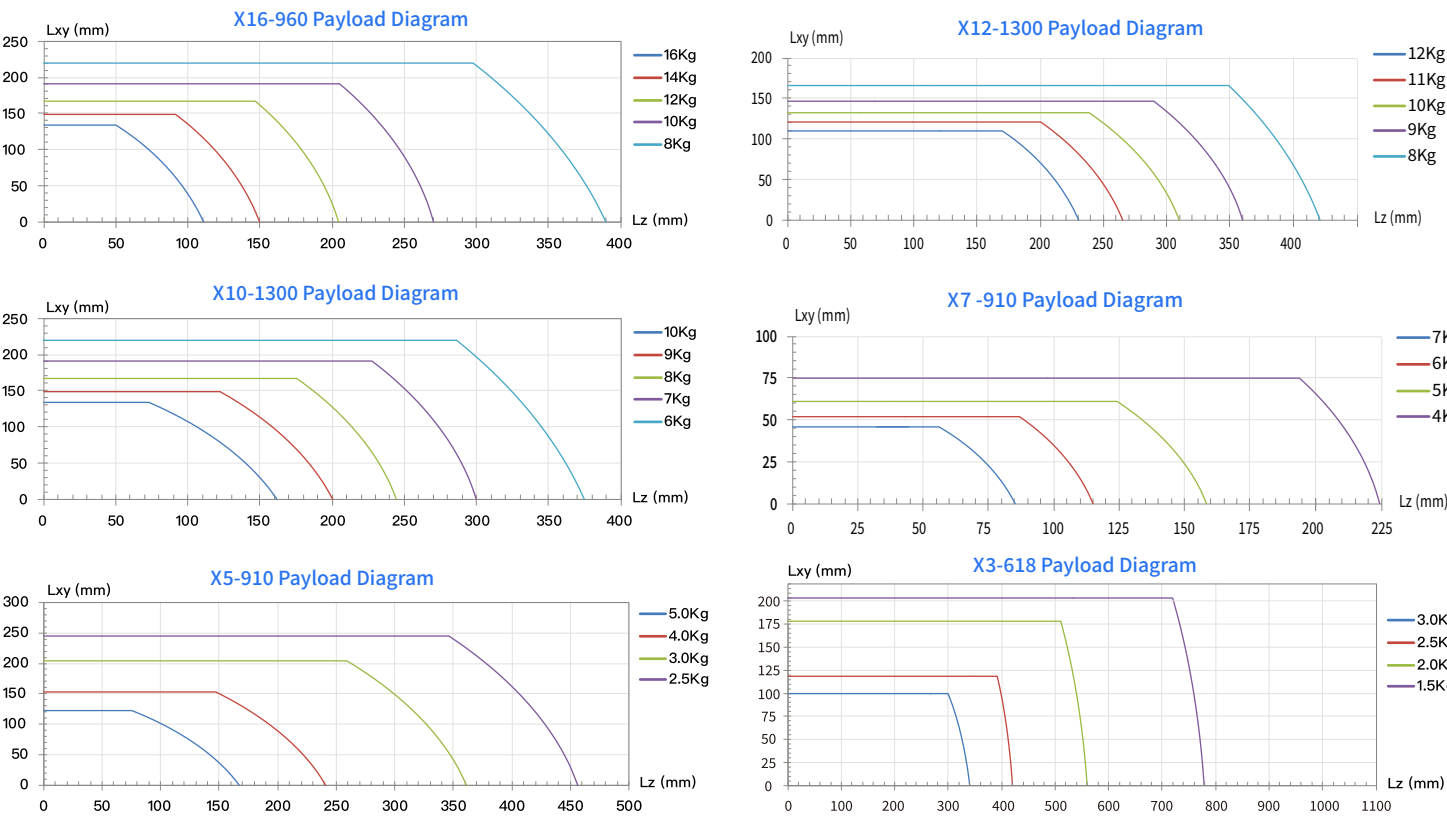


Payload Diagram ▶▶

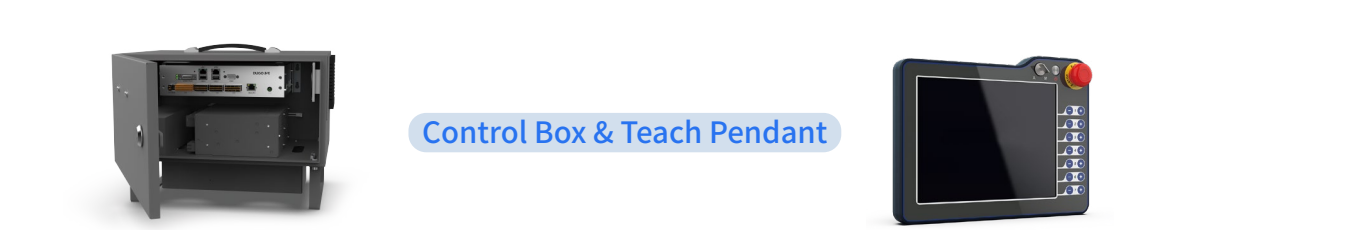


Standard 6-Axis Cobot

Payload Diagram

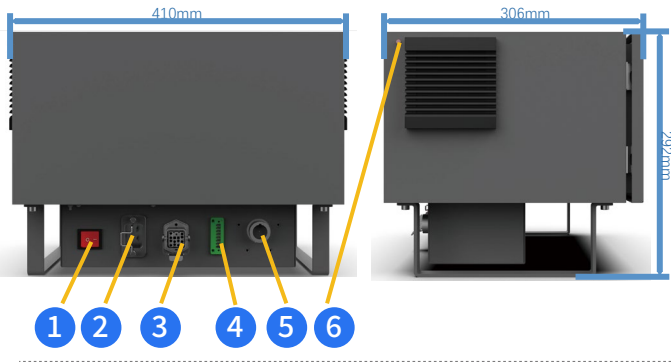


Control Box



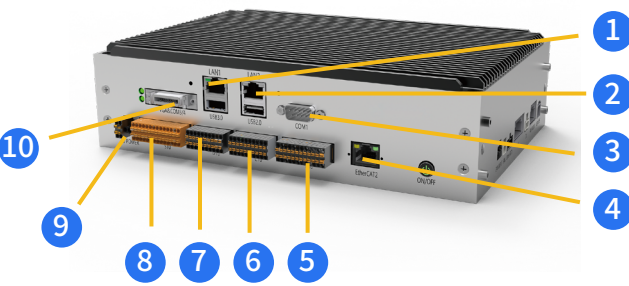
Control Box & Teach Pendant

The controller is used to control the robot's operations such as loading and unloading, grasping, polishing, handling, welding, gluing and oiling, as well as realizing the input and output control. The latest AUCTECH controller has tiny volume while taking into account the safety and flexibility, and has better performance in the field of human cooperation. It can be fully compatible with multiple series of robots, and also can be independently applied to automatic control systems.



- 1 System Switch
- 2 AC Input
- 3 Robot Arm Interface
- 4 Teach Pendant Shielding Interface
- 5 Teach Pendant Interface
- 6 ANT Interface (Optional WIFI)

- 1 LAN1+USB 3.0
- 2 LAN2+USB 2.0
- 3 COM1
- 4 EtherCAT2
- 5 EIO
2AI 2AO 485 INC
CAN
- 6 CIO
- 7 DIO
- 8 SIO
- 9 IO POWER
- 10 VGA&COM3/4



User Interface

| DI | |
|-----------------------|---|
| User DI | 16 Channels (8 Channels can be equipped with functional DI) |
| Input Effective Level | PNP, L: -3V-5V, H: 11V-30VDC, 2-15mA |
| Switching Time | TON: 50ms TOFF: 50ms |

| SDI | |
|---------------------------|--|
| Emergency Signal Input | 1 Channels (Passive signal, dry contact input) |
| Protective Stop Input | 1 Channels (Passive signal, dry contact input) |
| Configurable Secure Input | 2 Channels (Passive signal, dry contact input) |

| DO | |
|----------------|--|
| User DO | 16 Channels (8 Channels can be equipped with functional DO) |
| VOUT | PNP, 22-28V, Max: 0.5A |
| LOUT | PNP <2A (When exceeding 2A, the user needs to expand the power supply) |
| Switching Time | TON: 50ms TOFF: 50ms |

| SDO | |
|--------------------------------|--------------------------------|
| Configurable Secure Output | 2 Channels (PNP Active Signal) |
| Emergency Stop Feedback Output | 1 Channels (PNP Active Signal) |
| VOUT | 23.52V-25.2VDC (Max 0.5A SCP) |

| AI/O | |
|--|---------------------------------------|
| Analog Signal Output 2 Channels + Analog Signal Input 2 Channels - (Electrical isolation) | |
| Signal Current | 4-20mA Accuracy ± 1% |
| Input Impedance | 160Ω |
| Signal Voltage | 0-10V Accuracy ± 1% (Factory Default) |
| Input Impedance | 15kΩ |

| Communication/COM | |
|--|---|
| CAN | 1 Channels, bps configurable 10k, 20k, 50k, 100k, 125k, 250k, 500k, 1000k bps |
| RS485 | 1 Channels, bps configurable 4800, 9600, 19200, 38400, 115200 bps |
| LAN | 2-way (1-way gigabit, 1-way 100Mbit) Support MODBUS TCP, PROFINET, TCP IP |
| EtherCAT | 1 Channels, EtherCAT COM |
| INC Encoder Signal A+, A-; B+, B-; Z+, Z- | Working voltage: 24VDC Frequency: <200KHz Input: square wave signal |

Explosion-proof Cobot (6-Axis)

