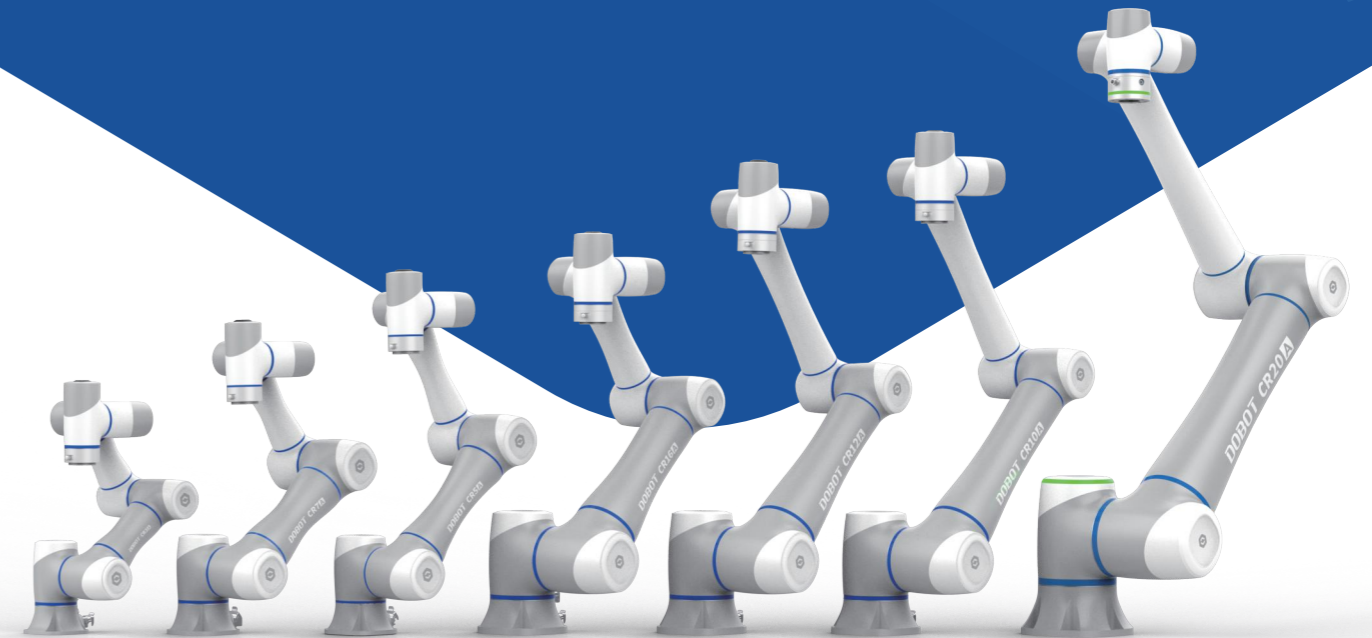




CRA
SERIES



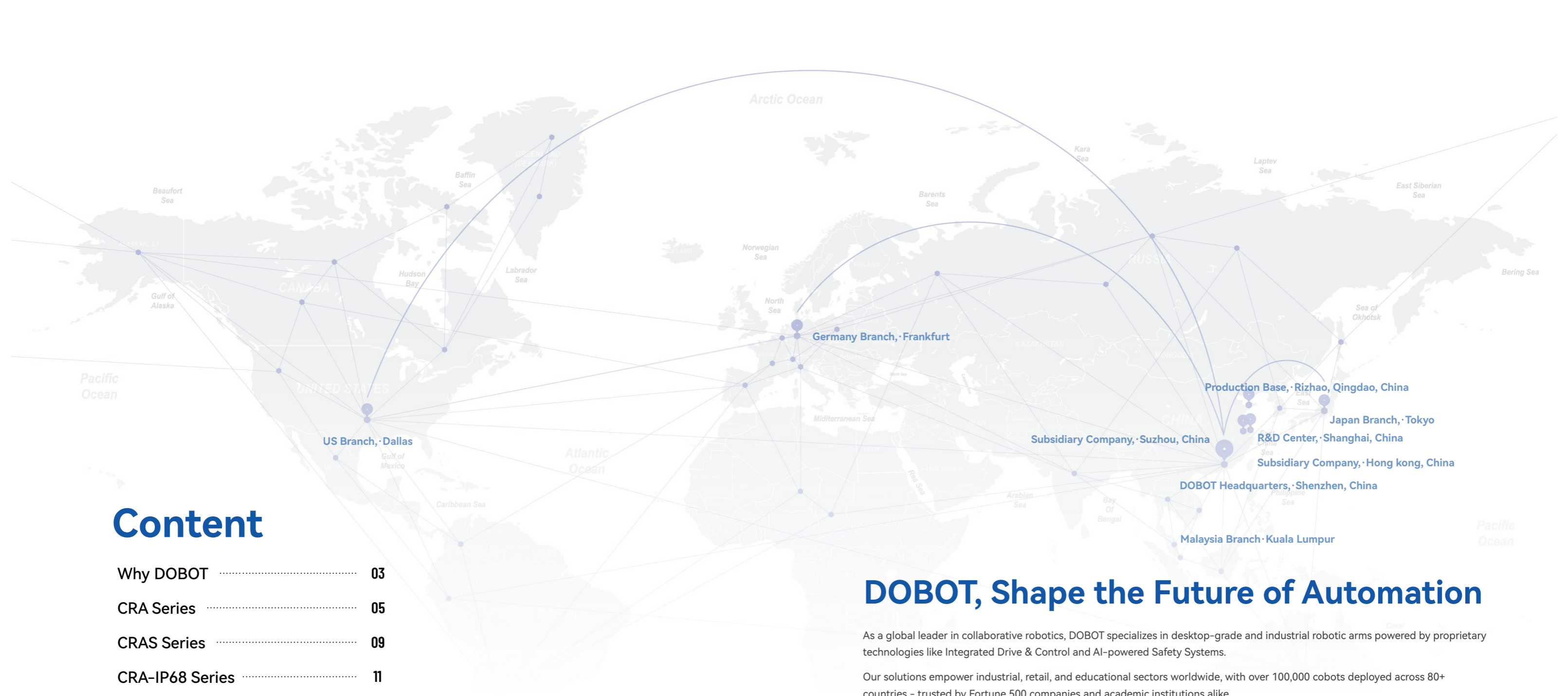
DOBOT CRA Series

A New Benchmark for High-Performance, High-Precision Collaborative Robot

- www.dobot-robots.com
- sales@dobot-robots.com
- www.linkedin.com/company/dobotrobotics/
- www.youtube.com/@DobotRobotics
- China | Germany | USA | Japan | Thailand | Malaysia



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Content

- Why DOBOT 03
- CRA Series 05
- CRAS Series 09
- CRA-IP68 Series 11
- CRAF Force-Controlled Series 12
- DobotStudio Pro 13
- VX500 Smart Camera 15
- DOBOT Accessory Ecosystem 16
- Teach Pendant 16
- One-Stop Palletizing Solution 17
- All-in-One Welding Solution 18
- Application Scenarios 21
- Product Specifications 23

DOBOT, Shape the Future of Automation

As a global leader in collaborative robotics, DOBOT specializes in desktop-grade and industrial robotic arms powered by proprietary technologies like Integrated Drive & Control and AI-powered Safety Systems.

Our solutions empower industrial, retail, and educational sectors worldwide, with over 100,000 cobots deployed across 80+ countries - trusted by Fortune 500 companies and academic institutions alike.

Supported by our global network spanning the United States, Germany, Japan, Thailand, and Malaysia, we're bridging smart manufacturing with future talent development.

100,000

Robots Sold Globally

80+

Selling to Countries and Regions

TOP 1

Collaborative Robot Exporter in China

1,300+

Intellectual Property Rights Owned

80+

Trusted by Fortune 500 Companies

350+

Channel Partners across the Globe

Why Choose DOBOT Cobots?

