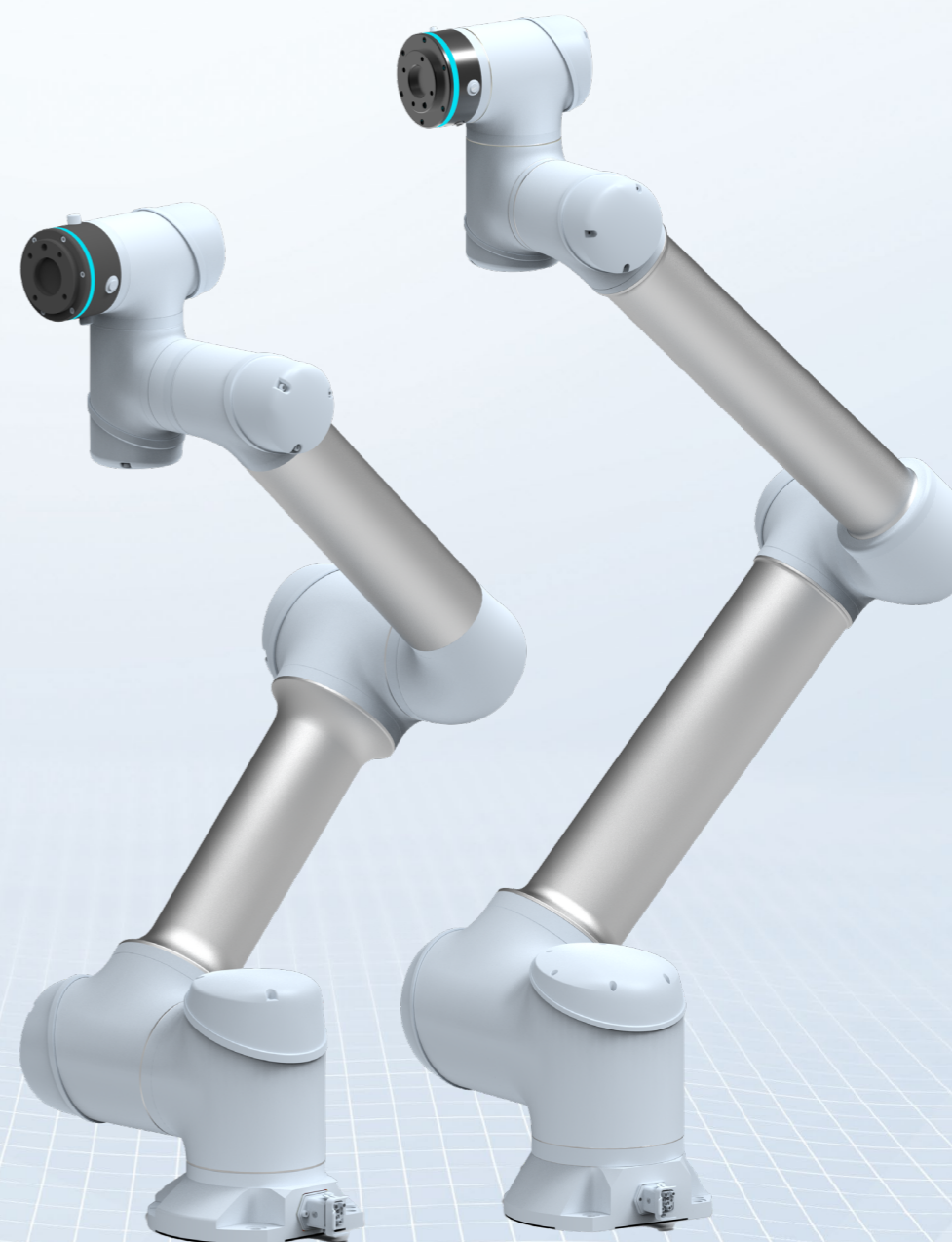


Collaborative Cobots

X Series



AUCTECH Makes Human Life
and Manufacturing More Convenient



AUCTECH Robotics

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Web: www.auctech.com.cn

Guangzhou Auctech Automation Technology Limited

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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)
- ⑰ 7-Axis Cobot
- ⑳ Dual-arm Cobot

AUCTECH Mobile Cobot

- ⑬ AUCTECH Mobile Cobot
- ⑰ AUCTECH Delivery System

AUCTECH Mind

- ⑳ 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.