Explosion Proof

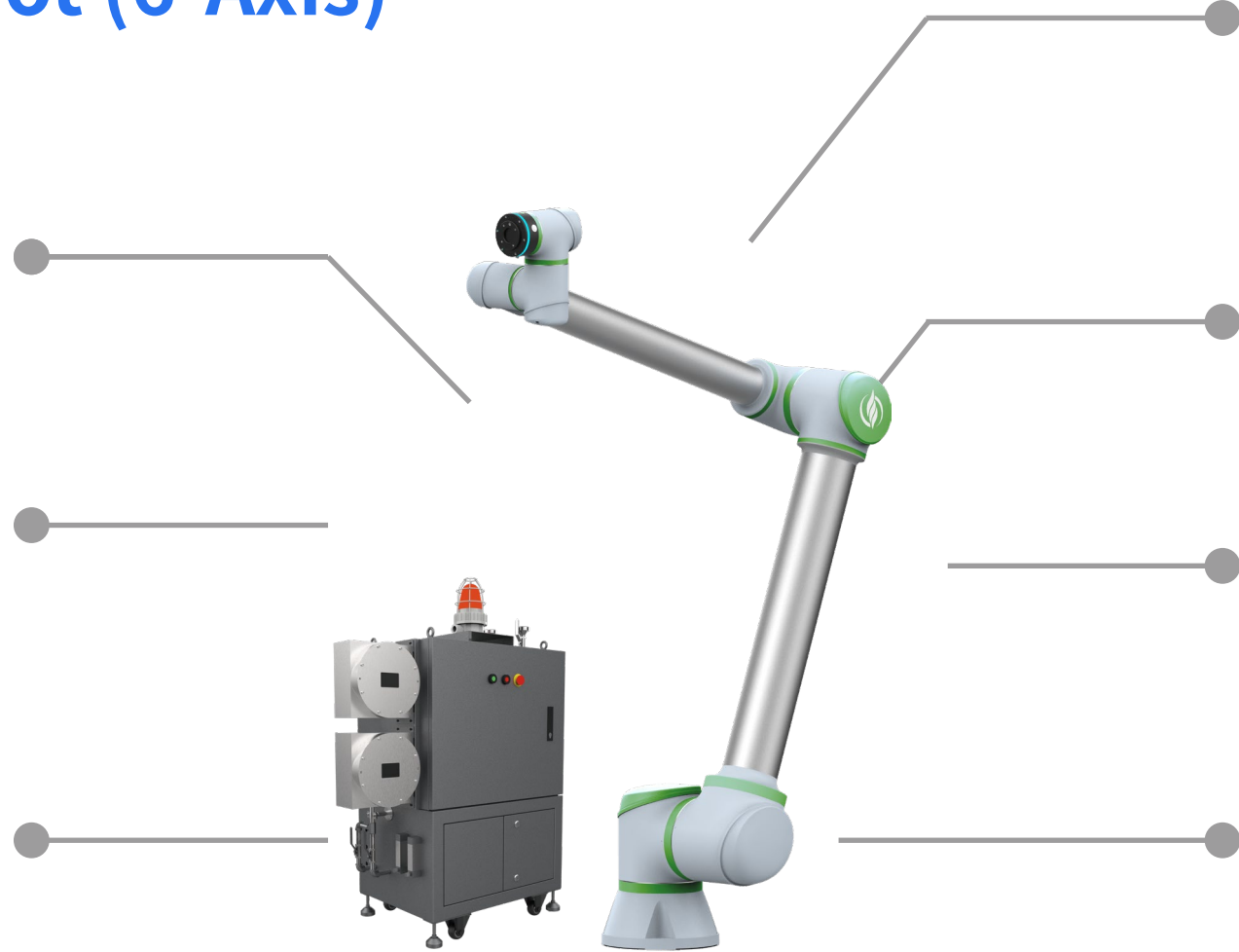
Explosion Proof: Ex db eb pxb IIC T4
Gb/Ex pxb tb IIC T130°C Db.

Multiple Explosion-proof Design

Multiple explosion-proof design, it can work normally at an ambient temperature of 50°C.

Replace High-risk Operator

Replace the front-line high-risk operators in all kinds of flammable, explosive, toxic, harmful, high-temperature and high-pressure oil, natural gas and chemical environments, and carry out work all day long.



Smart

Can configured various intelligent sensing devices to conduct real-time collection and intelligent analysis of on-site environmental data, improve the digital operation and maintenance ability comprehensively of enterprises.

Wide Application

More payload and working range options for larger scale of applications.

Easy Programming

With traction teach programming, less limitation to robot user.

Light and High Rigidity

Lightweight space-saving:
Can be quickly deployed and redeployed to adapt to production line changes.

Product Introduction

This series includes four explosion-proof collaborative robot products: X25-1800 ATEX, X20-1400 ATEX, X16-2000 ATEX, X10-1300 ATEX. As a protective wall for front-line high-risk personnel, it can replace front-line high-risk operators to work in various flammable, explosive, toxic, harmful, high-temperature and high-pressure oil, natural gas and chemical environments. The significant advantages of load handling and working radius makes it suitable for a wider range of application requirements. These models are also equipped characteristics such as safety, easy operation, quick deployment, and low power consumption.

Industry

Petrochemical Industry

Automobile Industry

3C Industry

Electric Industry

Medical Industry

Pan Industry

Consumer Goods Industry

Painting Industry

Education Industry

Explosion-proof Cobot (6-Axis)

Control Box ▶▶

| | |
|-----------------------|---|
| Weight | 160kg |
| Size | 1370*975*520mm |
| Power Supply | 200-240VAC, 47-63HZ, 8A/100-200VAC, 47-63HZ, 16A |
| Rated Power | 600W |
| Cable Length | 5m (For other specifications, please consult your dealer) |
| Communication Mode | TCP/IP, Modbus/TCP, CAN, RS485, Profinet |
| Communication I/O | 8DI, 8DO(PNP, 24V/MAX500mA) |
| Expand I/O | 16DI, 16DO(PNP, 24V/MAX500mA)/4AI(Voltage), 4AI(Current) |
| IP Class | IP65 |
| Operation Temperature | -10°C-50°C |
| Storage Temperature | -40°C-55°C |
| Humidity | 20%-90%RH |
| Explosion Proof | Ex db eb pxb IICT4Gb/Ex pxb tb IIIC T130°C Db |
| Type of Gas Source | Clean Air |



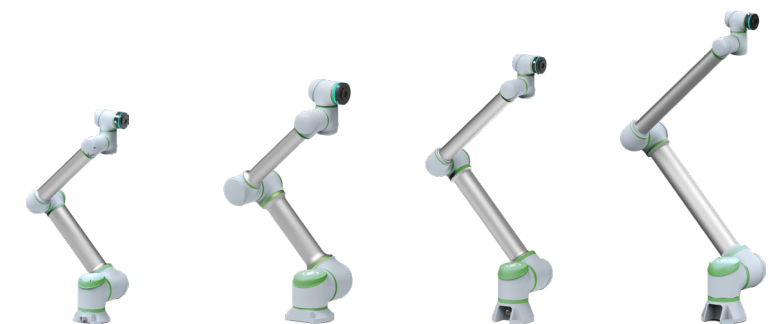
Control Box

Teach Pendant ▶▶

| | |
|-----------------|---|
| Size | 248x172x22mm |
| OS | Android 10.0 |
| Resolving Power | 1280*800 |
| VGA Size | 10.1 16:10 |
| IP Class | IP68 |
| Weight | 1095g |
| Power | AC100V~240V, 50Hz/60Hz, Output DC 5V/3A |
| DC Ports | DC 5V-3A ⌀ 3.5mm |



Technical Parameters ▶▶



X10-1300 ATEX

X20-1400 ATEX

X25-1800 ATEX

X16-2000 ATEX

Please refer to the standard 6-axis cobot form for specific model and technical parameters details

IP Class

IP 65

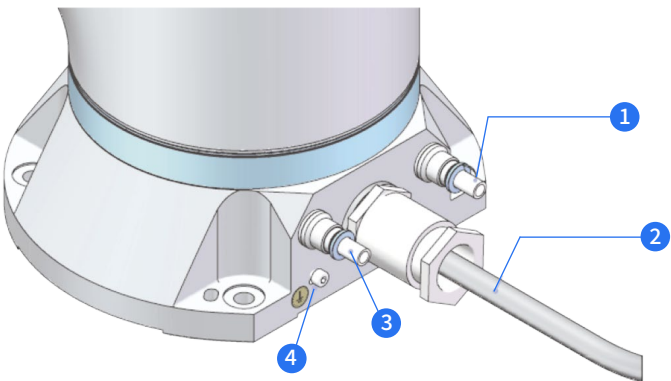
Explosion Proof Level

Ex db eb pxb IICT4Gb/
Ex pxb tb IIIC T130°C Db

Type of Gas Source

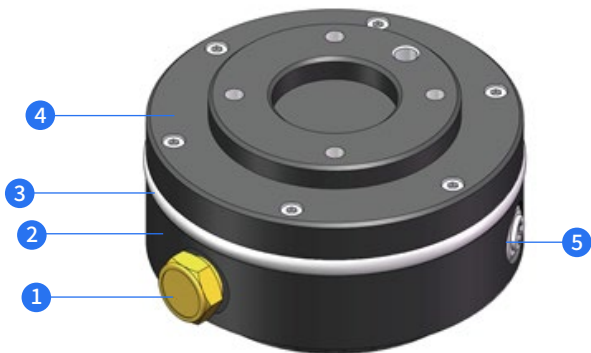
Clean Air

Diagram of the Base ▶▶



- 1 Mechanical Arm Air Inlet
- 2 Cable Flame Retardant Grade VW-1
- 3 Pressure Detection Port (Connected to Pressure Transmitter)
- 4 Grounding Wire (Effective Cross-sectional Area Shall not be less than 4mm²)

Diagram of the Tool ▶▶



- 1 Air Outlet Silencing Device
- 2 Tool Flange Body
- 3 Sealed Light Strip
- 4 Tool Flange Cover
- 5 Teach Button



AUCTECH Mobile Cobot

Customized Wheel Train

The customized wheel train for AUCTECH mobile cobot comes more stable and reliable.

360° Security Protection

Real-time 360° security protection achieves man-machine security cooperation.