WHY DOBOT ROBOTICS

CRA Series Collaborative Robot

Easy Deployment



- Adopting the drag-to-teaching trajectory replay method reduces debugging time by 80%.
- Massive interfaces (24-channel universal I/O) support plug-and-play for cameras, grippers, and other components.

Simple Operation



- Features Blockly programming for easy use, even for beginners. It provides welding and palletizing process packages allow no-code operation across PC, tablet, and teach pendant.

Ultimate Performance



- Features industry-leading repeatability of ± 0.02 mm, powered by high-performance integrated joints for top-speed operation. Proprietary vibration suppression and DH compensation algorithms ensure end-point jitter < 0.4 mm and absolute accuracy < 0.3 mm.

Safe Human-Robot Collaboration



- Equipped with industry-leading SafeSkin for pre-contact detection and stop within 15 cm.
- Features 20+ safety functions with real-time monitoring of joint position, speed, and torque. Supports up to 10 sets of dual-redundant safety I/Os for flexible safety integration.

Quick Return



- No safety fences required—simple deployment with low setup costs. Easily switch between tasks for fast product changeovers and high equipment utilization. It saves 2-3 workers per unit, with an ROI of under 12 months.

Proven Reliability



- Manufactured at China's largest cobot production base (over 53,000 m² / 13 acres, 100,000-unit annual capacity) under international-standard systems, the CRA Series has passed 100+ design validations and 40+ extreme tests. It is backed by an internationally certified warranty and trusted by 80+ Fortune Global 500 companies.



A for Advanced

CRA Series Collaborative Robot

CRA SERIES COLLABORATIVE ROBOT

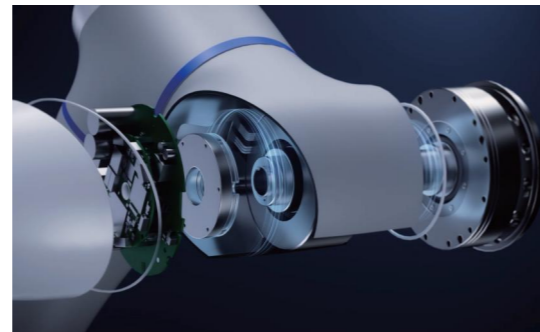


Ultimate Performance

Fast, accurate and stable with industry-leading motion performance _____ PERFORMANCE

Industry-Leading Speed

A new integrated joint design boosts joint speed up to $223^\circ/s$ —among the best in the industry. With real-time torque constraint, the robot automatically adjusts acceleration to operate efficiently within safe torque limits, maximizing cycle time and extending product lifespan for faster, more reliable production.



Fast Response

Equipped with EtherCAT-based joint servos, the system delivers 100 Mbps bandwidth and millisecond-level response, significantly enhancing motion speed and trajectory smoothness. This enables faster, more agile joint movements for superior performance.



High-Precision Positioning

Each robot is laser-calibrated before delivery to ensure absolute positioning accuracy under 0.3 mm, enabling precise assembly, screwdriving, and gluing tasks with consistent, high-quality results.



Stable Motion

DOBOT's proprietary vibration suppression algorithm eliminates jitter caused by load shifts and cantilever resonance. Even under high-speed or high-acceleration conditions, the robot stabilizes within milliseconds. With built-in DH compensation, it maintains less than 0.3 mm accuracy even in complex trajectories.

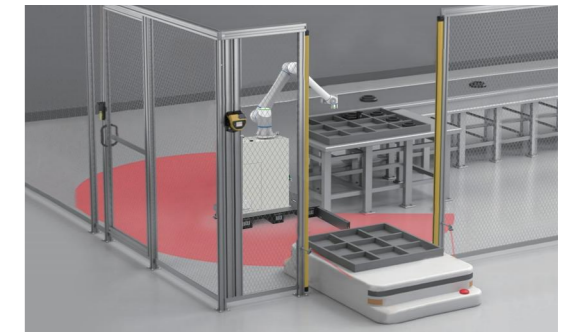


Enhanced Safety

Electromagnetic Brakes for Enhanced Safety _____ SAFETY

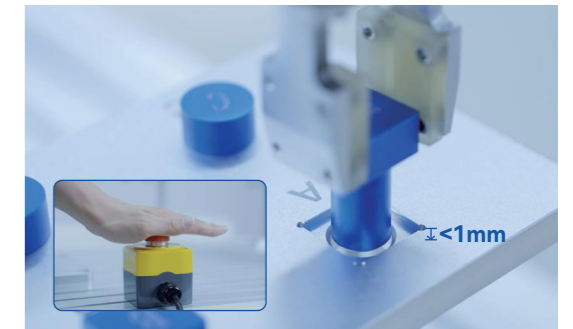
Comprehensive Safety System

Powered by a next-gen PLd Cat.3 safety controller with 20+ safety functions, the robot is certified to ISO 13849-1, ISO 10218-1, and ISO 15066 standards. With proper risk assessment, it enables safe, fence-free human-robot collaboration for reliable and efficient production.



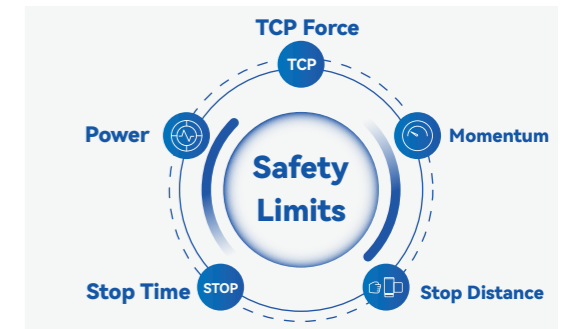
Electromagnetic Brakes

The robot features electromagnetic brakes that lock all joints within 18 ms of a power loss, limiting end-effector displacement to less than 1 mm (vs. 10 mm with traditional pin brakes). This minimizes the risk of equipment or product damage, ensuring greater safety in the production process.



Collision Detection & Retreat

Offers five adjustable sensitivity levels for collision detection. Upon impact, the robot immediately retreats and halts, then resumes from the same position once conditions are safe—minimizing downtime and manual intervention. Supports custom limits for TCP force, power, and momentum, with pause or slowdown responses to meet diverse safety needs with greater precision and efficiency.



Customizable Safety Zones

Users can define virtual safety walls or zones via software to restrict the robot's movement within a designated area. This prevents interference with surrounding equipment and ensures smooth, efficient operation in complex production environments.



CRA Series Collaborative Robot

CRA SERIES COLLABORATIVE ROBOT



Rich Interfaces

Flexible Integration with Multiple Protocols

EXPAND

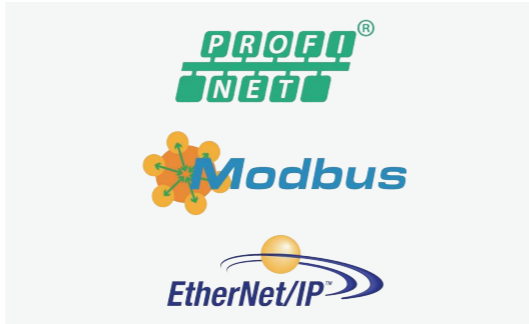
24 DIs and 24 DOs

The DIs and DOs of the general purpose interface have been expanded to 24, allowing for PNP and NPN switching. These interfaces can be configured into over 30 robot control and status feedback functions, catering to a wide range of equipment connections. This enhances convenience and flexibility in industrial automation, enabling seamless integration and control of equipment.



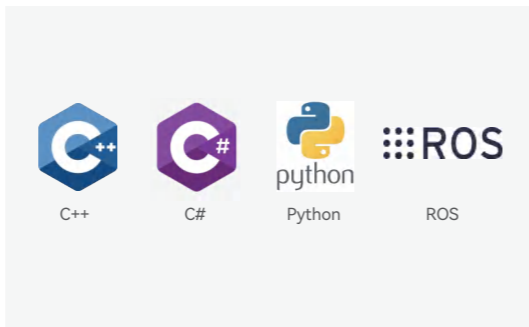
Versatile Connectivity & Easy Integration

Standard support for Modbus-TCP/RTU, EtherNet/IP, and PROFINET enables seamless connection to most mainstream PLCs and HMIs for efficient system integration.