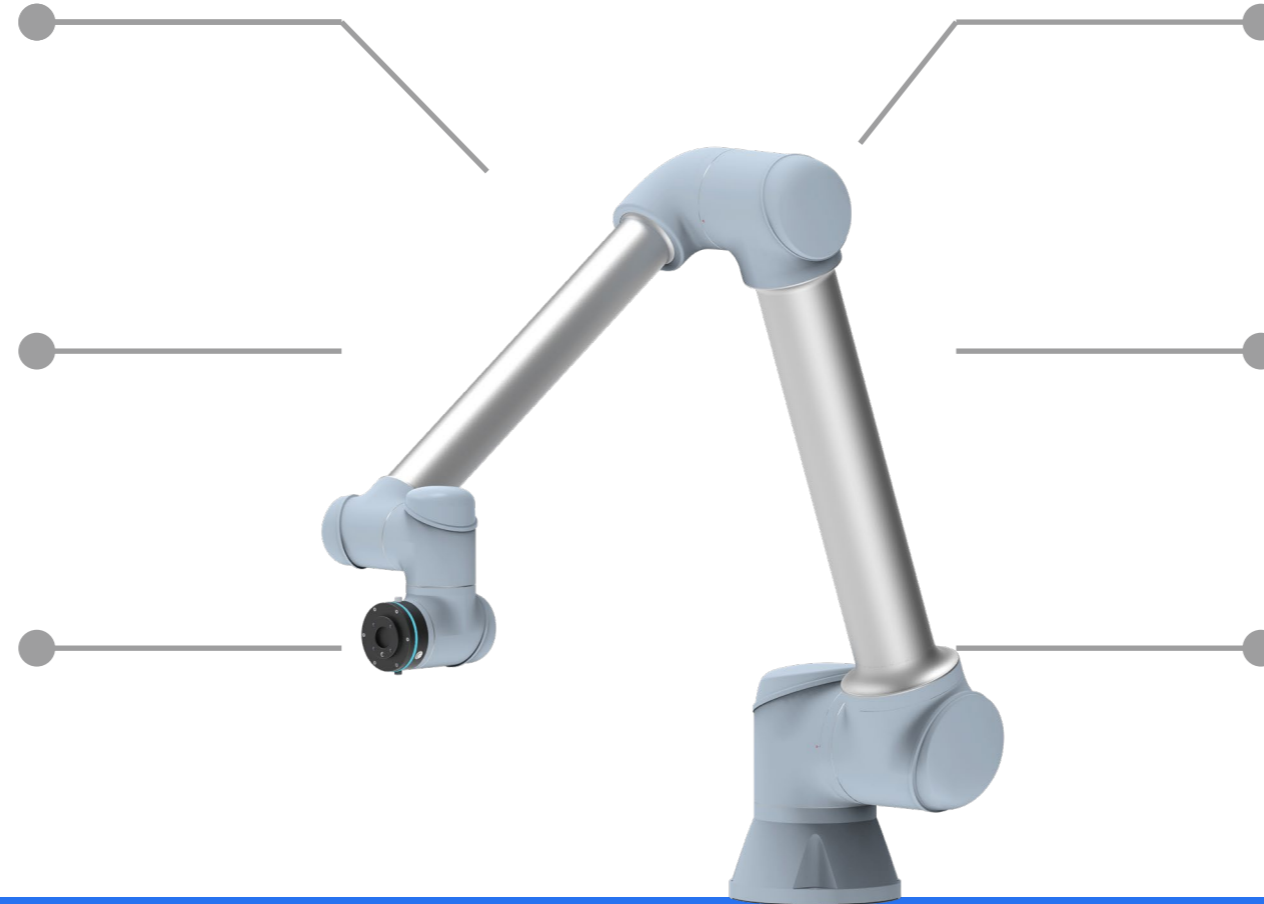
Smart

- 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



Standard 6-Axis Cobot



X30-1100



X25-1800



X20-1400



X16-2000



X16-960



X12-1300



X10-1300



X7-910



X5-910

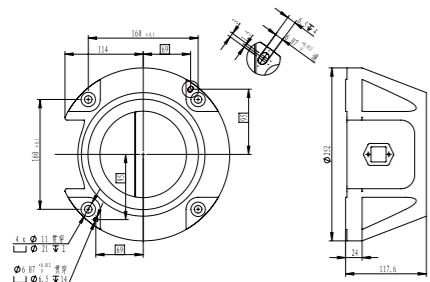


X3-618

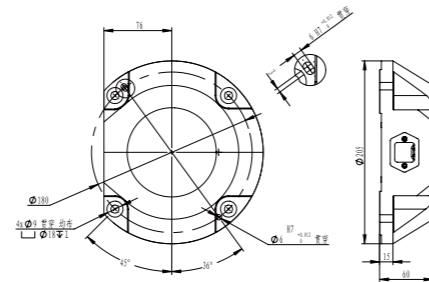
	X30-1100	X25-1800	X20-1400	X16-2000	X16-960	X12-1300	X10-1300	X7-910	X5-910	X3-618
Max Payload	30kg	25kg	20kg	16kg	16kg	12kg	10kg	7kg	5kg	3kg
Degree of Freedom	6	6	6	6	6	6	6	6	6	6
Max TCP Speed	2.0m/s	2.5m/s	2.2m/s	4.0m/s	3.0m/s	3.8m/s	3.8m/s	3.6m/s	3.6m/s	1.0m/s
Max Straight-line Speed	1.0m/s	1.5m/s	1.0m/s	1.8m/s	1.5m/s	1.5m/s	1.5m/s	1.5m/s	1.5m/s	0.8m/s
Reach	1100mm	1800mm	1400mm	2000mm	960mm	1300mm	1300mm	917mm	917mm	618mm
Repeatability	±0.05mm	±0.05mm	±0.05mm	±0.03mm	±0.03mm	±0.03mm	±0.03mm	±0.02mm	±0.02mm	±0.02mm
Joint	range of motion	Max Speed				Max Speed				
J6	±360°	225°/s	225°/s	225°/s	225°/s	225°/s	225°/s	225°/s	225°/s	225°/s
J5	±360°	225°/s	225°/s	225°/s	225°/s	225°/s	225°/s	225°/s	225°/s	225°/s
J4	±360°	225°/s	225°/s	225°/s	225°/s	225°/s	225°/s	225°/s	225°/s	225°/s
J3	±360°	180°/s	150°/s	180°/s	180°/s	225°/s	225°/s	200°/s	225°/s	225°/s
J2	±360°	120°/s	100°/s	120°/s	180°/s	180°/s	180°/s	200°/s	225°/s	225°/s
J1	±360°	120°/s	120°/s	120°/s	180°/s	180°/s	180°/s	200°/s	225°/s	225°/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)					
End Joint I/O	2 Dig I/O, 24V, 0.6A	2 Dig I/O, 24V, 0.6A	2 Dig I/O, 24V,0.6A	2 Dig I/O, 24V, 0.6A	2 Dig I/O, 24V, 0.6A	2 Dig I/O, 24V, 0.6A	2 Dig I/O, 24V, 0.6A	2 Dig I/O, 24V, 0.6A	2 Dig I/O, 24V, 0.6A	2 Dig I/O, 24V, 0.6A
Power Supply	220-240VAC 47-63Hz10A/100-200VAC 47-63Hz 16A				100-240VAC 47-63Hz 10A					
Power Consumption	Typical Power Consumption 600W	Typical Power Consumption 600W	Typical Power Consumption 600W	Typical Power Consumption 400W	Typical Power Consumption 400W	Typical Power Consumption 400W	Typical Power Consumption 400W	Typical Power Consumption 200W	Typical Power Consumption 200W	Typical Power Consumption 200W
Installation	Land type	Installed in any Direction				Installed in any Direction				
IP Class	IP54/IP65	IP54/IP65	IP54/IP65	IP54/IP65	IP54/IP65	IP54/IP65	IP54/IP65	IP54/IP65	IP54/IP65	IP54/IP65
Ambient Temperature Range	-10°C~50°C	-10°C~50°C	-10°C~50°C	-10°C~50°C	-10°C~45°C	-10°C~45°C	-10°C~45°C	-10°C~45°C	-10°C~45°C	-10°C~45°C
Storage Temperature Range	-40°C~55°C	-40°C~55°C	-40°C~55°C	-40°C~55°C	-40°C~55°C	-40°C~55°C	-40°C~55°C	-40°C~55°C	-40°C~55°C	-40°C~55°C
Robot Dimensions	1395x420x290mm	2300x440x252mm	1695x388x205mm	2300x388x205mm	1180x388x205mm	1512x388x205mm	1512x388x205mm	1100x330x200mm	1100x330x200mm	769x315x150mm
Robot Package Size	1060x500x600mm	1295x540x515mm	1060x500x600mm	1465x516x472kg	958x508x516mm	958x508x516mm	958x508x516mm	698x588x450mm	698x588x450mm	532x431x330mm
Net/Gross Weight	64kg/75kg	61.6kg/70kg	66kg/75kg	60kg/68kg	37kg/45kg	37.8kg/46kg	37.8kg/46kg	22kg/30kg	22kg/30kg	13kg/20kg