Complete Ecological Technical Support

Efficient docking of various tools and more convenient for grasping.

B-Series



T-Series



L-Series



Integrated Teach Screen

Realize visual linkage debugging of mobile platform and collaboration arm on one screen, fast deployment.

Charging Variety

Contact/wireless/automatic charging mode, meeting the requirements of short-time, real-time and 7 * 24 all-day operation.

Integrated & Open Controller

Open programming environment+ multiple communication and data interfaces+independent detection can meet more customization requirements.

Product Introduction

AUCTECH ARV(AGV+ROBOT) is integrated with independently developed mobile platforms and Cobot, with independently developed vision and fixture and other execution units to realize functional applications such as material handling, assembly, detection and precision processing. AUCTECH ARV(AGV+ROBOT) has comprehensive security protection, multiple interaction and communication modes and can well interface with customer systems. It can also provide customized solutions, customized scheduling system, on-site guidance and perfect after-sales service to ensure customer experience. As a standardized product, AUCTECH ARV(AGV+ROBOT) offers consistency, reliability and stability not found in non-standard equipment.

Industry



Petrochemical Industry



Automobile Industry



3C Industry



Electric Industry



Medical Industry



Pan Industry



Consumer Goods Industry



Painting Industry



Education Industry

AUCTECH Mobile Cobot



AM-X2-B



AM-X3-B



AM-X4-B



AM-X6-B



AM-X2-T



AM-X2-L

Dimensions
(L*W*H, excluding cooperation arm
and side obstacle avoidance laser)

Comprehensive Accuracy

Total Weight

Navigation Mode

Cobot Payload

Platform Load

| | |
|---------------------|---------------------------|
| Mobile Capability | Driving Form |
| | Turning Radius |
| | Crab Speed (Any Angle) |
| | Width of Walking Passage |
| | Movement Speed |
| | Turning Speed |
| | Obstacle Clearance Height |
| | Trench Width |
| | Ground Clearance |
| | Gradeability |
| Parking Accuracy | |
| Battery Performance | Battery |
| | Capacity |
| | Running Time |
| | Charging Time |
| Charging Mode | |
| Safety Device | |
| Interface | Hardware Support |
| | Communication Protocol |
| Button | |
| Use Environment | Ambient Temperature |
| | Ambient Humidity |
| | Runtime Environment |
| | Cleanliness |

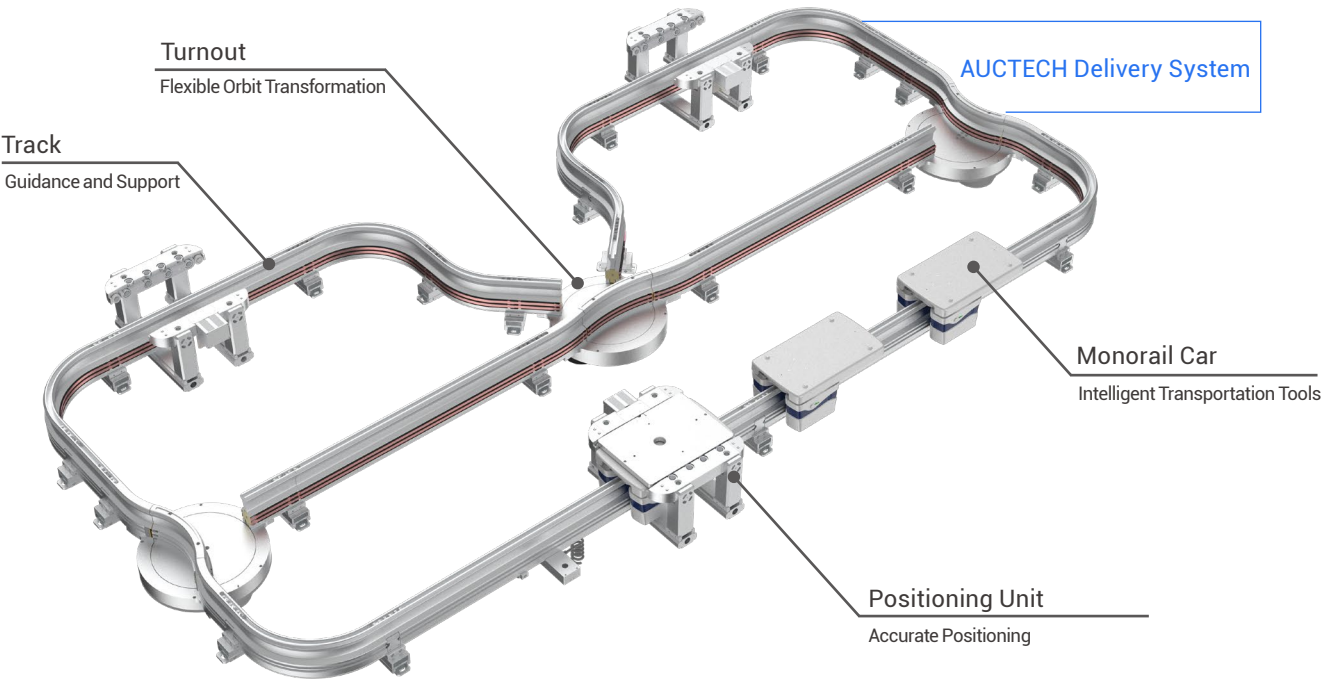
| | | | |
|--|--|---|--|
| 1250mm×600mm×700mm | | 950mm×600mm×700mm | |
| ±0.3mm | | | |
| About 320/330/361/350/360KG (Equipped with collaborative arm X5/10/16/20/30) | | About 270/280/300/KG (Equipped with collaborative arm X5/10/16/20) | |
| SLAM & QR CODE | | | |
| 5kg/10kg/16kg/20kg/30kg (Equipped with collaborative arm X5/10/16/20/30) | | 5kg/10kg/16kg/20kg (Equipped with collaborative arm X5/10/16/20) | |
| 670kg Max | | 350kg Max | |
| Two-wheel Differential | | Two-wheel Differential | |
| 500mm Min | | 500mm Min | |
| / | | / | |
| 900mm Min | | 900mm Min | |
| ≤1m/s | | ≤1m/s | |
| ≤0.5m/s | | ≤0.5m/s | |
| 10mm | | 10mm | |
| 30mm | | 25mm | |
| 30mm | | 30mm | |
| <5° | | <5° | |
| ±5mm position accuracy, ±1° angle accuracy | | | |
| DC51.2V Lithium iron phosphate LFP | DC51.2V Lithium iron phosphate LFP (Option) | DC51.2V Lithium iron phosphate LFP | DC51.2V Lithium iron phosphate LFP (Option) |
| 52Ah | 80Ah | 42Ah | 80Ah |
| About 5.5 hours | About 8 hours | About 5.5 hours | About 8 hours |
| ≤1.8h | ≤2h | ≤1.5h | ≤2h |
| Contact Charging / Wireless Charging / Converter (Both Manual and Automatic Support) | | | |
| Collision Detection/Safety Contact/Obstacle Avoidance Laser/Emergency Stop, etc. | | | |
| Hardware Support CAN bus, RS-485, RS-232, RJ45, USB | | | |
| Communication Protocol Support CANOPEN, Modbus, etc. | | | |
| Start Button/Pause Button/Reset Button/Teach Button | | | |
| Ambient Temperature: -10℃~45℃ | | | |
| Ambient Humidity: 5%~95 % (No Condensation) | | | |
| Indoor Use Only | | | |
| None/ Class6(Class 1000) / Class5 (Class 100) | | | |

| | | | | | | | |
|--|---|--|---|---|---|---|--|
| 800mm×600mm×700mm | | 1250mm×700mm×800mm | | 1250mm×600mm×1070mm | | 1250mm×600mm×700mm | |
| ±0.3mm | | | | | | | |
| About 247/260KG (Equipped with collaborative arm X5/10) | | About 392/405/436/435KG (Equipped with collaborative arm X5/10/20/30) | | About 330/361/350/360KG (Equipped with collaborative arm X10/16/20/30) | | About 320/330/361/350/360KG (Equipped with collaborative arm X5/10/16/20/30) | |
| SLAM & QR CODE | | | | | | | |
| 5kg/10kg (Equipped with collaborative arm X5/10) | | 5kg/10kg/20kg/30kg (Equipped with collaborative arm X5/10/20/30) | | 10kg/16kg/20kg/30kg (Equipped with collaborative arm X10/16/20/30) | | 5kg/10kg/16kg/20kg/30kg (Equipped with collaborative arm X5/10/16/20/30) | |
| 120kg Max | | 470kg Max | | 100kg Max | | 670kg Max | |
| Two-wheel Differential | | Mecanum Wheel | | Two-wheel Differential | | Two-wheel Differential | |
| 500mm Min | | / | | 500mm Min | | 500mm Min | |
| / | | ≤0.5m/s | | / | | / | |
| 900mm Min | | 1000mm Min | | 900mm Min | | 900mm Min | |
| ≤0.8m/s | | ≤0.8m/s | | ≤1m/s | | ≤1m/s | |
| ≤0.5m/s | | ≤0.5m/s | | ≤0.5m/s | | ≤0.5m/s | |
| 10mm | | 10mm | | 10mm | | 10mm | |
| 30mm | | 80mm | | 30mm | | 30mm | |
| 30mm | | 45mm | | 30mm | | 30mm | |
| <5° | | <5° | | <5° | | <5° | |
| ±5mm position accuracy, ±1° angle accuracy | | | | | | | |
| DC51.2V Lithium iron phosphate LFP | DC51.2V Lithium iron phosphate LFP (Option) | DC51.2V Lithium iron phosphate LFP | DC51.2V Lithium iron phosphate LFP (Option) | DC51.2V Lithium iron phosphate LFP | DC51.2V Lithium iron phosphate LFP (Option) | DC51.2V Lithium iron phosphate LFP | |
| 28Ah | 42Ah/80Ah | 42Ah | 80Ah | 52Ah | 80Ah | 52Ah | |
| About 5.5 hours | About 8 hours | About 5.5 hours | About 8 hours | About 5.5 hours | About 8 hours | About 5.5 hours | |
| ≤1.5h | ≤2h | ≤1.5h | ≤2h | ≤1.8h | ≤2h | ≤1.8h | |
| Contact Charging / Wireless Charging / Converter (Both Manual and Automatic Support) | | | | | | Contact Charging (A/M) | |
| Collision Detection/Safety Contact/Obstacle Avoidance Laser/Emergency Stop, etc. | | | | | | | |
| Hardware Support CAN bus, RS-485, RS-232, RJ45, USB | | | | | | | |
| Communication Protocol Support CANOPEN, Modbus, etc. | | | | | | | |
| Start Button/Pause Button/Reset Button/Teach Button | | | | | | | |
| Ambient Temperature: -10°C~45°C | | | | | | | |
| Ambient Humidity: 5%~95 % (No Condensation) | | | | | | | |
| Indoor Use Only | | | | | | | |
| None/ Class 6 (Class 1000) / Class 5 (Class 100) | | | | | | | |