Open Development & ROS Support

Offers robust TCP/IP secondary development in C++, C#, and Python for deep customization. Compatible with ROS1 and ROS2, giving access to a vast library of open-source tools like path planning and 3D perception for accelerated innovation.



Expandable Safety Interfaces

Equipped with 10 independent safety I/O channels, separated from general I/O and designed with dual-channel redundancy. Easily integrates with safety devices like light curtains, safety doors, and laser scanners to build multi-layer protection systems for comprehensive production safety.



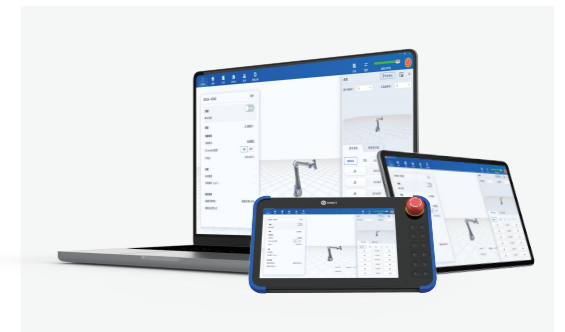
Smart Interaction

Operate the robot effortlessly across multiple terminals

FLEXIBLE

Seamless Multi-Terminal Control

Compatible with PC, tablet, and teach pendant, supporting both wired and wireless connections for flexible operation across scenarios.



Smart Interaction Panel

An interactive panel on the end effector allows for enabling/disabling, gripper control, drag teaching, and trajectory recording/playback—no PC required, making on-site operation more intuitive and efficient.



Compact Control Cabinet

20% smaller in size, ideal for integration into compact systems like mobile robots. Optional IP54 protection ensures reliable performance in harsh environments with oil and dust.



Original Path Recovery

After alarms (e.g., emergency stop, program error), users can manually move the robot to a safe position. Upon restart, it resumes along the original path—minimizing downtime and ensuring continuous production.



CRAS Series

CRAS SERIES

Safety is crucial in human-machine collaboration. The best solution is a safety mechanism that maintains efficiency while prioritizing safety. Dobot SafeSkin, the industry's only mass-produced safety skin, stands out by enabling non-contact monitoring and collision avoidance. This innovative technology allows collaborative robots to operate at an impressive speed of 1 m/s, four times faster than the international standard. Unlike traditional methods that require robots to slow down to avoid collisions, Dobot SafeSkin enhances efficiency and safety simultaneously.

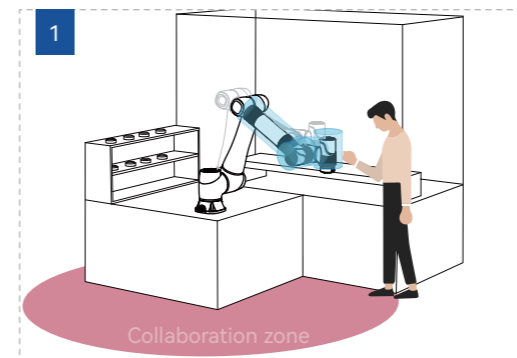
The CRAS series, built upon the efficient, flexible, and user-friendly CRA series and enhanced with DOBOT SafeSkin, enables you to accomplish human-machine collaborative production with increased efficiency and safety.

All-round protection

The SafeSkin is a wrap-around installation with comprehensive protection and excellent body perception, which is not affected by factors such as cloth and plastic gloves.

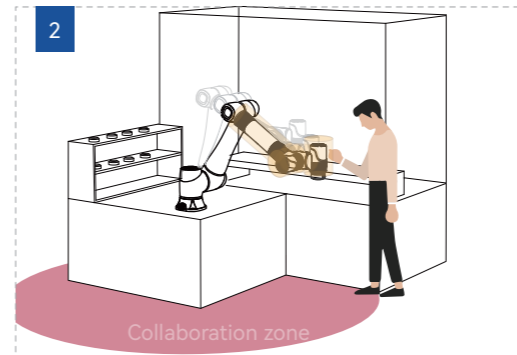


Scan to watch the SafeSkin demo video

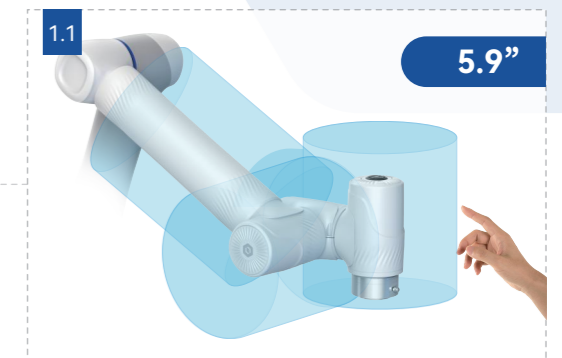


SafeSkin technology allows CRAS series robots to monitor human-machine collision risks in real-time. When the operator enters the collaboration zone, the robot can increase the maximum speed of collaboration up to 1 m/s*, four times faster than traditional collision detection methods, while maintaining safety.

*The data is based on the test results obtained by DOBOT Laboratory under controlled conditions. As an example, CR10AS can effectively reduce the risk of robot collision at a speed of 1 m/s. A comprehensive safety risk assessment is required for actual applications.

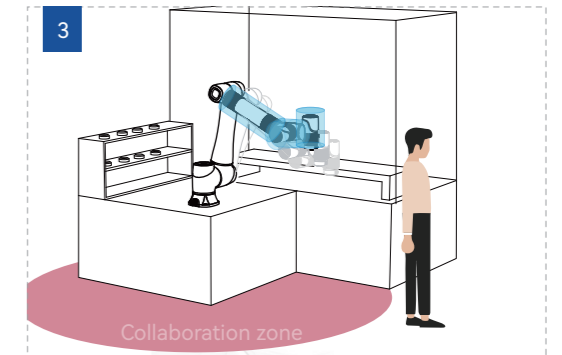


When an obstacle is detected by the SafeSkin, the CRAS collaborative robot is capable of activating its safety mechanism in just 0.01 seconds. Consequently, it promptly halts its operation within 0.1 seconds, effectively preventing collisions or minimizing the impact to enhance safety protection.



5.9" Omnidirectional Pre-collision Perception

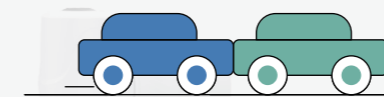
The SafeSkin employs a non-contact monitoring system that enables the robot to detect obstacles within a 5.9" range in real-time. This system forms a 360° anti-collision barrier, providing the robot with additional braking distance and ensuring its safe operation.



SafeSkin system detects when collision risk is eliminated, allowing seamless resumption of production program without manual intervention, enhancing human-robot collaboration efficiency.

*The safety recovery mode can be customized.

Safety Mechanism Comparison



Collision Detection

Brake after detecting a collision



Safety and efficiency cannot be achieved simultaneously

To ensure the collision force meets safety requirements, the operation speed has to be reduced



Pre-collision Perception

Real-time perception of collision risk



Safety and efficiency can be achieved simultaneously

Stop before the collision so as to improve the operation speed

CRA-IP68 Series

ROBOT CRA-IP68 SERIES

Designed For Harsh Conditions Characterized By High Dust and Humidity

With top-level IP68 dust and water protection, the CRA-IP68 Series excels in demanding applications such as machine tending, welding, grinding, and new retail (e.g., coffee, frying, noodle machines). It resists damage from cutting fluids, lubricants, and disinfectants, ensuring long-lasting, stable performance in harsh industrial environments.