Standard 6-Axis Cobot

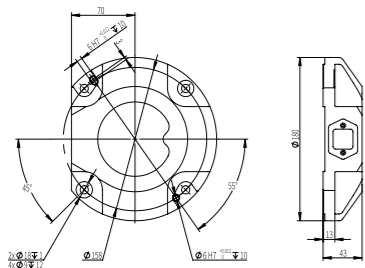
Base Flange ▶▶



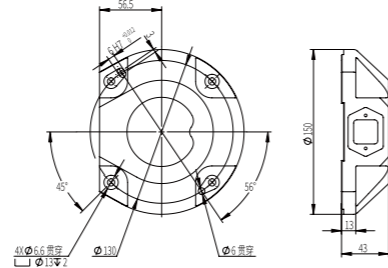
X25-1800/X30-1100
X20-1400/X16-2000



X16-960/X10-1300
X12-1300

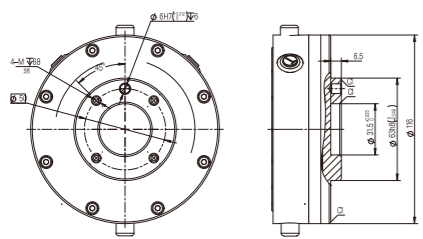


X5-910/X7-910

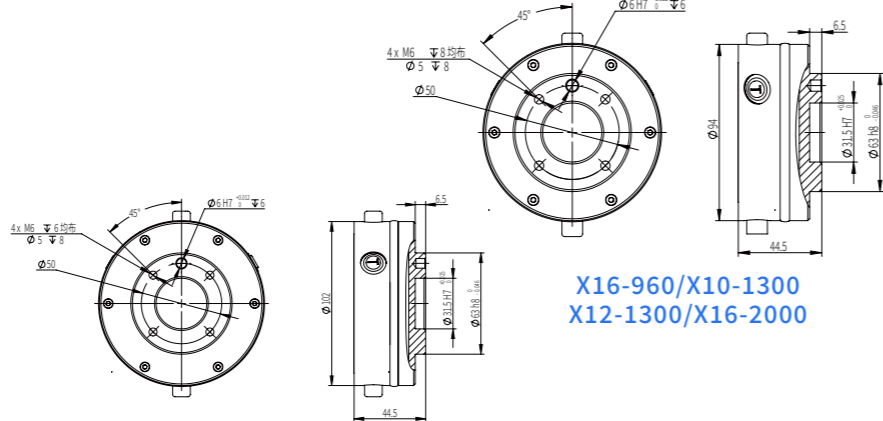


X3-618

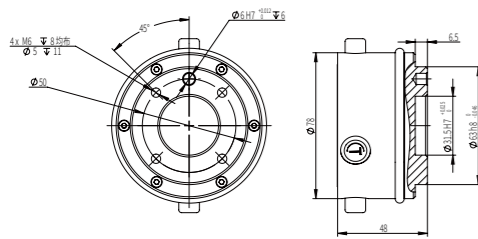
Tool Flange ▶▶



X30-1100/X20-1400

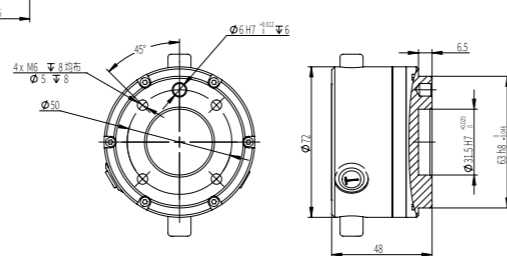


X16-960/X10-1300
X12-1300/X16-2000



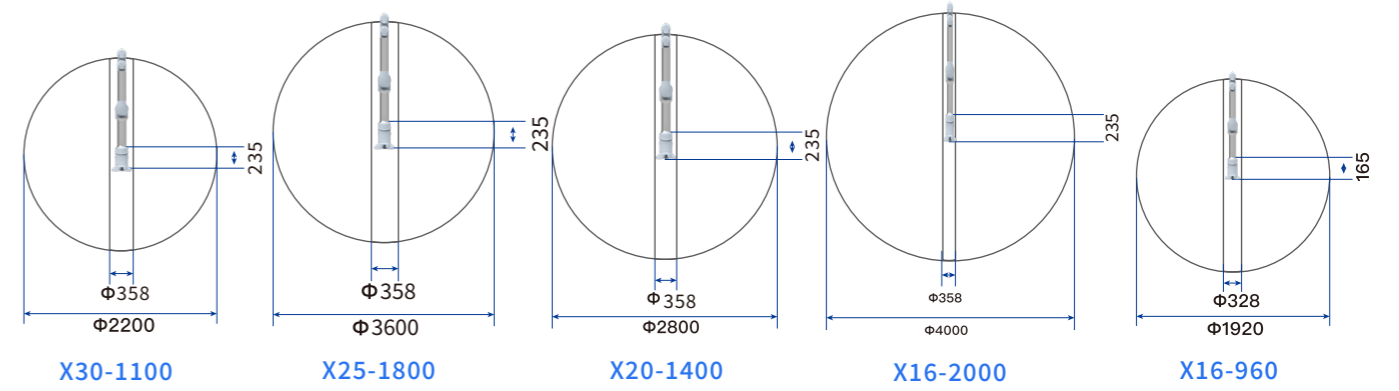
X5-910/X7-910

X25-1800

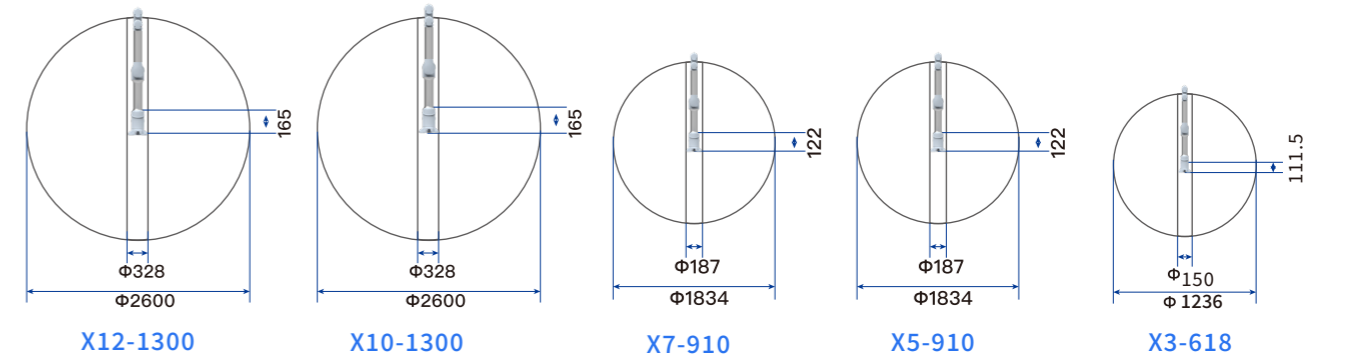


X3-618

Work Space ▶▶

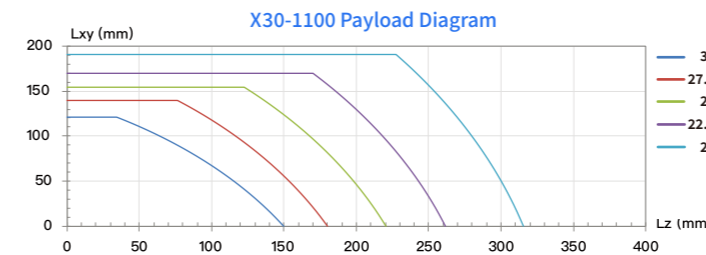


X30-1100 X25-1800 X20-1400 X16-2000 X16-960

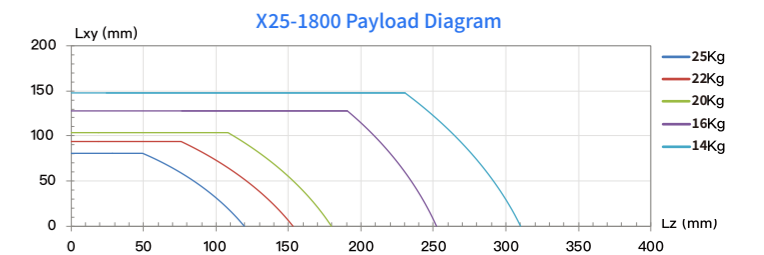


X12-1300 X10-1300 X7-910 X5-910 X3-618

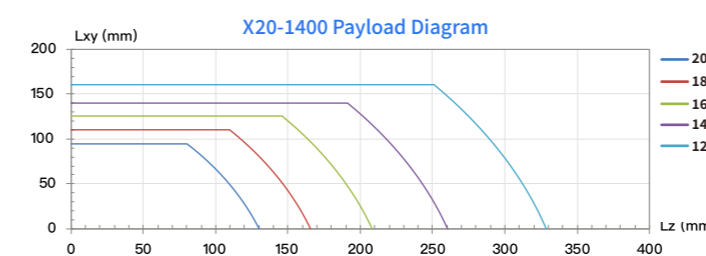
Payload Diagram ▶▶



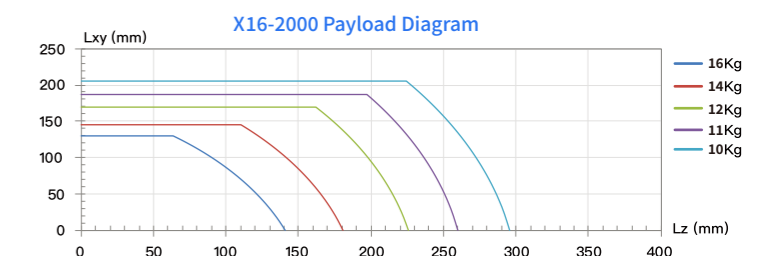
X30-1100 Payload Diagram



X25-1800 Payload Diagram



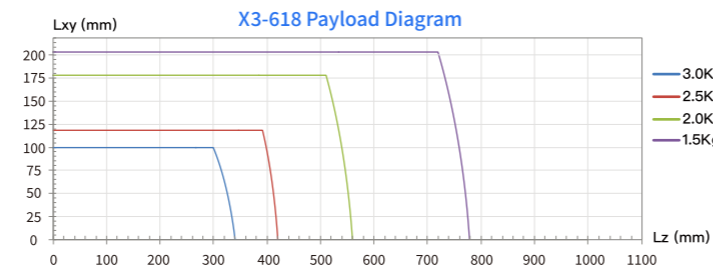
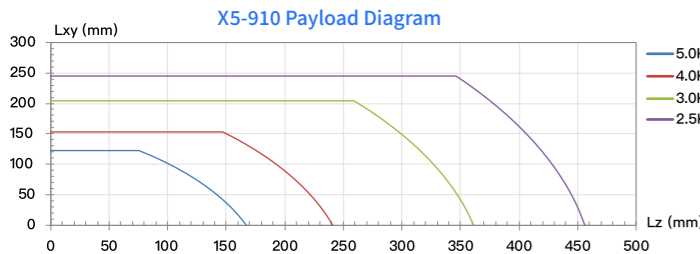
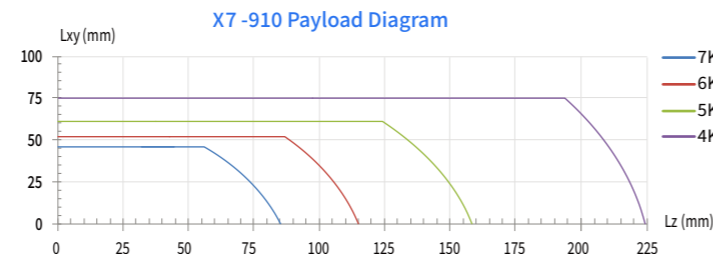
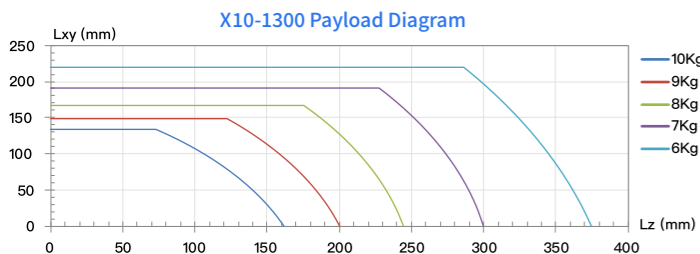
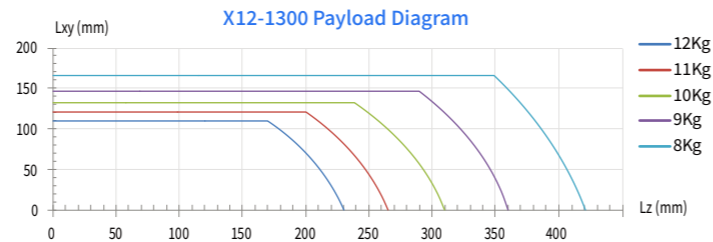
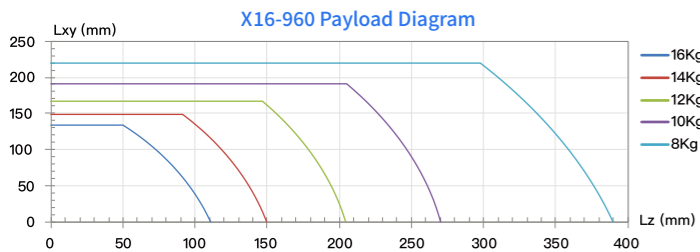
X20-1400 Payload Diagram