(1) The comprehensive accuracy depends on the accuracy of the end positioning device, the parking accuracy of the mobile platform, and the accuracy of the collaborative arm end.
(2) The operating time depends on requirements such as operating conditions and rhythm.
(3) Models X25-1800 and X16-2000 are not recommended because of their long arm span which may cause overturning risk when used with AGV. please consult the manufacturer if necessary.

AUCTECH Delivery System

- Modular Design
- Full-Automation
- Flexible Layout
- Energy Saving and Efficient
- Flexible Combination
- Space Saving
- Easy to Expand



AUCTECH Delivery System can organically connect production equipment and process flow. The system plans the path of the trolley based on the starting point and destination of material transportation, achieving fully automatic material transportation and meeting the requirements of flexible production systems for material transportation. It has the characteristics of energy-saving, clean, efficient, and flexible. The installation method of the multi transmission system is very flexible, which can be lifted or installed on the ground, and has unique advantages in situations where the production area is very tight.

Main Modules ▶▶

Track and Accessories

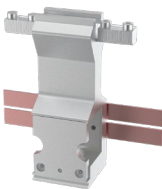
- Guidance and Support
- Full Track Power Supply
- Sensor Installation
- Multiple Specifications
- Flexible Combination

AUCTECH Delivery System track system provides path guidance for the trolley during operation. The power supply system is laid along the track to provide power for the entire track. The track system of AUCTECH Delivery System has various specifications of length and bending radius, which can be flexibly combined and configured according to needs.

Track Connection and Power Supply Module

- Track Connection
- Power Connection
- Force Fulcrum
- Track Installation Adjustment

The track connection and power supply module of AUCTECH Delivery System is an indispensable organic component of the track system, which can connect different tracks, guide the power supply to connect to the tracks and support the system's force.



Monorail Car

- Motor Drive
- Wireless Communication
- Anti-collision
- Anti-blocking Rotation
- Running Status Display

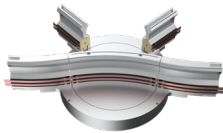
The monorail car is the core component of AUCTECH Delivery System and is an intelligent material transportation vehicle operating in orbit. The car receives power from the track and is driven by the onboard power system. It has the characteristics of anti-collision, anti-blocking rotation, and display of operating status.



Positioning Unit

- Motor Drive
- Path Switch
- Anti-blocking Rotation
- Locking in Place
- Programmable Controller
- Power-on Reset Self Check
- Combined Application

Turnouts are key modules that control the operation of small cars along different paths through AUCTECH Delivery System. By setting the turnout reasonably, the main and branch roads of the track system can be formed, as well as the function of dividing the track main road into different branches and merging them into the main road.



Track and Accessories

- Cylinder Drive
- Accurate Positioning
- Horizontally Adjustable
- Operating Load Support

The positioning unit is a unit that interacts between AUCTECH Delivery System and production process equipment and stations, and is also a station for precise positioning of on-board materials.



Communication Module

- Optoelectronic Communication
- Status Display
- Flexible Layout
- Programmable Controller
- Trolley Start Control
- I/O & RS232

The communication module is the core module for communication between the car and the upper control system. The control system can wirelessly communicate with the car through the communication module, query the car's information, and control its operation.



Technical Parameters ▶▶

Track Straight Section and Accessories

| Spec. | Value |
|--------------|----------------|
| Weight (kg) | 5.6 |
| Material | Aluminum Alloy |
| Surface | Anodization |
| Accessories1 | Ni-Cu |
| Accessories2 | Plastics |

Track Bends and Accessories

| Spec. | Value |
|--------------|---------------------------------|
| Size | 90°R220 45°R220 90°R520 45°R520 |
| Weight (kg) | 3.7 2.2 7.8 4.3 |
| Material | Aluminum Alloy |
| Surface | Anodization |
| Accessories1 | Ni-Cu |
| Accessories2 | Plastics |

Track connection and power supply module and accessories

| Spec. | Value |
|--------------|----------------|
| Weight (kg) | 0.5 |
| Material | Aluminum Alloy |
| Accessories1 | Cu |
| Accessories2 | Plastics |
| Accessories3 | Steel |

Track and Accessories

| Spec. | Value |
|---------------------------|-----------------|
| Size (mm) | 325 X 410 X 170 |
| Weight (kg) | 7.8 |
| Positioning Accuracy (mm) | ±0.1 |
| Operating Pressure (bar) | 4-6 |
| KPa (bar) | 5 |
| Gas Circuit Connection | ø4mm |

Monorail Car

| Spec. | Value |
|------------------------------------|----------------------------|
| Size (mm) | 350 X 203 X 150 |
| Weight (kg) | ≤4.5 |
| Max Operating Speed (m/min) | 36 or 60 (Optional) |
| Deceleration Running Speed (m/min) | 20 (Adjustable) |
| Max Weight (kg) | 11 (Excluding Dead Weight) |
| Parking Accuracy (mm) | ±1 |
| TRNF | Rolling Contact |
| Running Direction | Forward and Reverse |
| Supply Voltage (VDC) | 24 |

Turnout

| Spec. | Value |
|---|---------------------------------|
| Material | Aluminum Alloy |
| Rotation Angle (Main Road/Guide) | 60°, 150°, 210° |
| Rotation Angle (Divergence/Convergence) | 120°, 240° |
| Joint | 1xRS232, 3xDI, 4xDO |
| Load (kg) | 34 (Including Dead-Weight) |
| Supply Voltage (VDC) | 24 |
| Weight (kg) | 14 |
| Rotation Time | 150°=1.4s, 60°=0.65s, 210°=1.9s |
| Rotation Time | 120°=1.3s, 240°=2.3s |

Communication Module

| Spec. | Value |
|----------------------|-----------|
| Size (mm) | 130x56x30 |
| Weight (kg) | 0.5 |
| Supply Voltage (VDC) | 24 |
| DI | 3 |
| DO | 3 |
| RS232 | 1 |

7-Axis Cobot

Product Features▶▶



7-Axis Cobot has various functions such as rapid deployment, traction teaching and collision detection. It is particularly suitable for flexible production lines with compact layout and high precision to conduct precision assembly, product packaging, polishing, testing, machine loading and unloading and other industrial operations. 7-Axis Cobot, with its high flexibility, precision, and safety, will open up a brand new way of industrial production and lead the new era of human-machine collaboration.

More Flexible

With 7 degrees of freedom, the robot can work well in compact space.

Safe

Collision detection function enables human robot collaboration.

Easy Programming

with traction teach programming, less limitation to robot user.

More Accurate

Repeatability up to $\pm 0.02\text{mm}$.

Economic Efficient

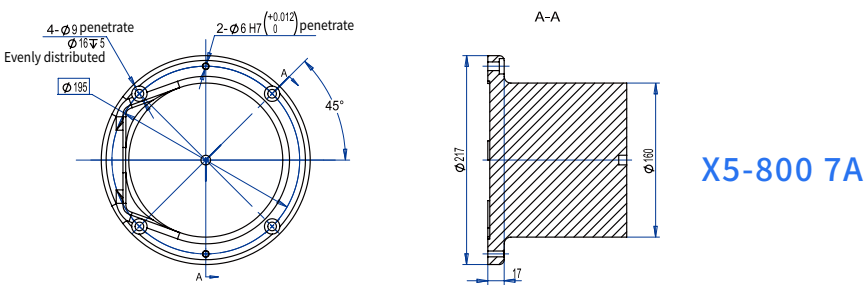
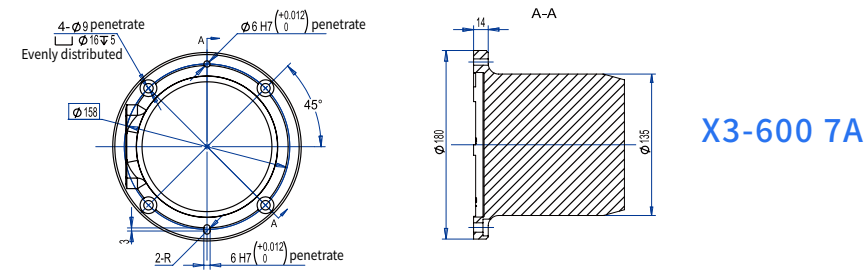
Power consumption 250W.