CR3AP

CR5AP

CR10AP

CR20AP



CNC Loading & Unloading



Welding



Polishing



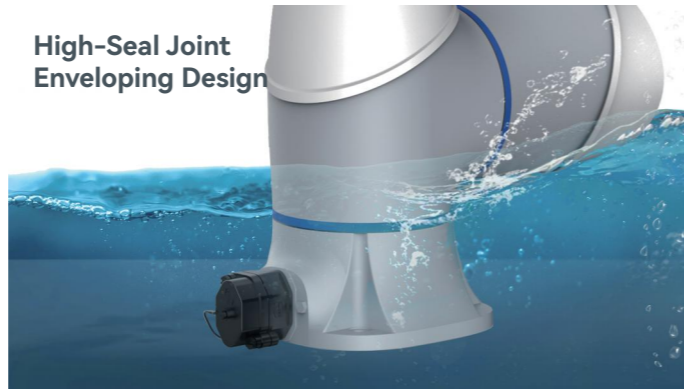
New Retail

All-Around Protection Design

Full IP68 Waterproof Design



High-Seal Joint Enveloping Design



Superior Corrosion Resistant



Internal Pneumatic System



Perfect for High Humidity, Dusty, Water Mist Conditions

*Certified by SGS under IEC 60529, the robot passed a rigorous 72-hour test to meet IP68 waterproof standards.

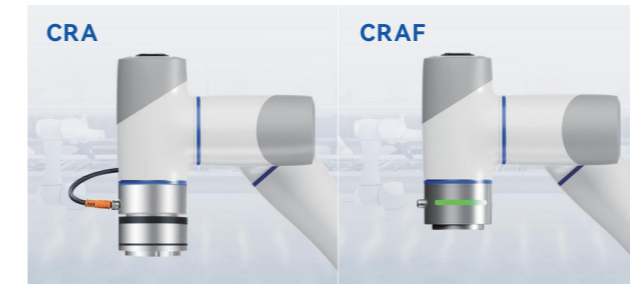
* Not suitable for prolonged underwater use. For any questions regarding application scenarios, please consult technical support.



CRAF Force-Controlled Series

ROBOT CRAF SERIES

Upgraded from the CRA Series, the CRAF Series integrates a high-precision 6-axis force sensor at the flange, capable of detecting forces along XYZ axes and torques around Mx, My, and Mz. It enables ± 3 N constant-force tracking on complex surfaces with exceptional compliance and accuracy. With a plug-and-play design, it's ideal for precision tasks like electronics assembly and automotive surface polishing.



CRA

CRAF



CR5AF

CR10AF

CR20AF



Polishing



Precision Assembly



Welding



Healthcare

Product Structure

All-in-one Force Control Design

- The CRAF Series are factory-calibrated with pre-configured force sensors, enabling plug-and-play operation without additional calibration or setup.

Flange with Ring Status Light

- Features a ring status light for real-time robot state visibility and a press-to-drag button.

Non-Occupying End Interface

- Does not occupy tool-side RS485 or I/O ports, ensuring compatibility with external devices (such as electric grippers or the VX500 Smart Camera).

Smooth Dragging

Supports full-flange drag with directional locking for precise teaching. With a starting force under 2N, it allows fine-tuned adjustment of end-point positions with minimal effort.



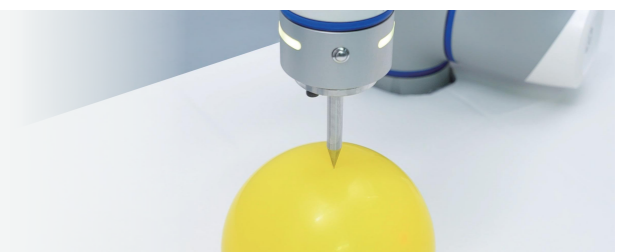
Precise Operations

The robot autonomously adjusts to curved surfaces with constant-force control accuracy of ± 3 N. It also supports automatic plane detection and dynamically adapts to surface height variations.



Safe Collaboration

Capable of detecting collisions as light as 1N with 1% F.S. accuracy and 0.5% F.S. precision. With impact resistance up to 2000N, it performs reliably even in complex industrial environments.

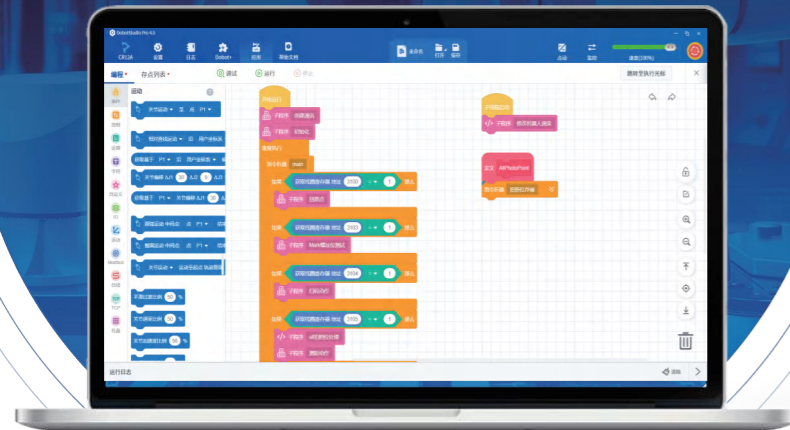


RobotStudio Pro

A newly designed UI with a clean layout for intuitive, efficient, and user-friendly control.

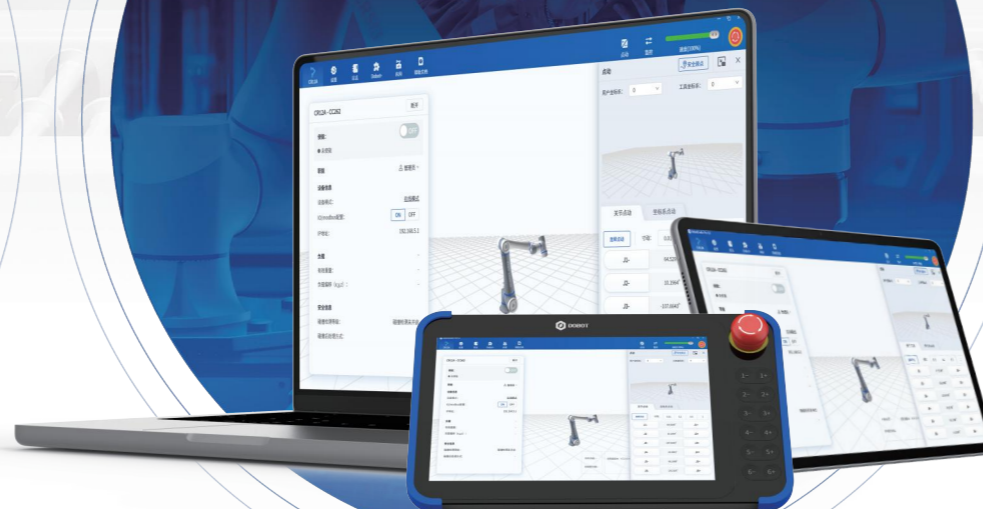
Efficient Programming Options

Graphical Programming: Easily create programs by dragging and dropping visual blocks. With a wide range of built-in command modules, users can get started quickly—no coding experience needed.
Script Programming: Supports Lua scripting for experienced developers to efficiently build complex programs, meeting the needs of diverse professional applications.



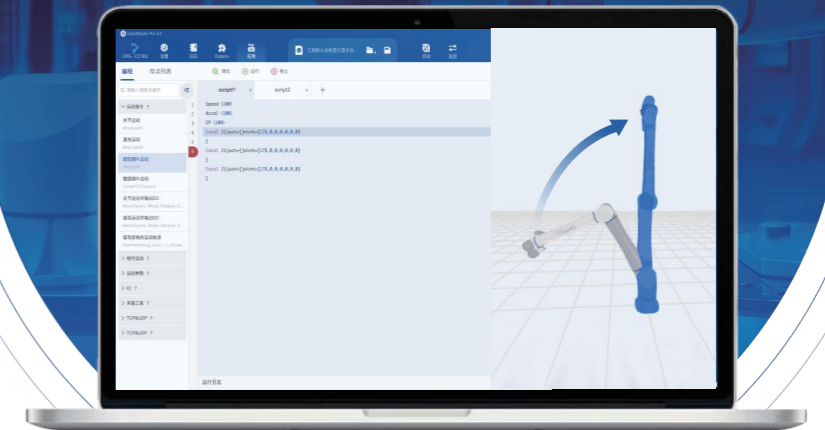
Cross-Platform Compatibility

Compatible with Windows, iOS, and Android operating systems, supporting a wide range of terminals including PCs, tablets, and teach pendants, meeting diverse user and application needs.



