Génération ROBOTS

DOBOT
— 2432.HK —
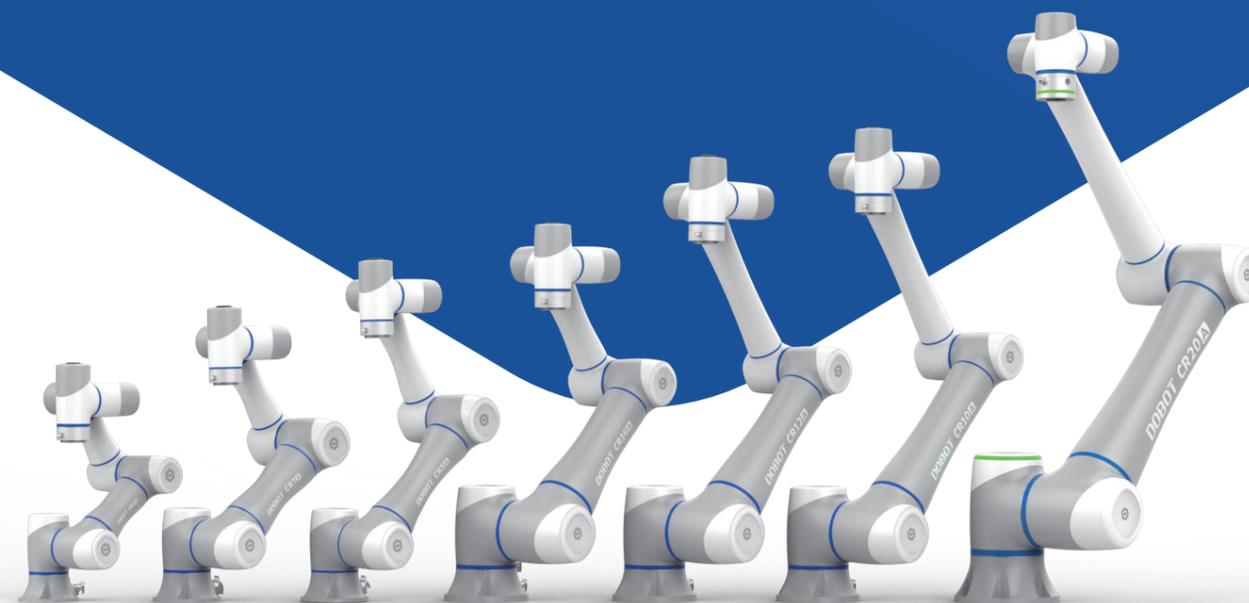
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DOBOT CRA Series