Technical Parameters▶▶

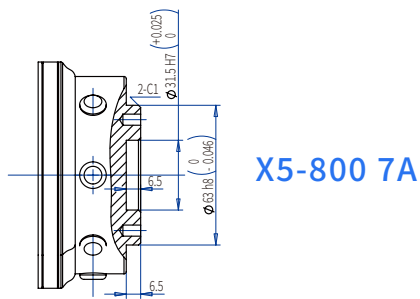
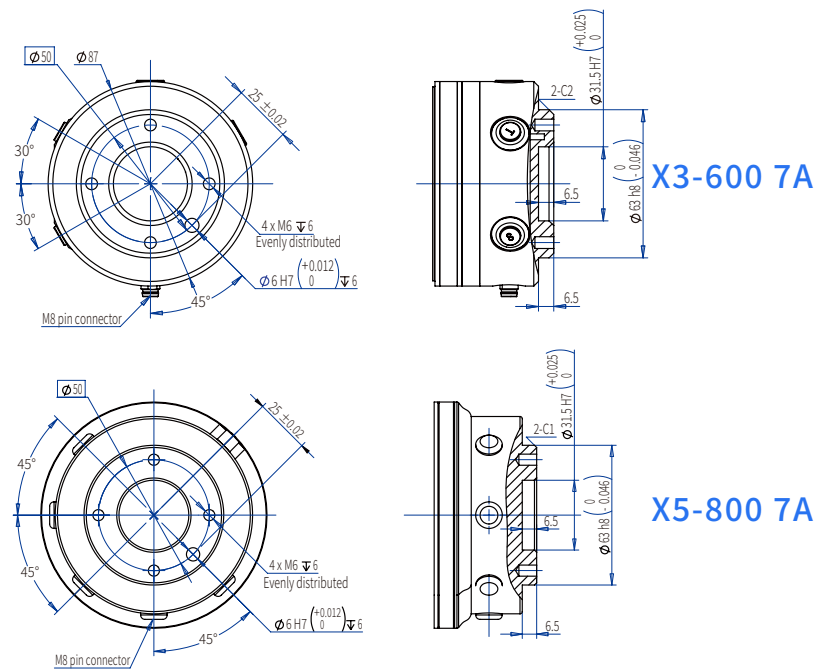
| | X3-600 7A | | X5-800 7A | |
|-----------------------------|--|-----------|--|-----------|
| Max Payload | 3kg | | 5kg (5.5kg*1) | |
| Degree of Freedom | 7 | | 7 | |
| Max TCP Speed | 2.5m/s | | 2.0m/s | |
| Max Straight-line Speed | 1.0m/s | | 1.0m/s | |
| Reach | 600mm | | 800mm | |
| Repeatability | $\pm 0.02\text{mm}$ | | $\pm 0.02\text{mm}$ | |
| Joint | Range | Max Speed | Range | Max Speed |
| J7 | Infinite Spins | 180°/s | $\pm 180^\circ$ | 180°/s |
| J6 | $\pm 120^\circ$ | 180°/s | $\pm 110^\circ$ | 180°/s |
| J5 | $\pm 180^\circ$ | 180°/s | $\pm 180^\circ$ | 180°/s |
| J4 | $\pm 120^\circ$ | 180°/s | $\pm 115^\circ$ | 180°/s |
| J3 | $\pm 180^\circ$ | 180°/s | $\pm 180^\circ$ | 180°/s |
| J2 | $\pm 115^\circ$ | 180°/s | $\pm 105^\circ$ | 180°/s |
| J1 | $\pm 180^\circ$ | 180°/s | $\pm 180^\circ$ | 180°/s |
| Tool Interface | GB/T 14468.1-50-4-M6(eqv ISO 9409-1) | | GB/T 14468.1-50-4-M6(eqv ISO 9409-1) | |
| I/O | Control Box I/O | | 14 Dig I/O, 24V, 0.5A | |
| | End Joint I/O | | 2 Dig I/O, 24V, 1A | |
| Power Supply | 230VAC (-15%~+10%), 50-60Hz | | 230VAC (-15%~+10%), 50-60Hz | |
| Power Consumption | Typical Power Consumption 250W | | Typical Power Consumption 400W | |
| Robot Dimensions | 1035x232x202mm | | 1285x220x240mm | |
| Control Box Size | 530x480x180mm | | 530x480x180mm | |
| Installation | Installed in Any Direction | | Installed in Any Direction | |
| Ambient Temperature Range | $-10^\circ\text{C}\sim 45^\circ\text{C}$ | | $-10^\circ\text{C}\sim 45^\circ\text{C}$ | |
| Storage Temperature Range | $-40^\circ\text{C}\sim 55^\circ\text{C}$ | | $-40^\circ\text{C}\sim 55^\circ\text{C}$ | |
| IP Class | IP54 | | IP54 | |
| Robot Package Size | 735x635x350mm | | 735x635x350mm | |
| Control System Package Size | 698x588x450mm | | 698x588x450mm | |
| Net/Gross Weight | 24kg/34kg | | 24kg/33kg | |

7-Axis Cobot

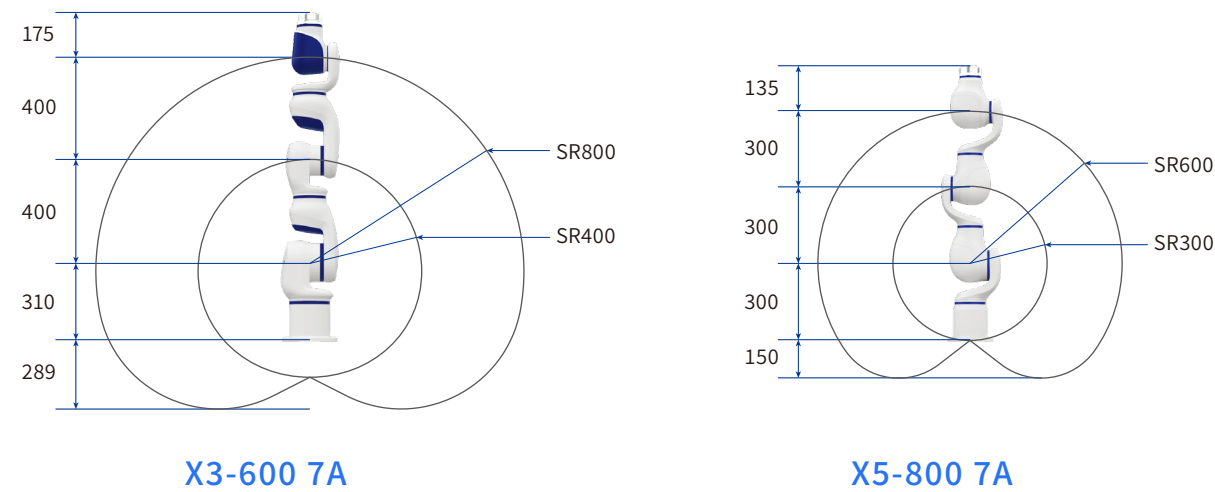
Base Flange ▶▶



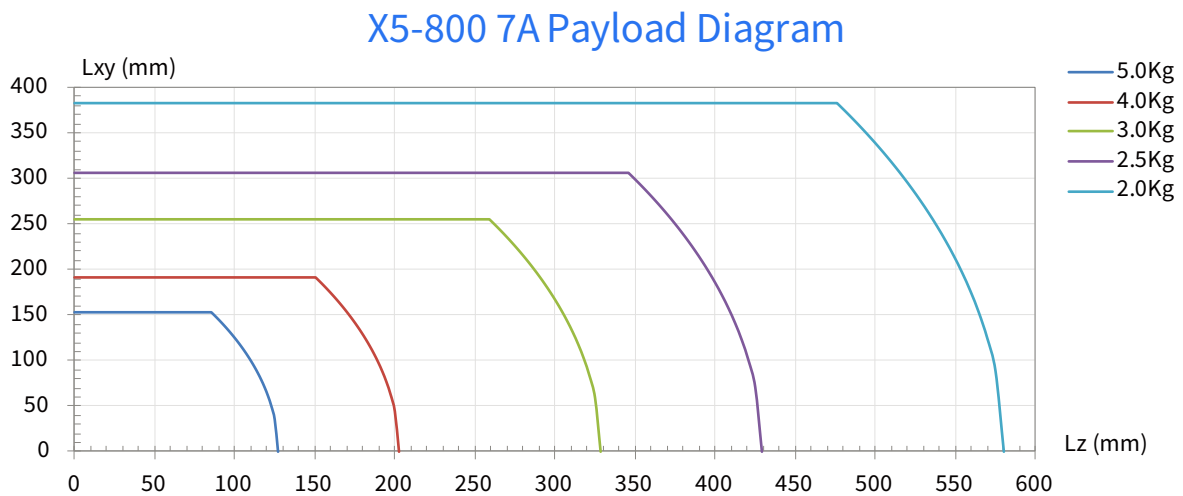
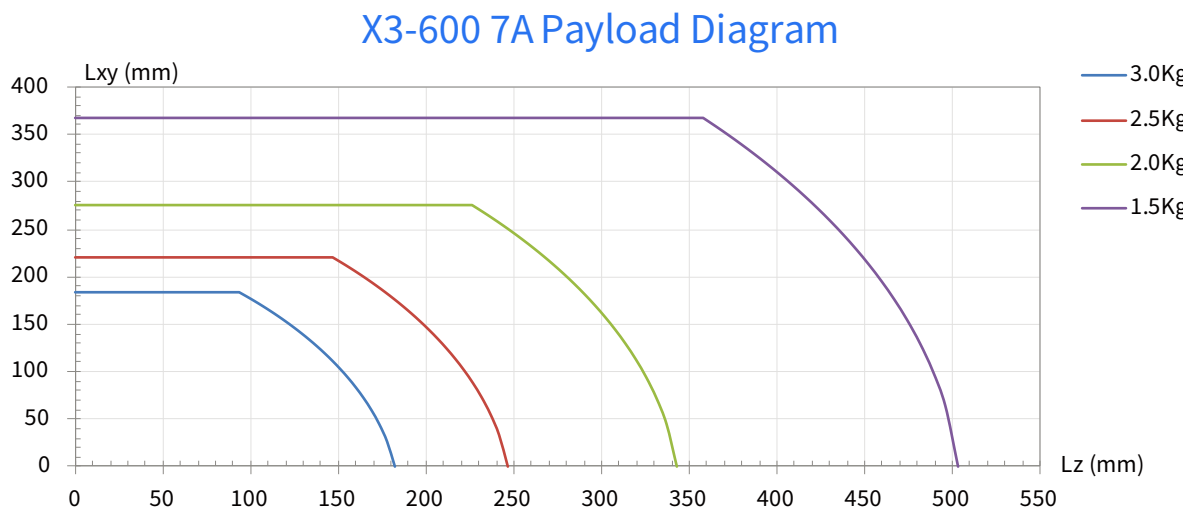
Tool Flange ▶▶