X16-2000 Payload Diagram

Standard 6-Axis Cobot

Payload Diagram ▶▶



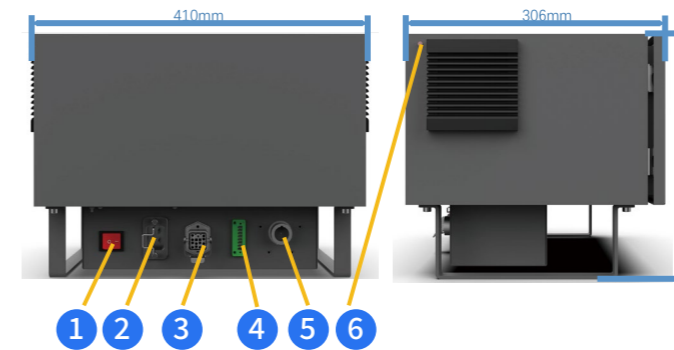
Control Box ▶▶



Control Box & Teach Pendant

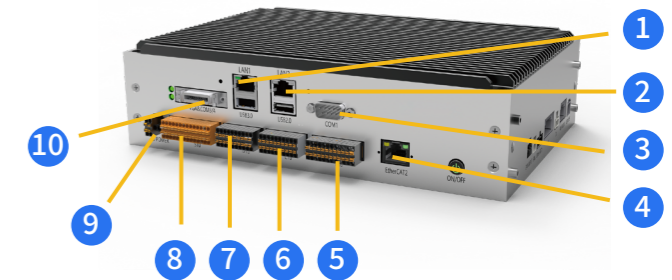


The controller is used to control the robot's operations such as loading and unloading, grasping, polishing, handling, welding, gluing and oiling, as well as realizing the input and output control. The latest AUCTECH controller has tiny volume while taking into account the safety and flexibility, and 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

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

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

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)

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)

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

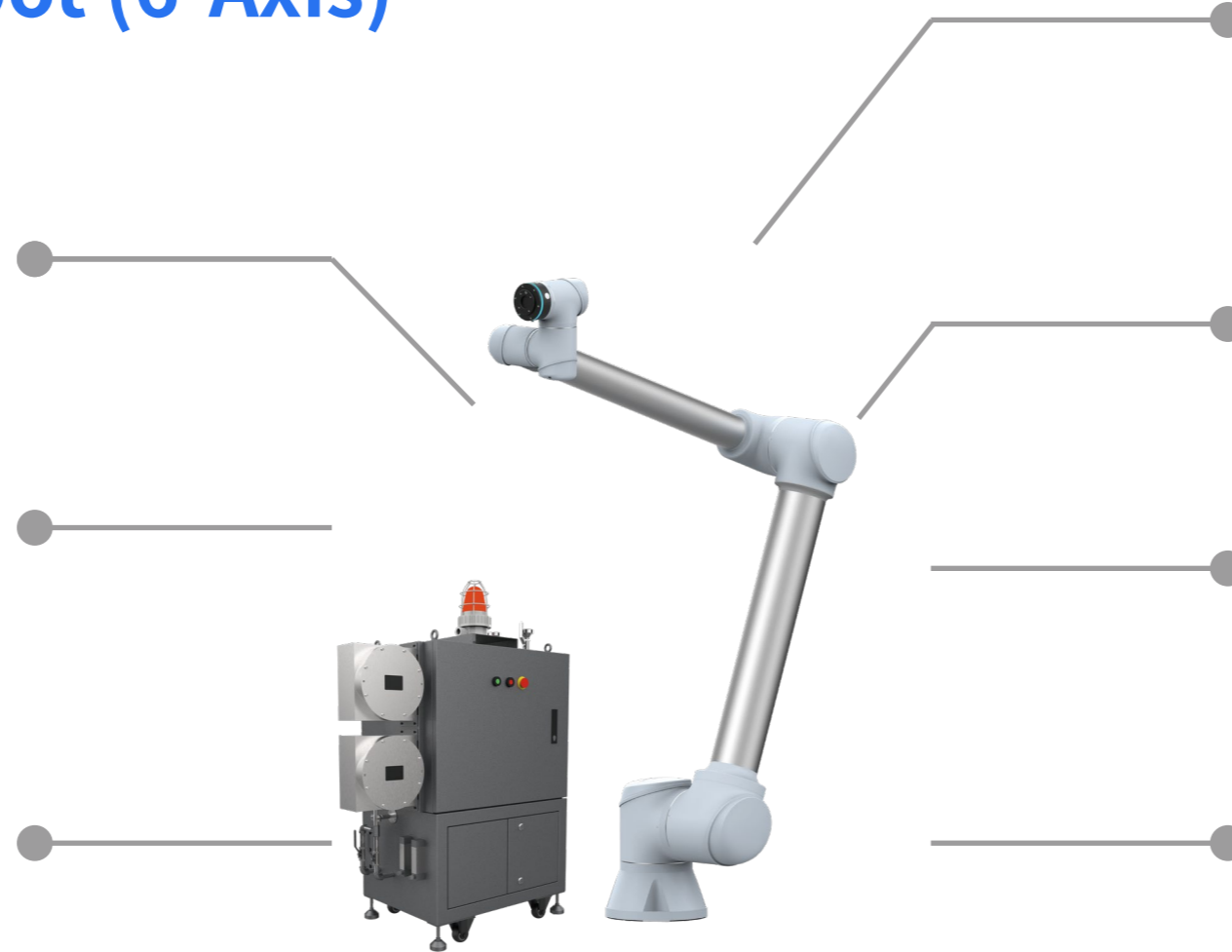
Explosion Proof: Ex db eb pxb IIC T4
Gb/Ex pxb tb IIC T130°C Db.

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 three 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



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



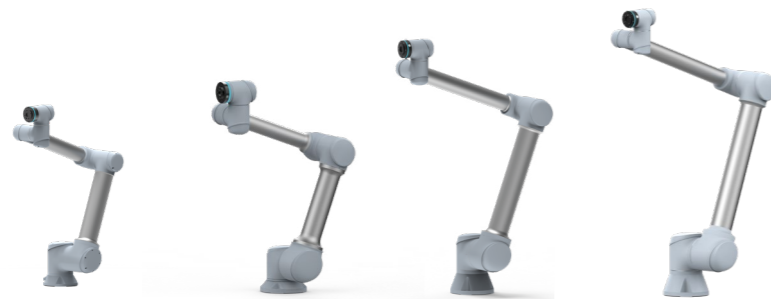
Control Box

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 collaborative robot form for specific model and technical parameters details

IP Class

IP 65

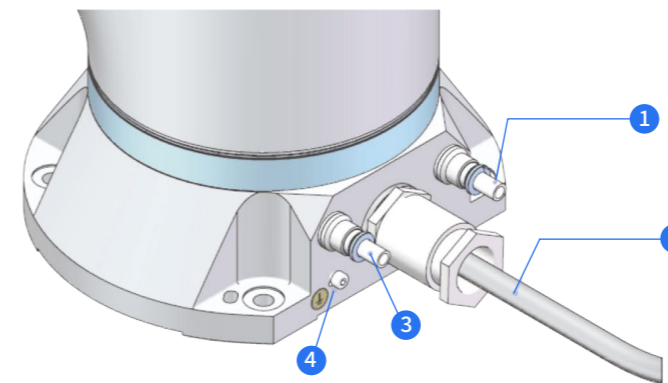
Explosion Proof Level

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

Type of Gas Source

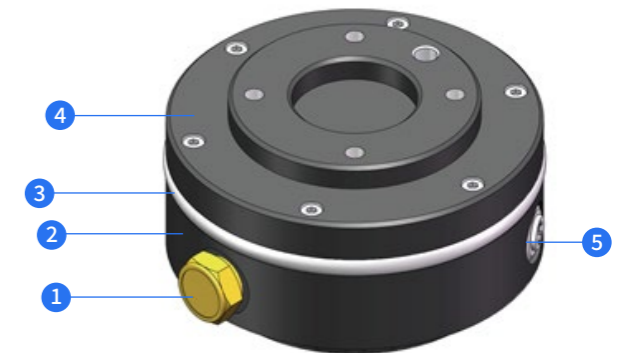
Clean Air

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

- EOpen 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 standardised product, AUCTECH ARV(AGV+ROBOT) offers consistency, reliability and stability not found in non-standard equipment.