Offline Programming & Simulation

Supports both local and cloud-based virtual controllers for offline programming and simulation, enabling program testing and debugging anytime, anywhere.



Rich Plug-in Ecosystem

Compatible with a wide range of grippers, vision systems, and sensors, enabling users to efficiently develop and deploy diverse applications.



Dedicated Process Packages

Supports welding, palletizing, CNC, and other specialized process packages. Simply configure parameters to auto-generate programs, accelerating project deployment.



Robust Logging Function

Allows real-time access to operation history and parameter changes for quick issue tracking and reduced downtime.



Visualized Configuration

Offers fully visualized setup with clear, intuitive operation and predictable results, reducing user risk and enhancing ease of use.



Batch Point Addition

Provides a point list management feature for adding multiple points at once, greatly improving efficiency in multi-point applications.



Flexible Debugging Tools

Supports advanced debugging functions such as single-step execution, breakpoints, and running from a selected line, making program debugging more efficient and user-friendly.

VX500 Smart Camera

VX500 SMART CAMERA

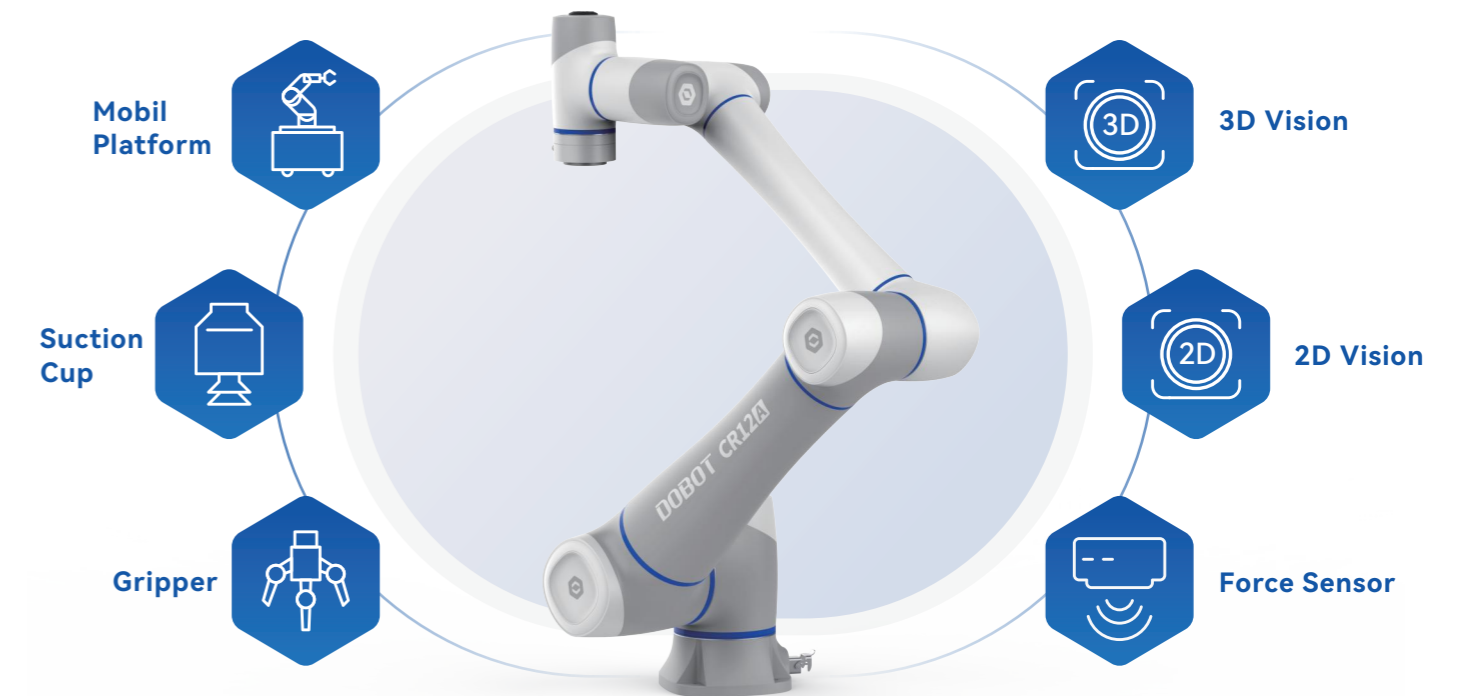
Enables more precise pick-and-place operations with easy-to-integrate 2.5D vision, enhancing accuracy and efficiency.



Open & Comprehensive DOBOT Ecosystem

OPEN DOBOT ECOSYSTEM

Built on the principles of openness and ease of use, the DOBOT Ecosystem actively collaborates with partners to deliver a wide range of compatible components. The CRA series features one RS485 interface at both the end effector and control cabinet, enabling seamless integration of ecosystem peripherals—such as grippers, 2D/3D cameras, and force sensors—via plug-and-play connectivity. To streamline secondary development, DOBOT provides a standardized SDK along with a rich library of demo source codes, empowering developers to build efficient, customized solutions for diverse application scenarios.



Teach Pendant (Optional)

TEACH PENDANT (OPTIONAL)

DOBOT collaborative robot teach pendant features a lightweight design that blends aesthetics with ergonomics, offering a more comfortable grip for extended use. Its well-crafted interactive interface balances safety and flexibility, significantly improving robot commissioning efficiency and delivering an exceptional user experience.



- **12 Physical Shortcut Buttons**

Quickly adapt to multi-point complex positioning applications. Physical keys significantly enhance positioning efficiency.

- **3-Level Enabling Switch**

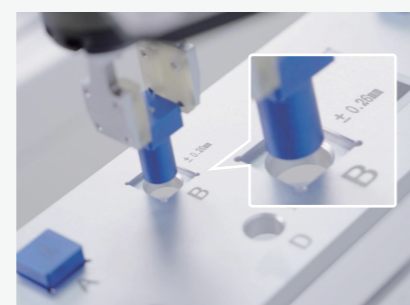
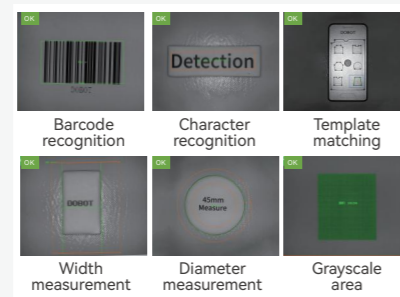
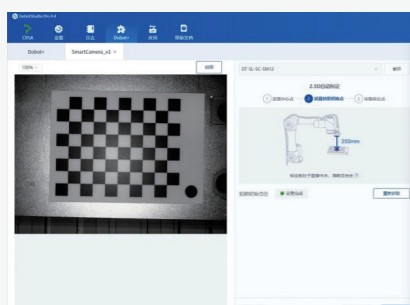
Meets safety requirements with a three-position enabling switch and drag-to-teach functionality.

- **10.1" HD Touchscreen**

With a resolution of 1920×1280, the multi-touch display ensures smoother and more intuitive control.

- **Certified Safety Standards**

Complies with ISO 10218-1:2011 and ISO 13849-1:2015 standards for enhanced operational safety.



Seamless Integration with CRA Series for Plug-and-Play Use

The VX500 vision system features an all-in-one design with built-in image acquisition, processing, lighting, and lens calibration. Integrated with the DobotStudio Pro platform, it enables one-click configuration and supports Blockly programming for easy visual control. Start using it with CRA cobots in just 30 minutes.