Work Space ▶▶

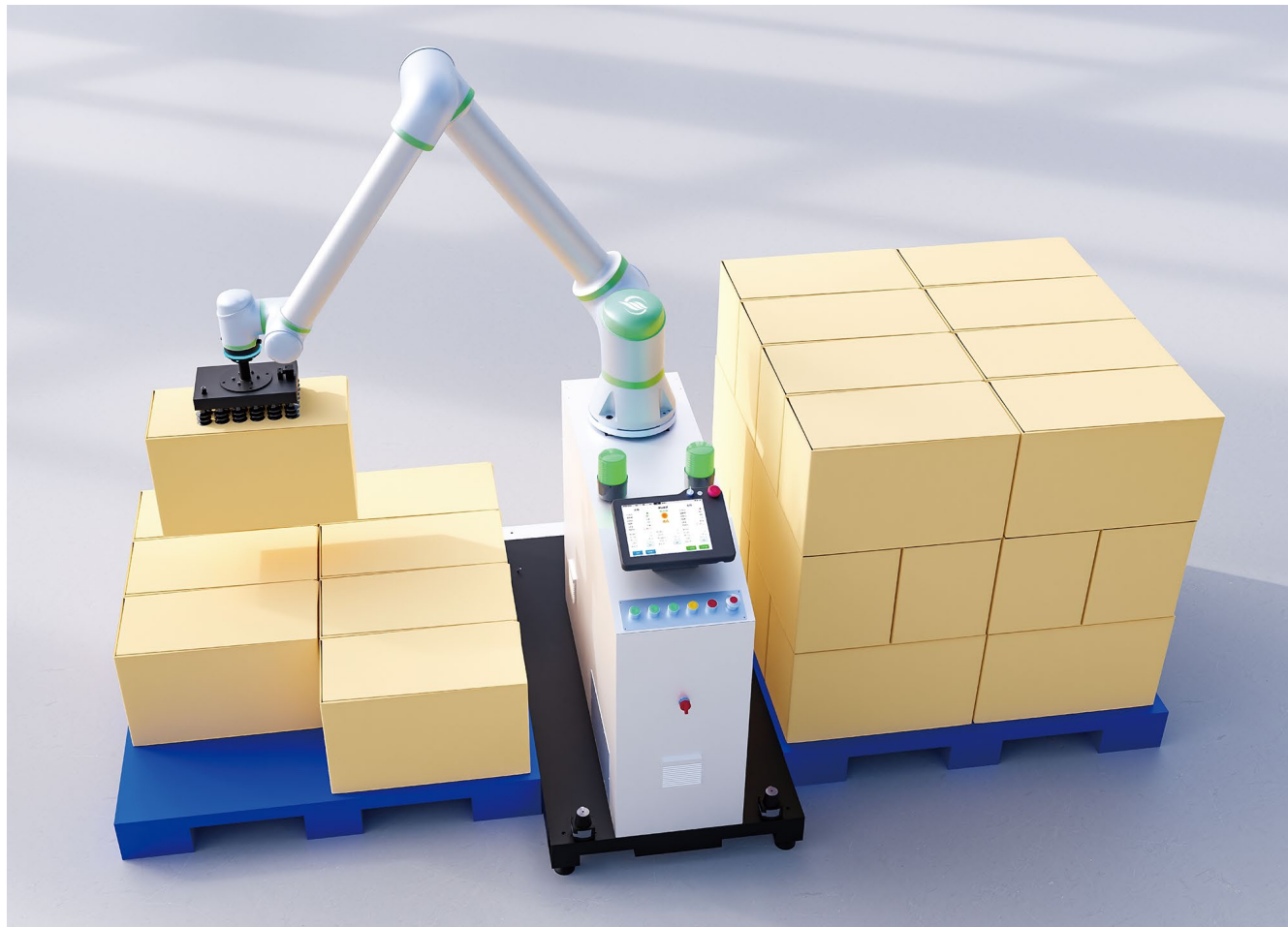



Payload Diagram ▶▶





X Series Palletizing Work Station


Product Features ▶▶



-  **Flexible Deployment**

Modular design, easy to transport, fast deployment, and flexible production.
-  **Easy Operation**

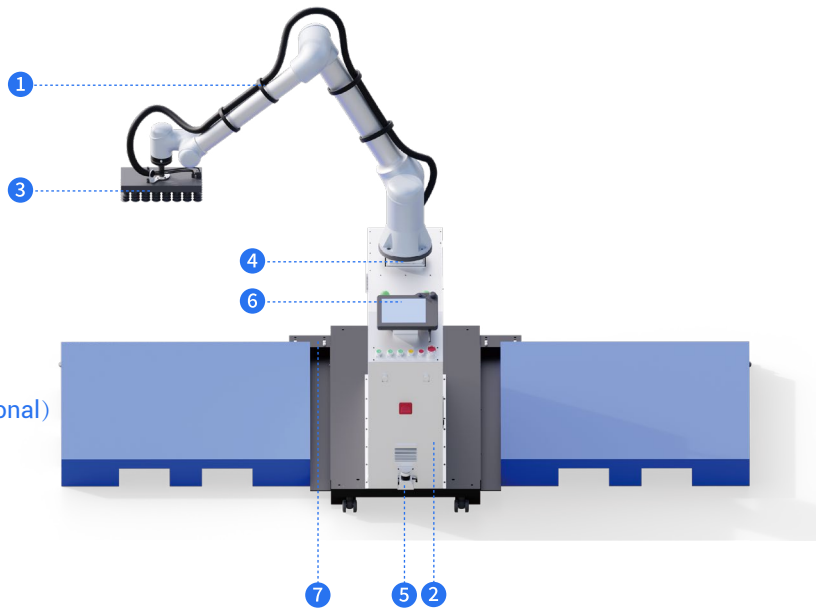
Movable base cabinet, complete palletizing process kit, easy to program and debug, quick to get started.
-  **Safe and Efficient**

No safety fence is required, and operators can work together with robots; Replace heavy handling work, reduce labor intensity, and improve production efficiency.
-  **Wide Application**

Suitable for industries such as food, medical, and electronics.

Product Composition ▶▶

- 1 Collaborative Robot
- 2 Electrical Control Cabinet
- 3 End Suction System such as Vacuum Gripper
- 4 Lifting Column (Optional)
- 5 Safety Peripherals such as Safety Laser Scanner (Optional)
- 6 Teach Pendant With PalletStudio System
- 7 Movable Base and Pallet Positioning System



Technical Parameters ▶▶


| | |
|--------------------|--|
| Palletizing Height | 1600mm(including pallet 1200mm*1000mm, by lifting device) MAX height: 2400mm(by elevating device) |
| Payload | 25kg |
| Working Radius | 1800mm |
| Efficiency | 6-8 boxes/min |
| Floor Space | 1500mm*2100mm |
| Rated Power | 1500W |
| Power Supply | 100~220V AC |
| Lifting Column | Lifting height 800mm |




Dual-arm Series Cobot

Product Features▶▶


More Intelligent

 With 7 degrees of freedom, the robot can work well in compact space.


Safe

 Collision detection function enables human robot collaboration.


Easy Programming

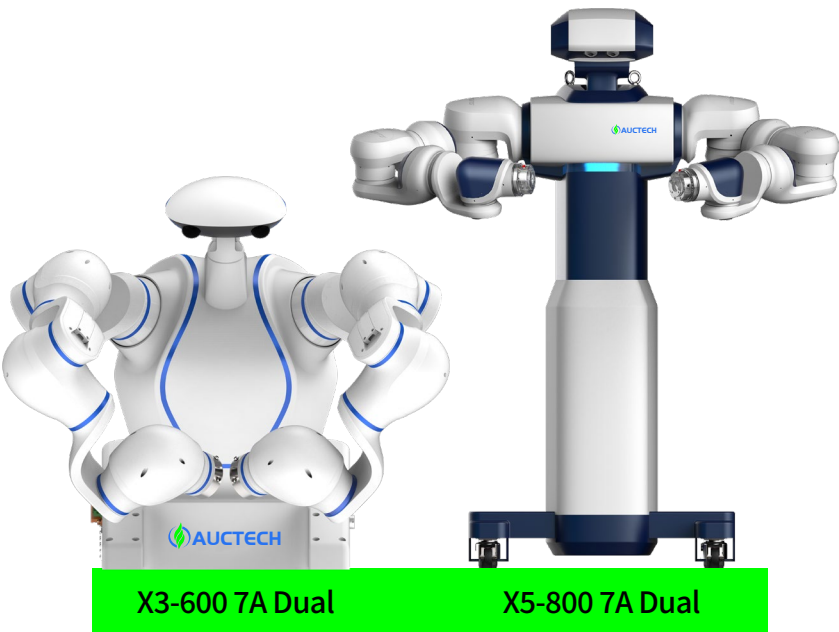
 With traction teach programming, less limitation to robot user.

Attractive and Compact Design

 The robot is integrated designed with build-in control box.

More Accurate

 Repeatability up to ±0.02mm.