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

Driving Form

Turning Radius

Crab Speed (Any Angle)

Width of Walking Passage

Movement Speed

Mobile Capability

Obstacle Clearance Height

Trench Width

Ground Clearance

Gradeability

Parking Accuracy

Battery

Battery Performance

Capacity

Running Time

Charging Time

Charging Mode

Safety Device

Interface

Hardware Support

Communication Protocol

Button

Ambient Temperature

Use Environment

Ambient Humidity

Runtime Environment

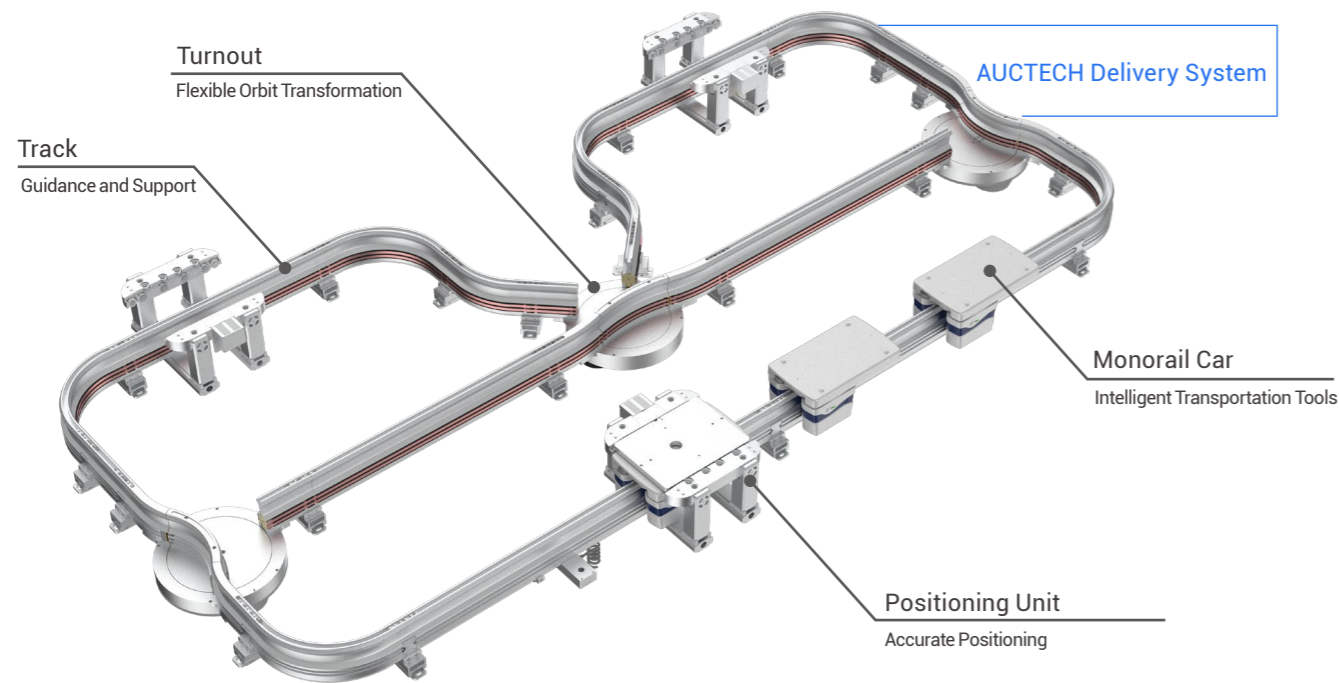
Cleanliness

	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)	1250mm×600mm×700mm		950mm×600mm×700mm		800mm×600mm×700mm		1250mm×700mm×800mm		1250mm×600mm×1070mm		1250mm×600mm×700mm	
Comprehensive Accuracy	±0.3mm				±0.3mm				±0.3mm			
Total Weight	About 320/330/361/350/360KG (Equipped with collaborative arm X5/10/14/16/20)		About 270/280/300/KG (Equipped with collaborative arm X5/10/14/16)		About 247/260KG (Equipped with collaborative arm X5/10)		About 392/405/436/435KG (Equipped with collaborative arm X5/10/14/20)		About 330/361/350/360KG (Equipped with collaborative arm X10/14/16/20)		About 320/330/361/350/360KG (Equipped with collaborative arm X5/10/14/16/20)	
Navigation Mode	SLAM & QR CODE				SLAM & QR CODE				SLAM & QR CODE			
Cobot Payload	5kg/10kg/14kg/20kg (Equipped with collaborative arm X5/10/14/16/20)		5kg/10kg/14kg/16kg (Equipped with collaborative arm X5/10/14/16)		5kg/10kg (Equipped with collaborative arm X5/10)		5kg/10kg/14kg/20kg (Equipped with collaborative arm X5/10/14/20)		10kg/14kg/16kg/20kg (Equipped with collaborative arm X10/14/16/20)		5kg/10kg/14kg/16kg/20kg (Equipped with collaborative arm X5/10/14/16/20)	
Platform Load	670kg Max		350kg Max		120kg Max		470kg Max		100kg Max		670kg Max	
Driving Form	Two-wheel Differential		Two-wheel Differential		Two-wheel Differential		Mecanum Wheel		Two-wheel Differential		Two-wheel Differential	
Turning Radius	500mm Min		500mm Min		500mm Min		/		500mm Min		500mm Min	
Crab Speed (Any Angle)	/		/		/		≤0.5m/s		/		/	
Width of Walking Passage	900mm Min		900mm Min		900mm Min		1000mm Min		900mm Min		900mm Min	
Movement Speed	≤1m/s		≤1m/s		≤0.8m/s		≤0.8m/s		≤1m/s		≤1m/s	
Mobile Capability	≤0.5m/s		≤0.5m/s		≤0.5m/s		≤0.5m/s		≤0.5m/s		≤0.5m/s	
Obstacle Clearance Height	10mm		10mm		10mm		10mm		10mm		10mm	
Trench Width	30mm		25mm		30mm		80mm		30mm		30mm	
Ground Clearance	30mm		30mm		30mm		45mm		30mm		30mm	
Gradeability	<5°		<5°		<5°		<5°		<5°		<5°	
Parking Accuracy	±5mm position accuracy, ±1° angle accuracy				±5mm position accuracy, ±1° angle accuracy				±5mm position accuracy, ±1° angle accuracy			
Battery	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	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
Battery Performance	52Ah	80Ah	42Ah	80Ah	28Ah	42Ah/80Ah	42Ah	80Ah	52Ah	80Ah	52Ah	52Ah
Capacity	52Ah	80Ah	42Ah	80Ah	28Ah	42Ah/80Ah	42Ah	80Ah	52Ah	80Ah	52Ah	52Ah
Running Time	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	About 8 hours	About 5.5 hours	About 8 hours	About 5.5 hours	About 5.5 hours
Charging Time	≤1.8h	≤2h	≤1.5h	≤2h	≤1.5h	≤2h	≤1.5h	≤2h	≤1.8h	≤2h	≤1.8h	≤1.8h
Charging Mode	Contact Charging / Wireless Charging / Converter (Both Manual and Automatic Support)				Contact Charging / Wireless Charging / Converter (Both Manual and Automatic Support)				Contact Charging / Wireless Charging / Converter (Both Manual and Automatic Support)			
Safety Device	Collision Detection/Safety Contact/Obstacle Avoidance Laser/Emergency Stop, etc.				Collision Detection/Safety Contact/Obstacle Avoidance Laser/Emergency Stop, etc.				Collision Detection/Safety Contact/Obstacle Avoidance Laser/Emergency Stop, etc.			
Interface	Hardware Support CAN bus, RS-485, RS-232, RJ45, USB				Hardware Support CAN bus, RS-485, RS-232, RJ45, USB				Hardware Support CAN bus, RS-485, RS-232, RJ45, USB			
Communication Protocol	Communication Protocol Support CANOPEN, Modbus, etc.				Communication Protocol Support CANOPEN, Modbus, etc.				Communication Protocol Support CANOPEN, Modbus, etc.			
Button	Start Button/Pause Button/Reset Button/Teach Button				Start Button/Pause Button/Reset Button/Teach Button				Start Button/Pause Button/Reset Button/Teach Button			
Ambient Temperature	Ambient Temperature: -10°C~45°C				Ambient Temperature: -10°C~45°C				Ambient Temperature: -10°C~45°C			
Ambient Humidity	Ambient Humidity: 5%~95% (No Condensation)				Ambient Humidity: 5%~95% (No Condensation)				Ambient Humidity: 5%~95% (No Condensation)			
Runtime Environment	Indoor Use Only				Indoor Use Only				Indoor Use Only			
Cleanliness	None/ Class6(Class 1000) / Class5 (Class 100)				None/ Class6(Class 1000) / Class5 (Class 100)				None/ Class6(Class 1000) / Class5 (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.