A New Benchmark for High-Performance, High-Precision Collaborative Robot
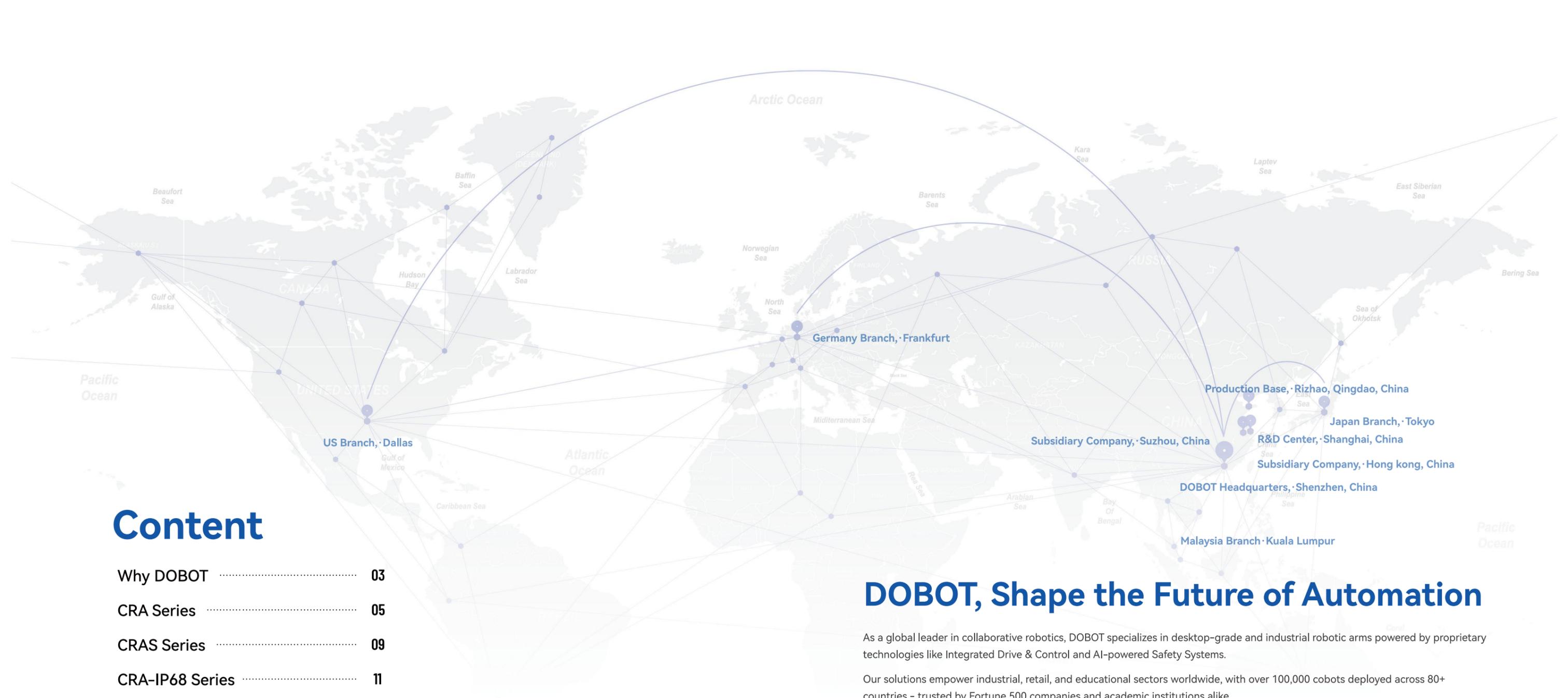
Map labels:

Germany Branch,·Frankfurt

Production Base,·Rizhao, Qingdao, China

Japan Branch,·Tokyo

Subsidiary Company,·Suzhou, China

R&D Center,·Shanghai, China

Subsidiary Company,·Hong kong, China

US Branch,·Dallas

DOBOT Headquarters,·Shenzhen, China

Malaysia Branch·Kuala Lumpur

Content

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, were bridging smart manufacturing with futuretalent 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

A for Advanced

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.

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°/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.
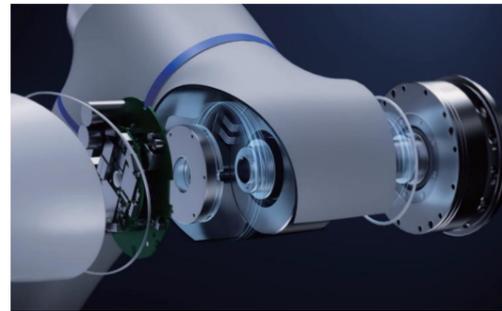
Fast Response

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.
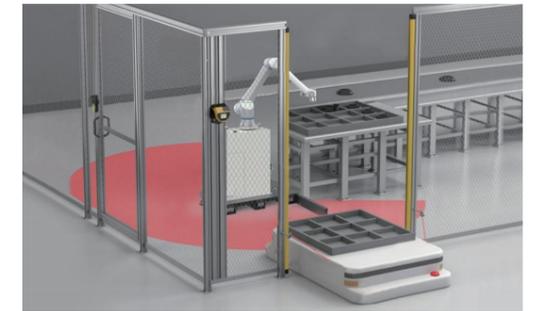
Electromagnetic Brakes

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.
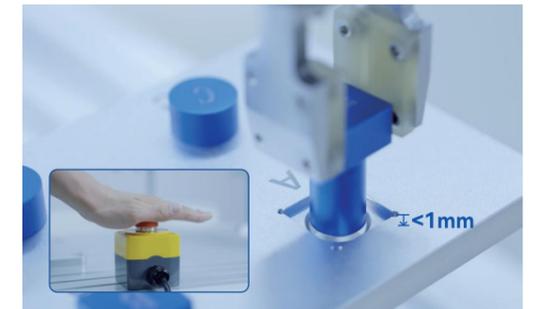
Collision Detection & Retreat