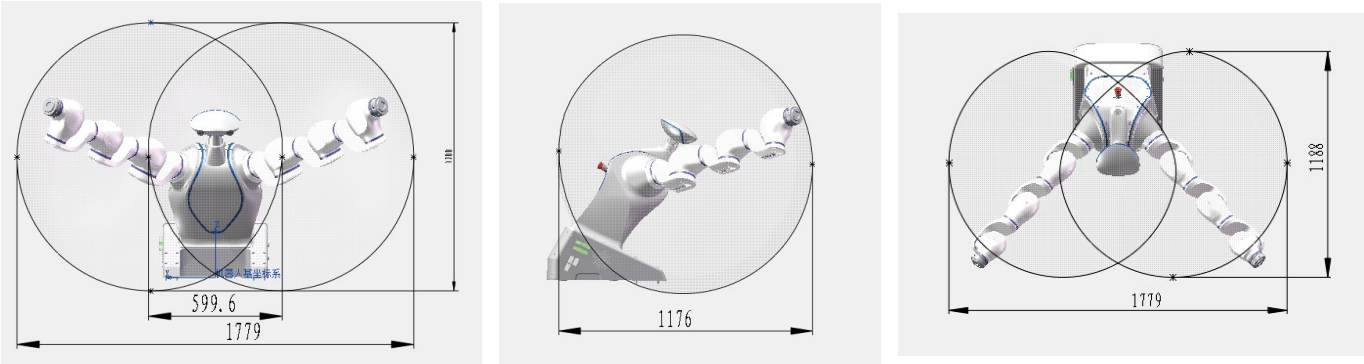
Dual-arm series cobot is featured with high flexibility, extreme safety, rapid deployment. It provides an overall solution for assembling by fast, safe, agile, accurate, and highly efficient positioning and operation, which also provides a better develop environment with more freedom and possibility for users.

Technical Parameters▶▶

| | X3-600 7A Dual | | X5-800 7A Dual | |
|---------------------------|--|-----------|--|-----------|
| Max Payload | 6kg (3kg x 2) | | 10kg (5kg x 2) | |
| Degree of Freedom | Each arm 7x2, Head 2, Head is optional | | Each arm 7x2, Head 2, Head is optional | |
| Max TCP Speed | 2.5m/s | | 2.0m/s | |
| Max Straight-line Speed | 1.0m/s | | 1.0m/s | |
| Reach | 600mm x 2 | | 800mm x 2 | |
| Repeatability | ±0.02mm | | ±0.02mm | |
| Joint | Range | Max Speed | Range | Max Speed |
| J7 | ±180° | 180°/s | ±180° | 180°/s |
| J6 | ±120° | 180°/s | ±110° | 180°/s |
| J5 | ±180° | 180°/s | ±180° | 180°/s |
| J4 | ±120° | 180°/s | ±115° | 180°/s |
| J3 | ±180° | 180°/s | ±180° | 180°/s |
| J2 | ±115° | 180°/s | ±105° | 180°/s |
| J1 | ±180° | 180°/s | ±180° | 180°/s |
| Tool Interface | GB/T 14468.1-50-4-M6 (eqv ISO 9409-1) | | GB/T 14468.1-50-4-M6 (eqv ISO 9409-1) | |
| Tool I/O of Each Arm | 2 Dig I/O, 24V, 1A | | 2 Dig I/O, 24V, 1A | |
| Power Supply | 230VAC(-15%~+10%), 50-60Hz | | 230VAC(-15%~+10%), 50-60Hz | |
| Power Consumption | Typical Power Consumption 500W | | Typical Power Consumption 800W | |
| Robot Dimensions | 1035x232x202mm | | 1285x220x240mm | |
| Control System | Built-in Control System | | Built-in Control System | |
| Installation | Installed in Any Direction | | Installed in Any Direction | |
| Ambient Temperature Range | -10°C~45°C | | -10°C~45°C | |
| Storage Temperature Range | -40°C~55°C | | -40°C~55°C | |
| IP Class | IP30 | | IP30 | |
| Robot Package Size | 1200x1000x1040mm | | 1100x1100x1900mm | |
| Net/Gross Weight | 70kg/100kg | | 200kg/250kg | |

Dual-arm Cobot

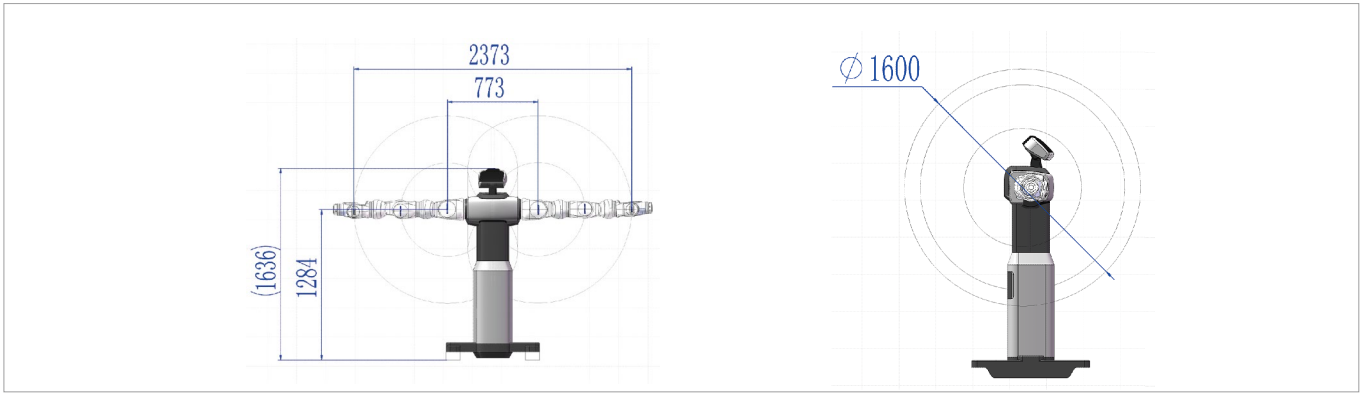
Work Space >>>



Front View

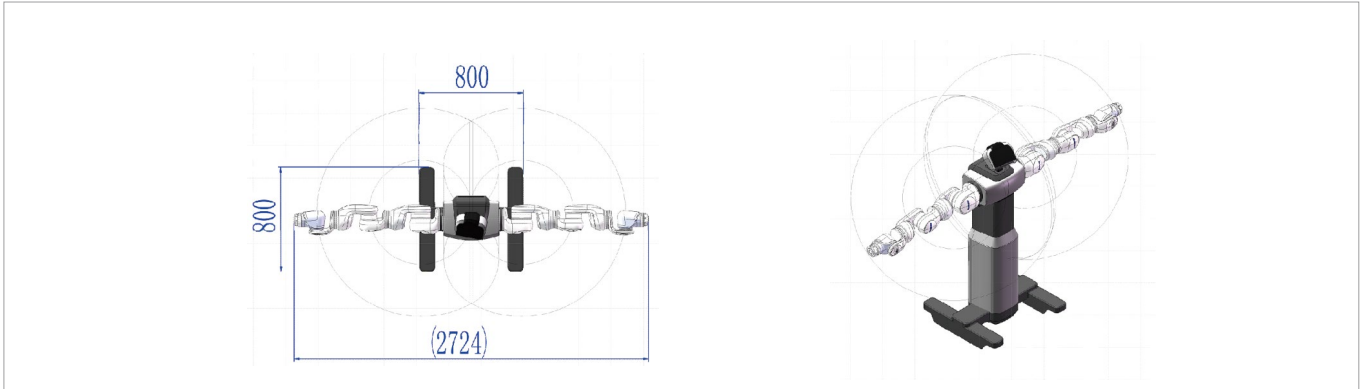
Side View

Top View



Front View

Side View

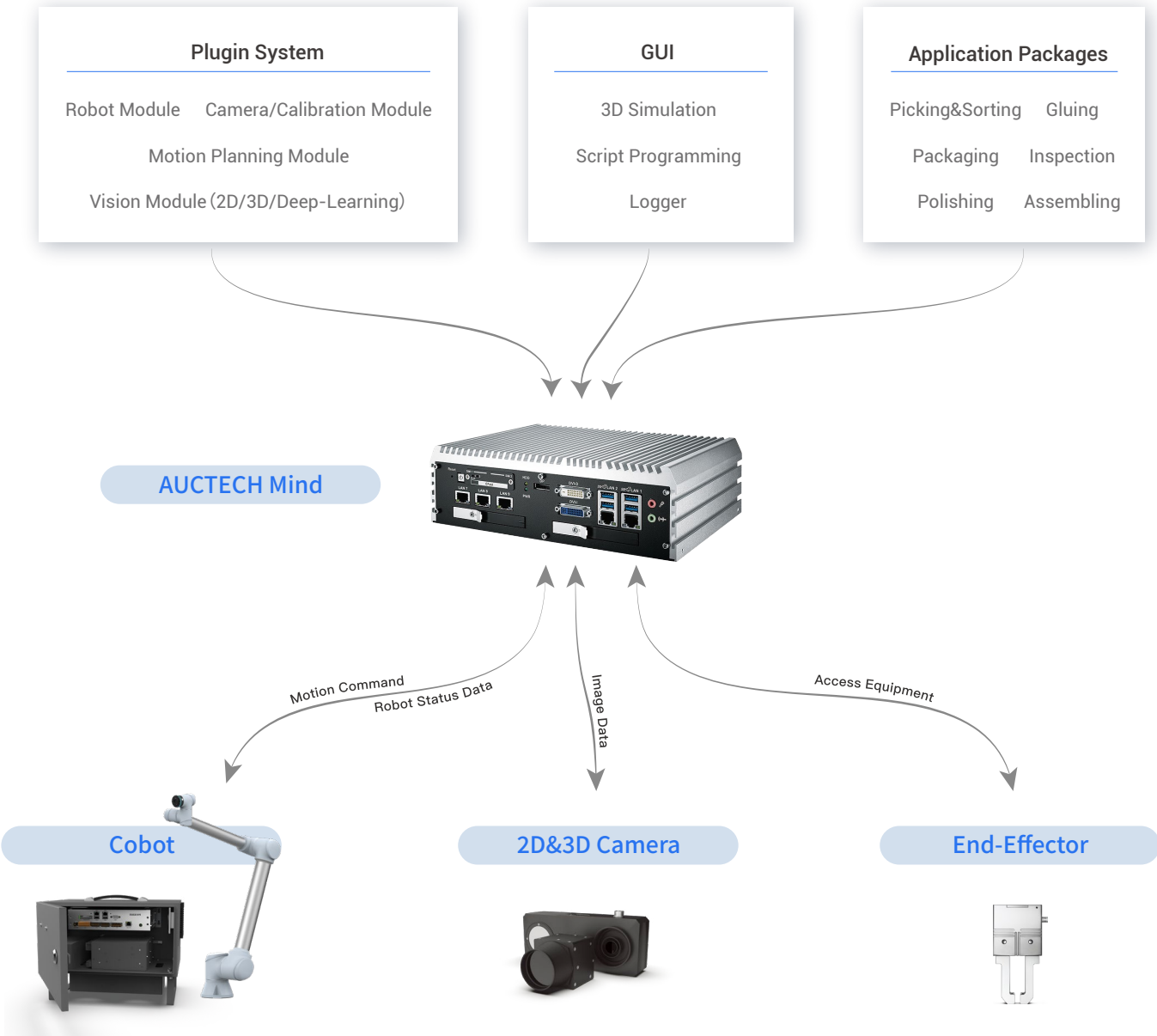


Top View

Axis View

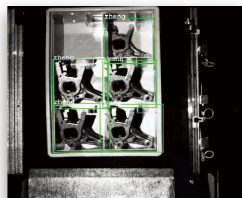
AUCTECH Intelligent Application Controller