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

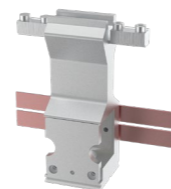
AUCTECH Delivery System track system provides path guidance for the trolley during operation. The power supply system is laid along the track to provide power for the entire track. The track system of AUCTECH Delivery System has various specifications of length and bending radius, which can be flexibly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

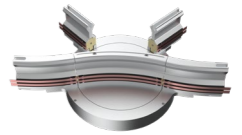
The monorail car is the core component of AUCTECH Delivery System and is an intelligent material transportation vehicle operating in orbit. The car receives power from the track and is driven by the onboard power system. It has the characteristics of anti-collision, anti-blocking rotation, and display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




X3-600 7A

X5-800 7A


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.

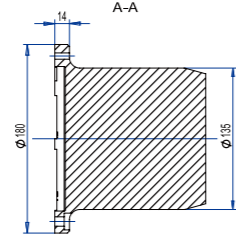
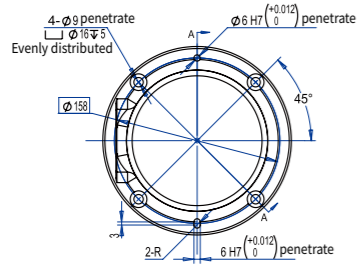
7-Axis Cobot has various functions such as rapid deployment, traction teaching and collision detection. It is particularly suitable for flexible production lines with compact layout and high precision to conduct precision assembly, product packaging, polishing, testing, machine loading and unloading 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.

Technical Parameters ▶▶

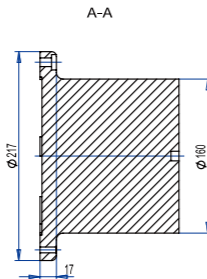
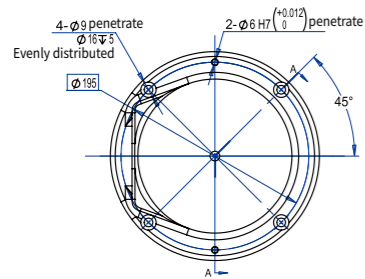
	X3-600 7A		X5-800 7A	
Max Payload	3kg		5kg (5.5kg*1)	
Degree of Freedom	7		7	
Max TCP Speed	2.5m/s		2.0m/s	
Max Straight-line Speed	1.0m/s		1.0m/s	
Reach	600mm		800mm	
Repeatability	$\pm 0.02\text{mm}$		$\pm 0.02\text{mm}$	
Joint	Range	Max Speed	Range	Max Speed
J7	Infinite Spins	180°/s	$\pm 180^\circ$	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

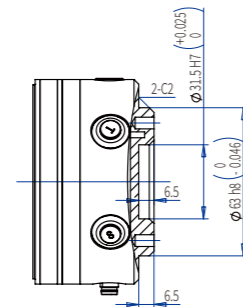
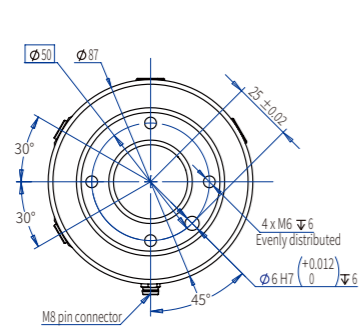


X3-600 7A

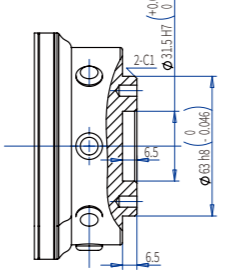
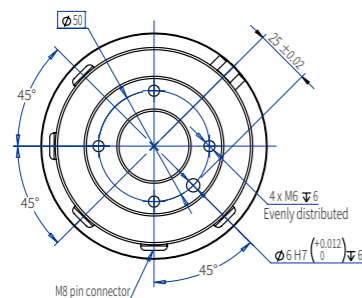


X5-800 7A

Tool Flange

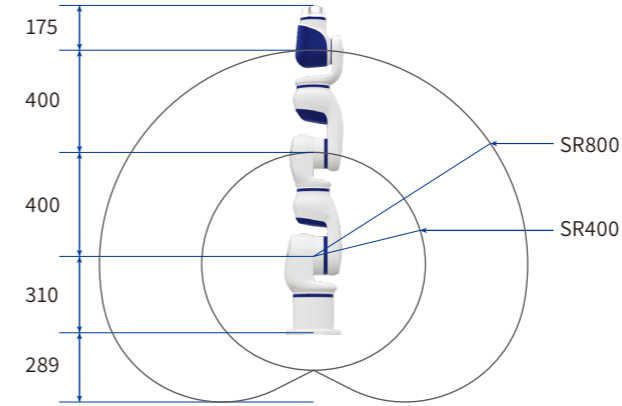


X3-600 7A

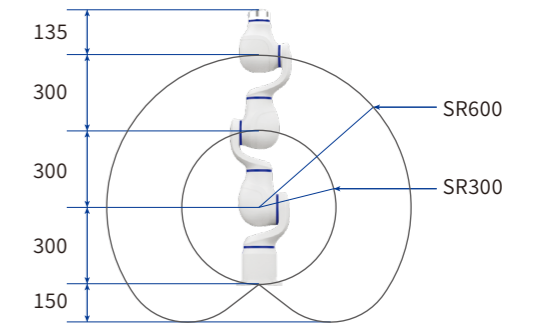


X5-800 7A

Work Space



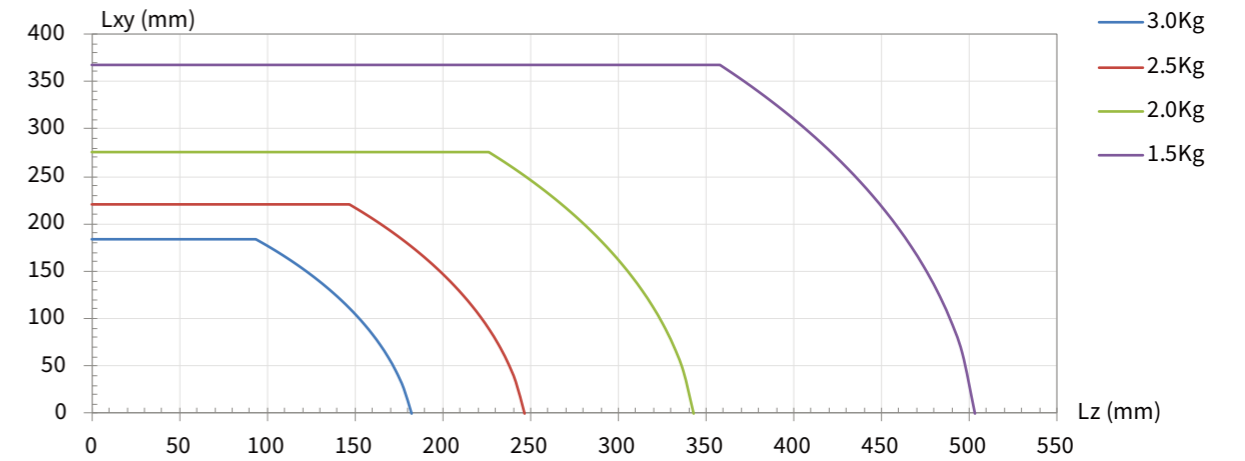
X3-600 7A



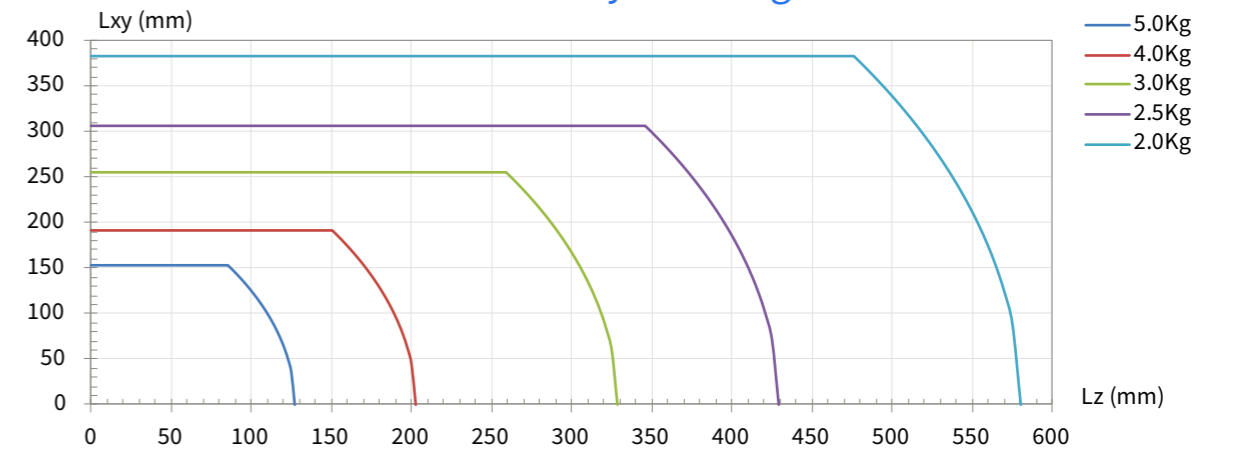
X5-800 7A

Payload Diagram

X3-600 7A Payload Diagram



X5-800 7A Payload Diagram



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.