Rich Functions for Easy Operations

Supports visual positioning, presence detection, assembly inspection, barcode reading, OCR, and dimension measurement. Handles a wide range of complex tasks with ease, streamlining robot vision applications.

High-Precision 2.5D Vision for Pick-and-Place Accuracy

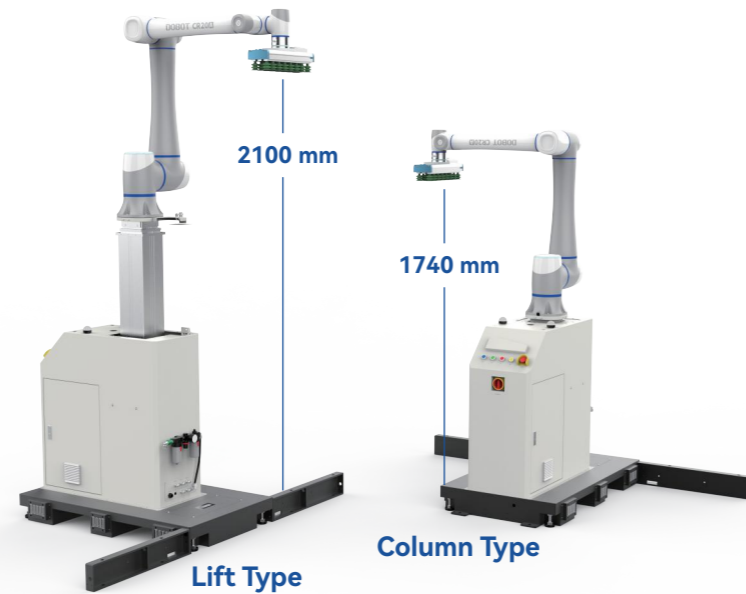
Equipped with 2.5D vision for accurate height and tilt detection, achieving high-precision recognition with repeatability up to ± 0.26 mm. Ideal for mobile robot navigation, flexible pick-and-place, and tasks such as loading/unloading or part orientation.

One-Stop Palletizing Solution

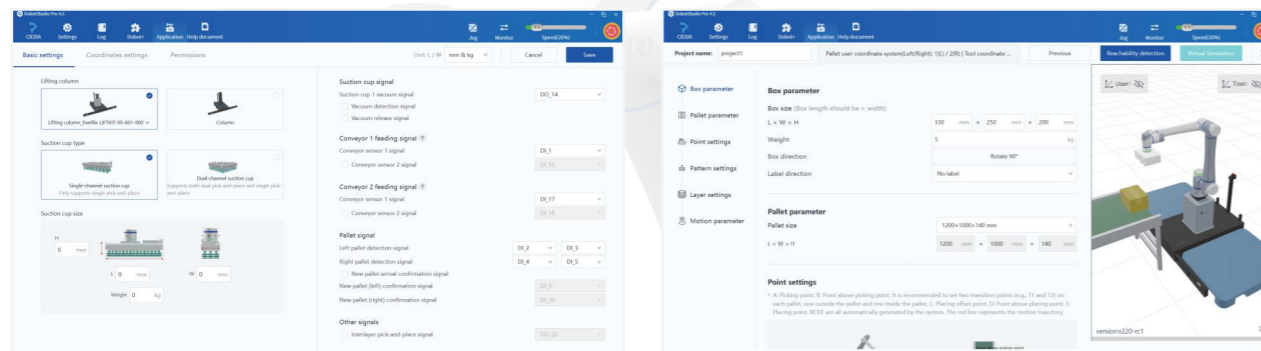
PALLETIZING SOLUTION

- The new-generation CR20V collaborative robot delivers a 25 kg maximum payload and reaches a 2,500 mm stacking height, achieving industry-leading speeds of 8-12 cycles/minute. Ideal for food & beverage, medical, consumer goods, and 3C electronic industries.
- With its self-developed palletizing process package, it enables programming-free setup and can deploy applications in just 30 minutes.
- Supported by customizable recipes and scripts, DOBOT provides tailored palletizing solutions for system integrators.

- The system allows for flexible configuration to pick up either one or two boxes simultaneously, resulting in a significant enhancement in palletizing efficiency. The maximum speed of palletizing can reach up to 13 boxes per minute.
*Note: The data is based on the test results from DOBOT Laboratory under controlled experimental conditions. The results in actual application scenarios may vary slightly.
- The flexibility of the palletizing configuration allows for customization of the order in which boxes are placed, transition points, and approach direction. This enhances the compactness and stability of the box palletizing process.
- It facilitates the task of selecting and positioning partitions while palletizing.
- The visualization of the configuration process allows for the display of parameters in a 3D format, enabling real-time switching and ultimately enhancing the interactive experience.

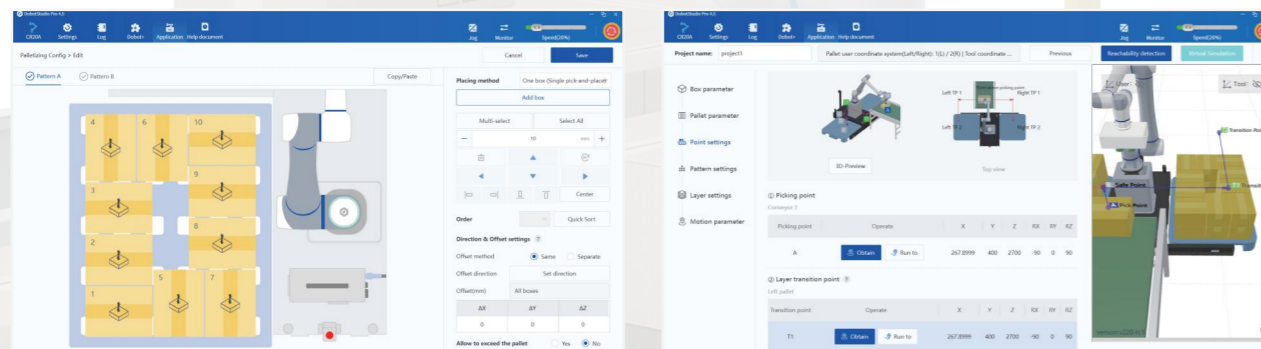


Easy to Set up with DOBOT Palletizing Process Package



Step 1: Set up the workstation specifications

Step 2: Set up the box and pallet



Step 3: Pallet type configuration

Step 4: Picking points configuration

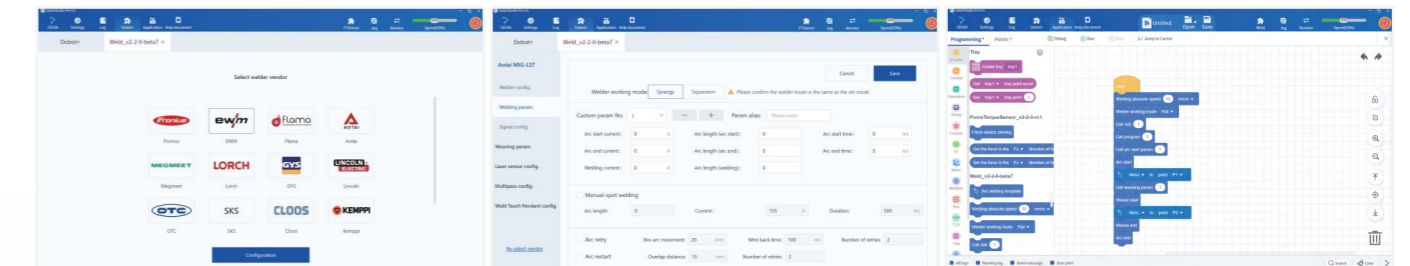
All-in-One Welding Solution

WELDING SOLUTION

- CRA Series collaborative robot is calibrated with high-precision dynamic parameters, ensuring welding path accuracy within 0.3 mm, high weld consistency, and stable welding quality.
- With a compact design, small footprint, and lightweight body, CRA Series offer flexible mobility and support multi-station flexible operations.
- Easy to program and quick to set up, CRA Series allow welding applications to be configured without professional robotics expertise, meeting the needs of small-batch, high-variety production.
- The professional Welding Process Package delivers deep compatibility with welding modes and parameters from over 10 major welding machine brands, with key supported functions including Arc Tracking, Intermittent Welding, Multi-Station Scheduling, Laser Seam Seeking, Touch Sensing, Multi-Layer Multi-Pass Welding, Laser Tracking, Arc Restart & Retry, and Various Weaving Patterns.