AUCTECH Mind is composed of intelligent software, intelligent controller and peripherals such as camera and other sensors. AUCTECH Mind is positioned to empower AUCTECH robot applications with multi-sensorfusion and AI technology.



Product Introduction >>

AUCTECH Mind is an intelligent application controller that integrates 2D, 3D, and deep learning functions. The software algorithm is fully developed by AUCTECH. It can be used in different application scenarios such as handling (palletizing), loading, picking, classification, positioning, gluing, assembly. and inspection. It has the advantages of high cost-effectiveness, strong openness, and easy deployment and implementation.



Deep Learning



3D Location



2D Recognition

Product Features >>



High performance
CPU (i3/i5/i7)



GPU algorithm
acceleration



Serial port and other
expansion interfaces



DI-DO



Multiple camera interfaces
(POE,USB3.0)

Technical Parameters >>



AUCTECH Mind-Mini



AUCTECH Mind-Lite



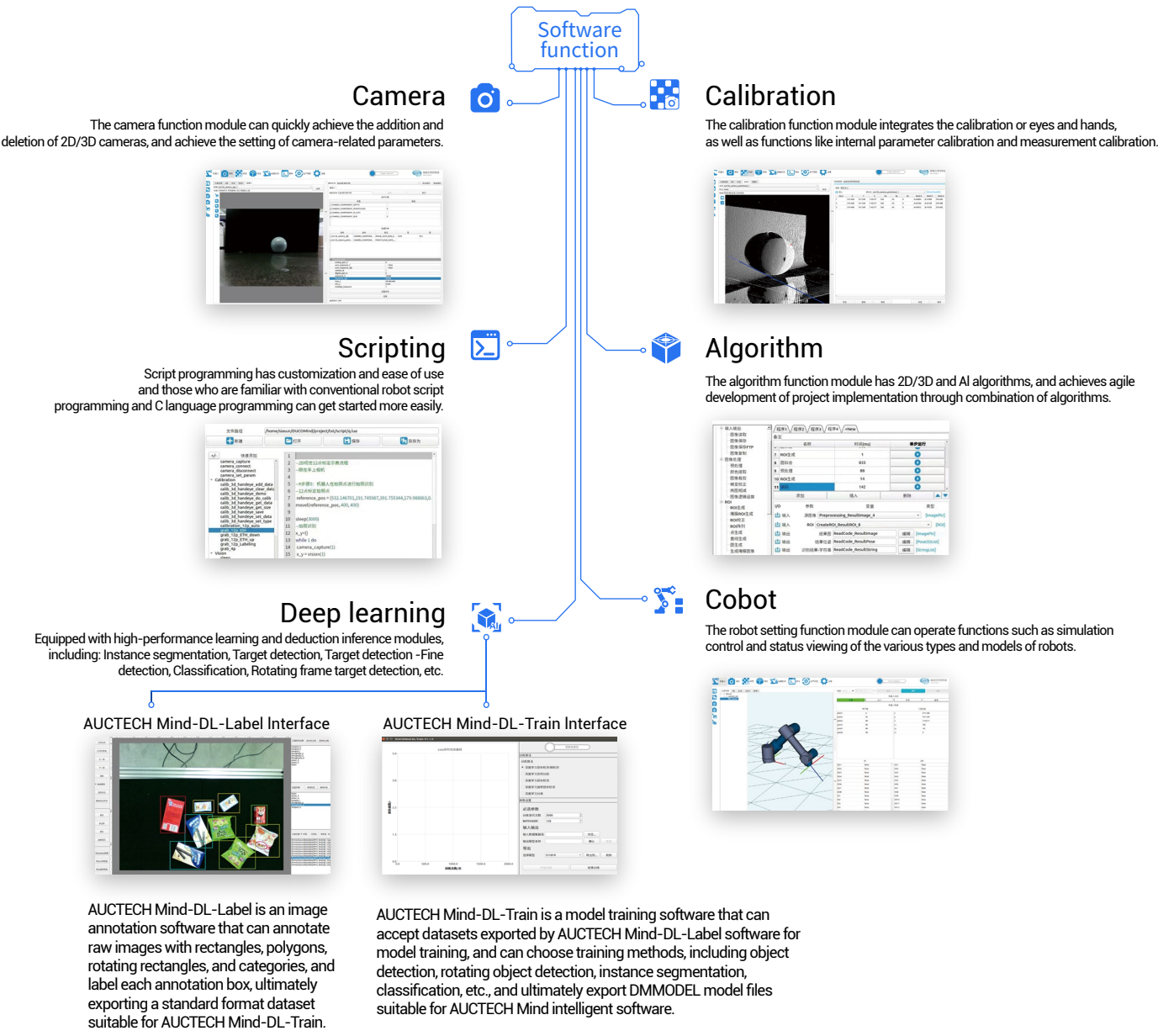
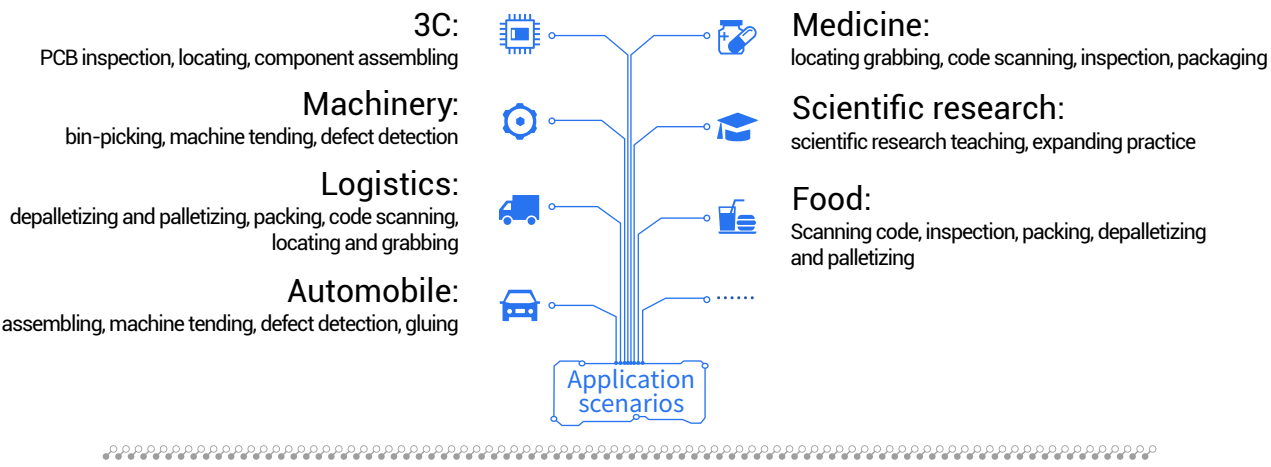
AUCTECH Mind-Power



AUCTECH Mind-Ai

| | Intel® Core™ i3-6100 | Intel® Core™ i5-7500 | Intel® Core™ i7-7700 | Intel® Core™ i7-8700 |
|---------|----------------------|----------------------|----------------------|----------------------|
| CPU | Intel® Core™ i3-6100 | Intel® Core™ i5-7500 | Intel® Core™ i7-7700 | Intel® Core™ i7-8700 |
| GPU | — | — | GTX 1650 | Nvidia 2080T |
| RAM | 8G | 16G | 16G | 16G |
| Disk | 128G | 256G | 256G | 256G |
| PC Card | GIGE*4 | GIGE*2 | GIGE*2 | GIGE*2 |
| POE | — | GIGE*4 | GIGE*4 | — |
| I/O | — | DI*16/DO*16 | DI*16/DO*16 | DI*16/DO*16 |
| Size | 230.3*152.0*79.1mm | 260.0*175.0*79.0mm | 260.0*215.0*79.0mm | 330.0*210.0*172.0mm |
| Weight | 2.9 kg | 4.3 kg | 4.8 kg | 5.6 kg |

AUCTECH Mind



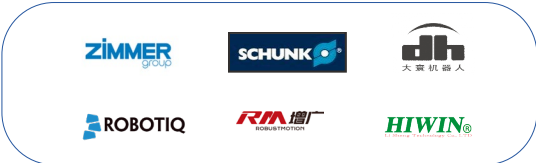
We Are Dedicated to The Advancement of Cobot



Vision System



Electrical Gripper



Laser Scanner



Force Sensor



Force Sensor



Gateway&IO Expansion Module



Quick-Change Flange



Simulatin&Off-line Programming



Optical Positioning&3D Scanner



Welding Machine



Dress Packs



Tightening System



Protective Clothing



Lifting Column