X3-600 7A Dual

X5-800 7A Dual

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 $\pm 0.02\text{mm}$.

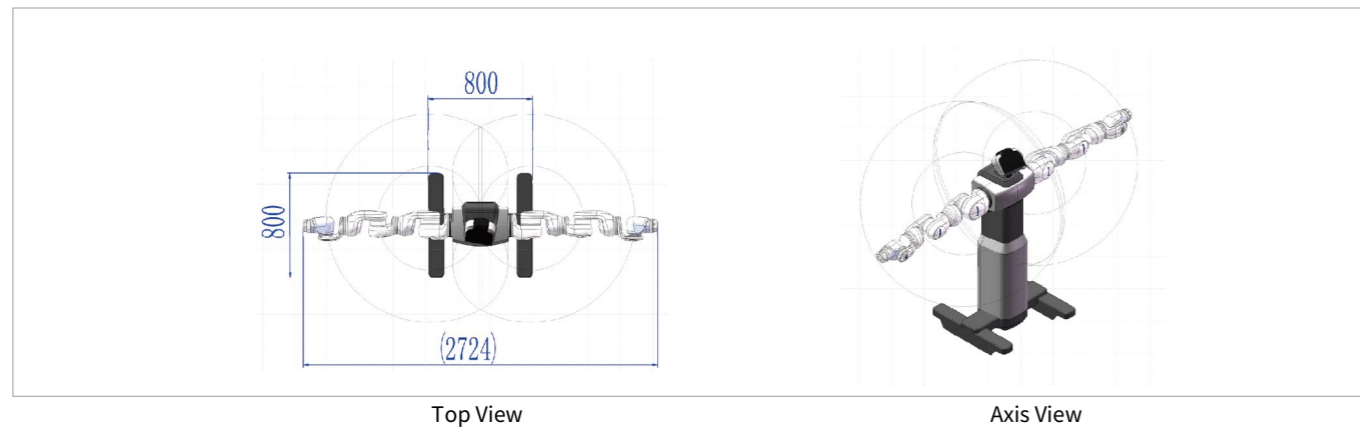
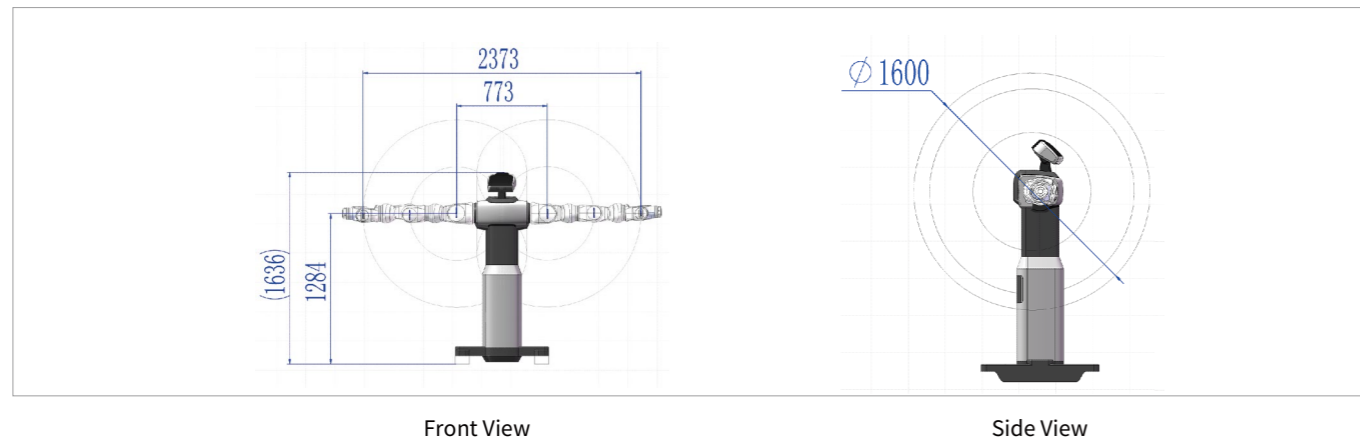
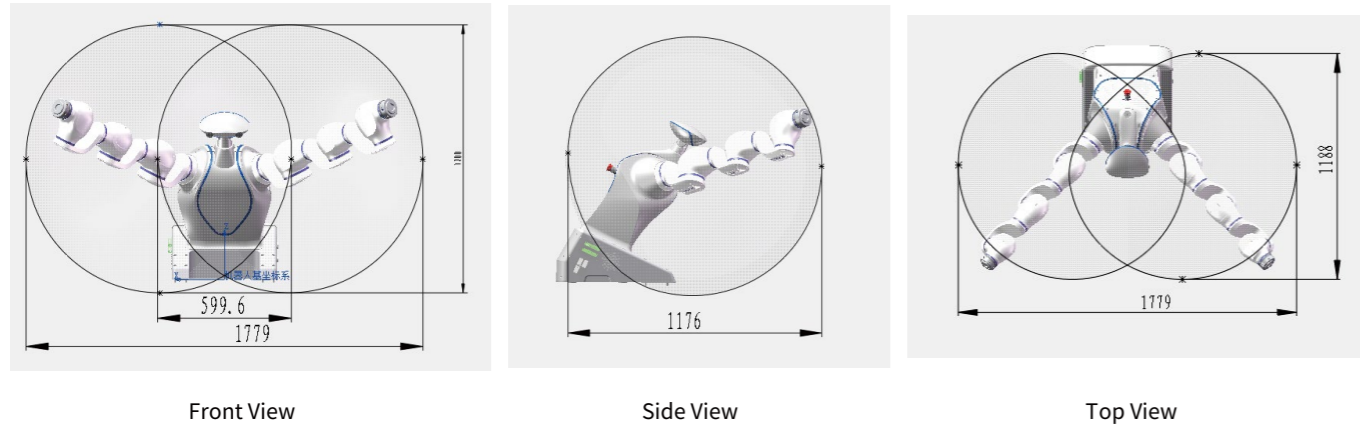
Dual-arm series cobot is featured with high flexibility, extreme safety, rapid deployment. It provides an overall solution for assembling by fast, safe, agile, accurate, and highly efficient positioning and operation, which also provides a better develop environment with more freedom and possibility 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	$\pm 0.02\text{mm}$		$\pm 0.02\text{mm}$	
Joint	Range	Max Speed	Range	Max Speed
J7	$\pm 180^\circ$	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)	
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	$-10^\circ\text{C}\sim 45^\circ\text{C}$		$-10^\circ\text{C}\sim 45^\circ\text{C}$	
Storage Temperature Range	$-40^\circ\text{C}\sim 55^\circ\text{C}$		$-40^\circ\text{C}\sim 55^\circ\text{C}$	
IP Class	IP30		IP30	
Robot Package Size	1200x1000x1040mm		1100x1100x1900mm	
Net/Gross Weight	70kg/100kg		200kg/250kg	