*Note: The product features are continuously evolving.

Plug and Play, Quick to Configure



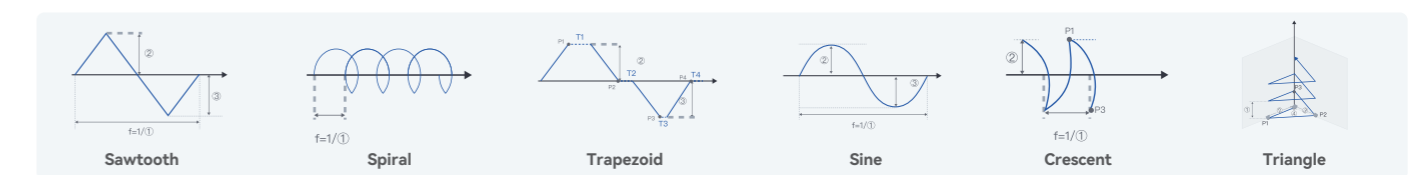
1 Select the Welding Machine Brand.

2 Select the Welding Parameters.

3 Easy to customize the welding steps with blockly programming.

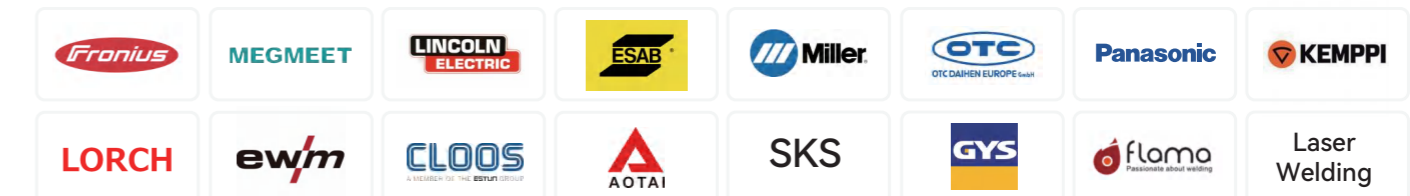
Multiple Arc Weave Patterns, No Programming Required

- Supports Various Oscillation Welding Methods: Adapts to complex welding scenarios.
- Parameter Customization: Allows settings for amplitude, frequency, dwell time on the left and right, and weaving direction.



Wide Compatibility

Widely Compatible with 10+ Leading Welding Machine Brands Globally



Supports 4 Communication Methods:



*When performing laser welding or arc welding, it is possible to choose the appropriate communication method with DOBOT Welding Process Package.

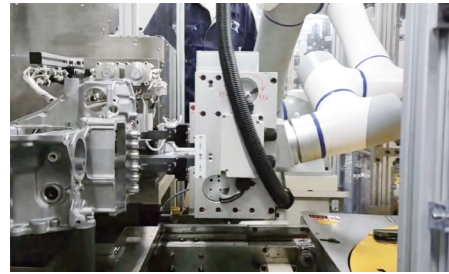
Trusted by 80+ Fortune 500 Companies Worldwide



Versatile Applications Across Industries

CRA series offers 3–20 kg payloads and multiple reach options, ideal for 3C, automotive, semiconductors, metal processing, food, healthcare, and over 15 other sectors — your next smart automation choice.

Automotive Industry



Gearbox Thread Locking



Car Door Component Assembly



Automotive Glass Gluing

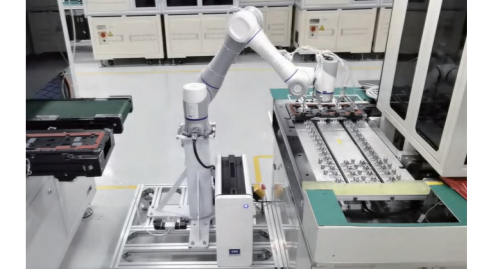
Lithium Battery Industry



Energy Battery Screw Locking



Battery Inspection Loading & Unloading

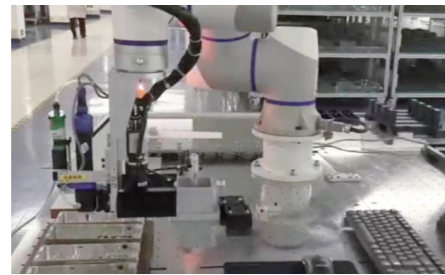


Cell Welding Loading & Unloading

3C Industry



PCB Board Loading & Unloading



Smartphone Dispensing

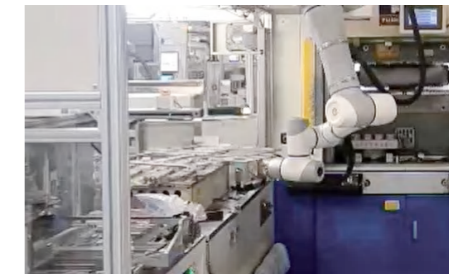


Electronic Component Sorting

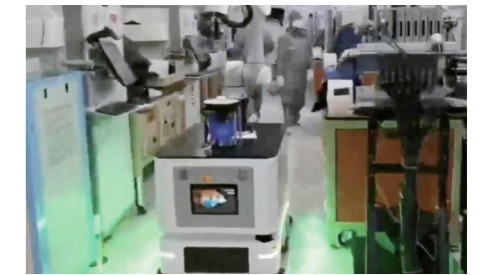
Semiconductor Industry



Die Bonder Loading & Unloading



IC Packaging Loading & Unloading



Wafer Loading & Unloading

Palletizing & Packaging



Home Appliance Production
Line Palletizing



Automated Candy Packaging



Plastic Bottle Capping

Plastics & Chemical Industry



Injection Molding Assistance



Glue Dispensing Machine Loading
& Unloading

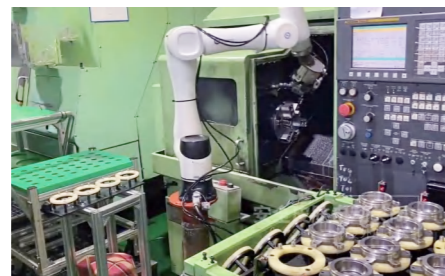


Plastic Cap Handling

Metal Processing



CNC Machine Loading & Unloading



CNC Machine Loadin
& Unloading (with SafeSkin Technology)

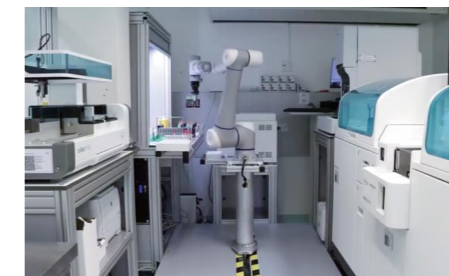


Steel Frame Welding

Medical & Healthcare Automation



Orthopedic Surgical Robot Assistance



Medical Sample Testing



Laboratory Automation

Product Specifications

Product Name	CR3A	CR5A	CR7A	CR6AL	CR10A	CR12A	CR16A	CR16AL	CR20A	CR30A
Weight	16.5kg	25 kg	24.5 kg	41.5 kg	40 kg	39.5 kg	40 kg	40 kg	73 kg	70 kg
Max. Payload	3 kg	5 kg	7 kg	6 kg	10 kg	12 kg	16 kg	16 kg	20 kg *1	30 kg
Working Radius	620 mm	900 mm	800 mm	1800 mm	1300 mm	1200 mm	1000 mm	1300 mm	1700 mm	1305 mm
Maximum Working Speed	3 m/s	4 m/s	4 m/s	5 m/s	5 m/s	5 m/s	4 m/s	4 m/s	5.5 m/s	4 m/s
Joint Range of Motion	J3: ±155° other joints ±360°	J3: ±160° other joints ±360°	J3: ±160° other joints ±360°	J3: ±170° other joints ±360°	J3: ±160° other joints ±360°	J3: ±160° other joints ±360°	J3: ±160° other joints ±360°	J3: ±160° other joints ±360°	J3: ±165° other joints ±360°	J3: ±165° other joints ±360°
Max. Working Speed	J1/J2	180°/s	180°/s	180°/s	150°/s	150°/s	150°/s	150°/s	110°/s	120°/s
	J3	223°/s	180°/s	180°/s	180°/s	180°/s	180°/s	180°/s	110°/s	150°/s
	J4/J5/J6	223°/s	223°/s	223°/s	223°/s	223°/s	223°/s	223°/s	180°/s	180°/s
End Effector IO	DI	2 channels	2 channels	2 channels	2 channels	2 channels	2 channels	2 channels	4 channels	4 channels
	DO	2 channels	2 channels	2 channels	2 channels	2 channels	2 channels	2 channels	4 channels	4 channels
	AI	2 Channels (Shared with RS485)	2 Channels (Shared with RS485)	2 Channels (Shared with RS485)	2 Channels (Shared with RS485)	2 Channels (Shared with RS485)	2 Channels (Shared with RS485)	2 Channels (Shared with RS485)	2 Channels (Shared with RS485)	4 Channels (Shared with RS485)
Repeatability	±0.02 mm	±0.02 mm	±0.02 mm	±0.05 mm	±0.03 mm	±0.03 mm	±0.03 mm	±0.04 mm	±0.05 mm	±0.05 mm
IP Rating	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54	IP54
Temperature Range	0~50°C	0~50°C	0~50°C	0~50°C	0~50°C	0~50°C	0~50°C	0~50°C	0~50°C	0~50°C
Power Consumption	120W	150W	150W	350W	350W	350W	350W	350W	500W	500W
Cable Length (Robot-to-Control Cabinet)	5 m	5 m	5 m	5 m	5 m	5 m	5 m	5 m	6 m	6 m
SafeSkin Model (Optional)	CR3AS*3	CR5AS*3	CR7AS*2	-	CR10AS*3	CR12AS*2	CR16AS*2	-	-	-

*1: For palletizing applications, CR20A can support a maximum payload of 25 kg. For details, please consult DOBOT technical personnel.

*2: Equipped with 3 SafeSkin models, located on J4, J5, and J6 axes.

*3: Equipped with 4 SafeSkin models, located on the forearm, J4, J5, and J6 axes.



Product Name	CR3AP	CR5AP	CR10AP	CR20AP
Weight	16.5kg	25 kg	40 kg	73 kg
Max. Payload	3 kg	5 kg	10 kg	20 kg
Working Radius	620 mm	900 mm	1300 mm	1700 mm
Joint Range of Motion	J3: ±155° Other Joints ±360°	J3: ±160° Other Joints ±360°	J3: ±160° Other Joints ±360°	J3: ±165° Other Joints ±360°
Maximum working speed	3 m/s	4 m/s	5 m/s	5.5 m/s
Max. Working Speed	J1/J2	180°/s	180°/s	150°/s
	J3	223°/s	180°/s	180°/s
	J4/J5	223°/s	223°/s	223°/s
	J6	270°/s	223°/s	180°/s
End-Effector I/O	DI	2 channels	2 channels	2 channels
	DO	2 channels	2 channels	2 channels
	AI	2 Channels (Shared with RS485)	2 Channels (Shared with RS485)	2 Channels (Shared with RS485)
Repeatability	±0.02 mm	±0.02 mm	±0.03 mm	±0.05 mm
IP Rating	IP68	IP68	IP68	IP68
Temperature Range	0~50°C	0~50°C	0~50°C	0~50°C
Power Consumption	120W	150W	350W	500W
Cable Length (Robot-to-Control Cabinet)	5 m	5 m	5 m	6 m
Material(s)	Aluminum Alloy , ABS Plastic			

Product Specifications



Product Name	CR5AF	CR10AF	CR20AF	
Weight	25.5 kg	40.5 kg	74 kg	
Max. Payload	5 kg	10 kg	20 kg	
Working Radius	900 mm	1300 mm	1700 mm	
Range of Motion (Joints)	J3: ±160° Other Joints ±360°	J3: ±160° Other Joints ±360°	J3: ±165° Other Joints ±360°	
Max. Joint Speed	J1/J2	180°/s	150°/s	
	J3	180°/s	150°/s	
	J4/J5/J6	223°/s	223°/s	
Force Sensor	Range	Force(Fx/Fy/Fz): 150N Torque(Mx/My/Mz): 15Nm	Force(Fx/Fy/Fz): 300N Torque(Mx/My/Mz): 30Nm	Force(Fx/Fy/Fz): 500N Torque(Mx/My/Mz): 50Nm
	Overload	500% F.S.	500% F.S.	500% F.S.
	Accuracy	1% F.S.	1% F.S.	1% F.S.
	Precision	0.5% F.S.	0.5% F.S.	0.5% F.S.
End-Effector I/O	DI	2 Channels	2 Channels	4 Channels
	DO	2 Channels	2 Channels	4 Channels
	AI	2 Channels (Shared with RS485)	2 Channels (Shared with RS485)	4 Channels (Shared with RS485)
Repeatability	±0.02 mm	±0.03 mm	±0.05 mm	
IP Rating	IP54	IP54	IP54	
Temperature Range	0~50°C	0~50°C	0~50°C	
Power Consumption	150W	350W	500W	
Installation Method	Forward Installation			
Cable Length (Robot-to-Control Cabinet)	5 m	5 m	6 m	
Material(s)	Aluminum Alloy & ABS Plastic			

Robot Control Cabinet



	CC262		CC263		DSC
	AC Version	DC Version	AC Version	DC Version	
Dimensions	345 mm*345 mm*145 mm	345 mm*345 mm*145 mm	400 mm*400 mm*175 mm	400 mm*320 mm*175 mm	220 mm*150 mm*45 mm
Weight	9.5 kg	8.5 kg	15.5 kg	11.5 kg	1.2 kg
Input Power Supply	100~240V, 47~63Hz		30~60V		100~240V, 47~63Hz
I/O Power Supply	24V, Max 3A, Max 0.5A per channel				24V, Max 2A, Max 0.5A per channel
I/O Interface	DI	24 channels (NPN or PNP)			16 channels (NPN or PNP)
	DO	24 channels (NPN or PNP)			16 channels (NPN or PNP)
	AI	2 channels, Voltage/Current mode, 0~10V, 4~20mA			2 channels, Voltage/Current mode, 0~10V, 4~20mA
	AO	2 channels, Voltage/Current mode, 0~10V, 4~20mA			2 channels, Voltage/Current mode, 0~10V, 4~20mA
Communication Interfaces	Ethernet Port	2 ports, for TCP/IP, Modbus TCP, EtherNet/IP, PROFINET communication			2 ports
	USB Port	2 ports, for file import/export			1 ports
	RS485 Interface Encoder	1 port, for RS485, Modbus RTU communication			1 port, available for Modbus RTU communication
IP Rating	IP20 (Optional IP54)				IP20
Teaching Method	PC, APP (Android), Teach Pendant				Teach Pendant, PC, APP
Compatible Robot Models	CRA Series (3~16 kg models)		CRA Series (20~30 kg models)		CRA Series, CRV Series

DOBOT Collaborative Robot Teach Pendant

Model	DT-TP10-3PE-N
Dimensions (L×W×H)	290*180*41 (mm)
Resolution	1920*1200@60Hz
Screen Size	10.1"
IP Rating	IP54
Weight	1.02 kg
Standard Cable Length	4.5 m
Material(s)	PC + ABS