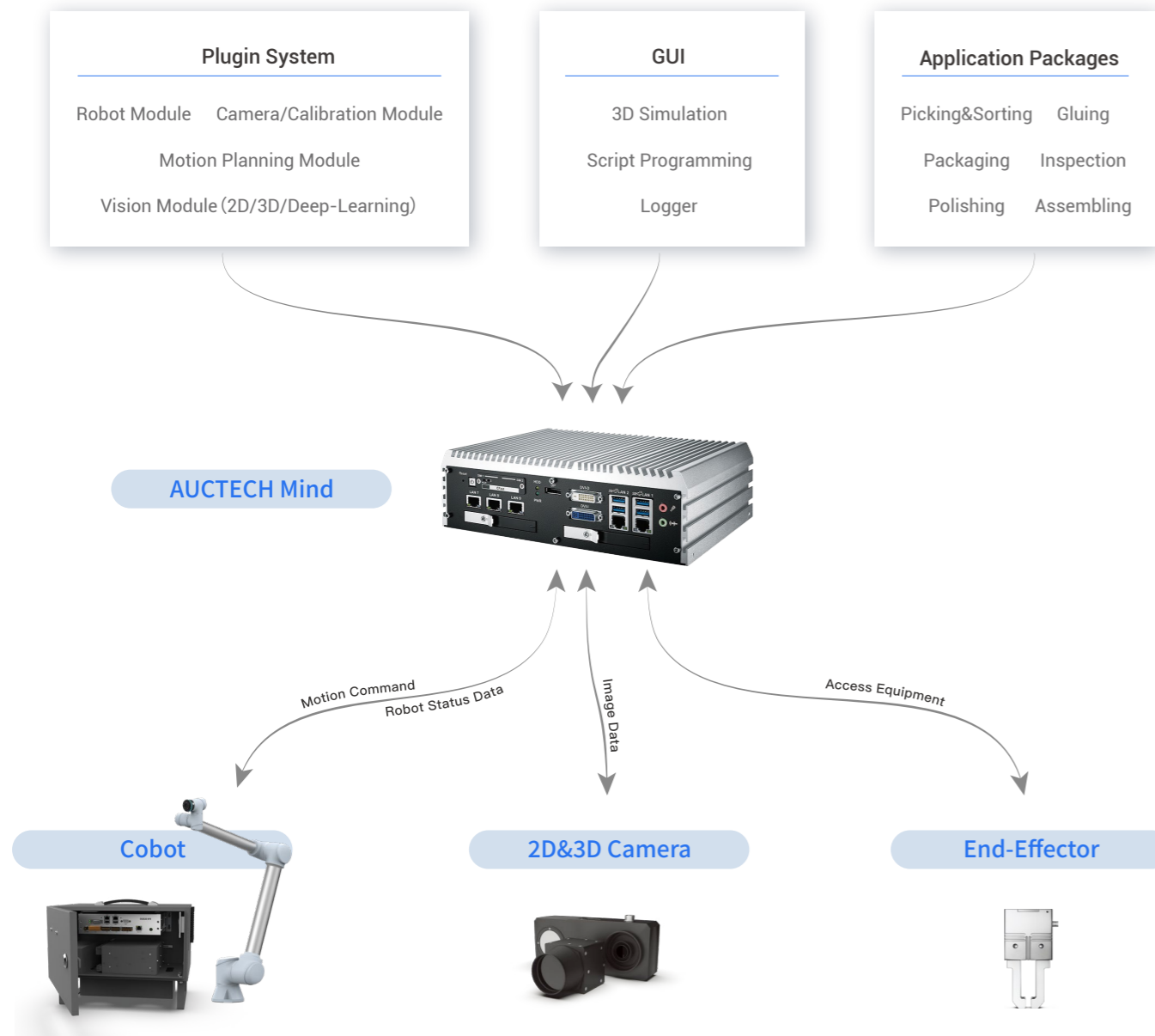
Dual-arm Cobot

Work Space >>>



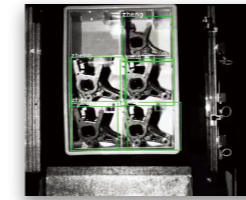
AUCTECH Intelligent Application Controller

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

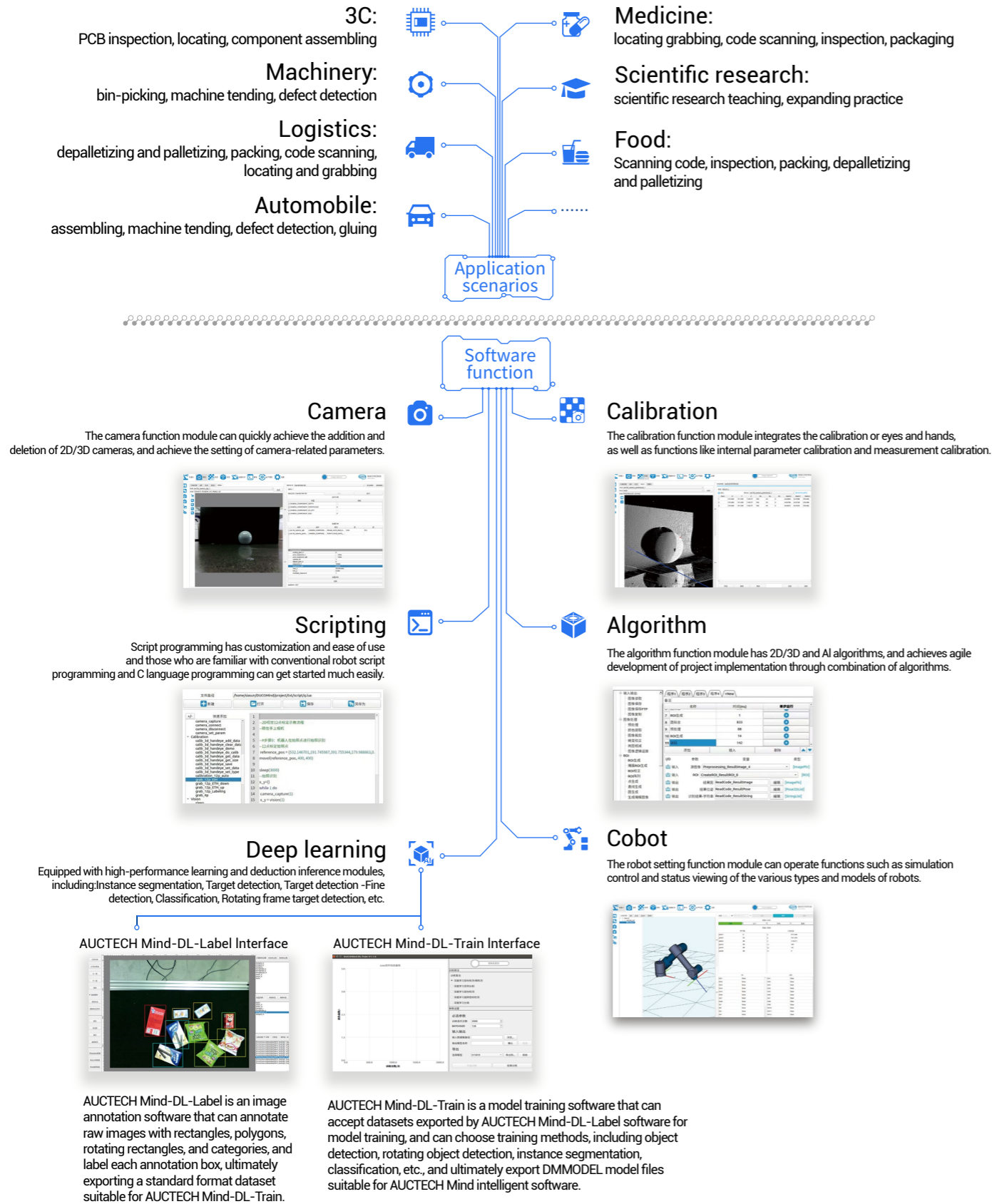
Product Features >>>

- 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
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



AUCTECH Cobot Accessories

- Vision System**
 - MECH MIND, ALSONTECH, Photoneo, DATALOGIC, inspiraz, COGNEX 康耐视
- Force Sensor**
 - Link-touch 蓝点触控, ATI INDUSTRIAL AUTOMATION, NBIT, HKM, SRI Sunrise Instruments, WACOH
- Electrical Gripper**
 - ZIMMER, SCHUNK, dh 大策机器人, ROBOTIQ, RMA 瑞广, HIWIN
- Force Sensor**
 - 广州科腾, OPT Robot Automation parts, ROBOTIQ, SCHMALZ, SRT, ReRobot 天融机器人
- Laser Scanner**
 - OLEI, 大汉正源, SICK, KEYENCE 基恩士
- Gateway&IO Expansion Module**
 - AMSAMOTION 艾莫迅, MOXA, hilscher, HongKe 虹科, HIMS
- Quick-Change Flange**
 - ZIMMER, ATI INDUSTRIAL AUTOMATION, SCHUNK, 桥田 quickot
- Dress Packs**
 - murrplastik, 库鑫 CUBEXIN, igus
- Simulatin&Off-line Programming**
 - ORIGITECH, VISUAL COMPONENTS, RoboDK, HANHUA 瀚承智选
- Tightening System**
 - Rexroth Bosch Group, Atlas Copco, DEPRAG madriplex Unlimited, Danikor
- Optical Positioning&3D Scanner**
 - 艾目易 | Aimooe, 中观
- Protective Clothing**
 - Tenu, YOU GUARD 上海普甲
- Welding Machine**
 - MEGMEET
- Lifting Column**
 - EWELLIX A Schaeffler Company

We Are Dedicated to The Advancement of Cobot



AUCTECH COBOT FOR MORE

Collaborative and safe, easy to work, flexible and intelligent.

Working with you to create a better working scene and more value for you.