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.
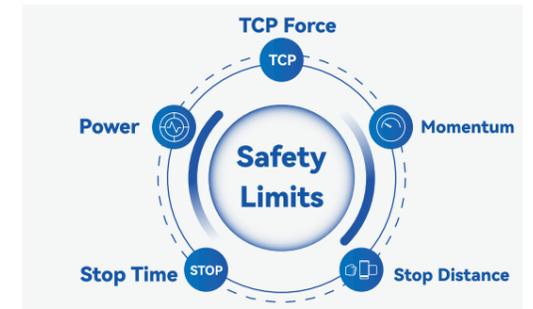
Customizable Safety Zones

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

Smart Interaction
Operate the robot effortlessly across multiple terminals _____ FLEXIBLE

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.

C++   C#   Python   ROS

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.

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.

P2   P3
Stop Position
Deceleration   Recovery Action
Pause
Jog Feed   Restart Action
P1   P4

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.
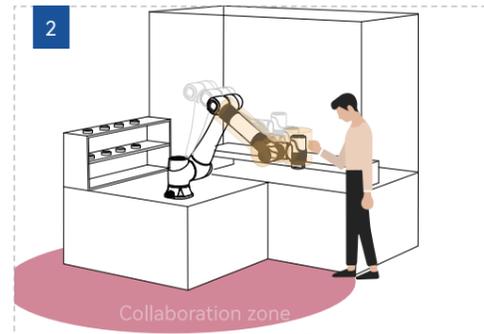
Scan to watch the SafeSkin demo video

1

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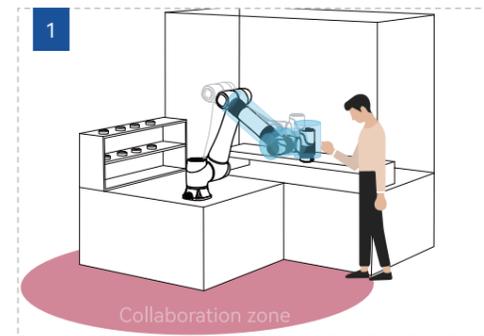
SafeSkin technology allows CRAS series robots to monitor human-machine collision risks in real-time. When the operator enters the collaboration zone, the robot can increase the maximum speed of collaboration up to 1 m/s*, four times faster than traditional collision detection methods, while maintaining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

1.1 5.9"

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.
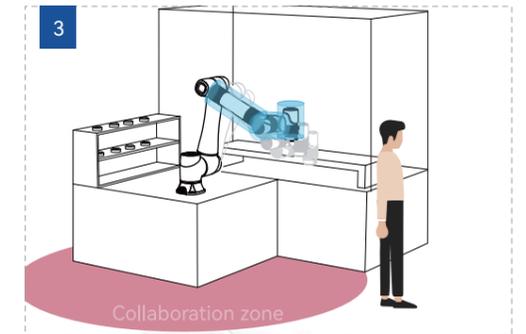
2

Collaboration zone

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.

3

Collaboration zone

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

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.

CR5AP   CR10AP   CR20AP
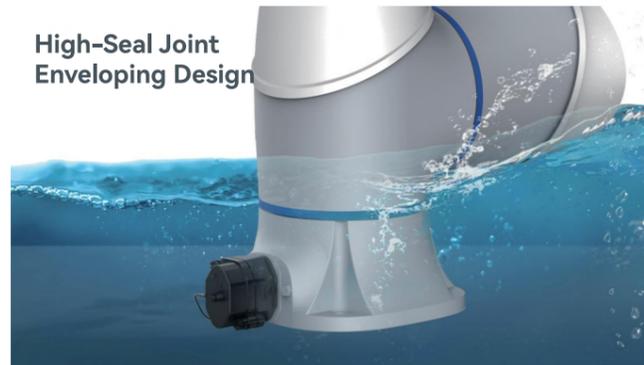
CNC Loading & Unloading	Welding	Polishing	New Retail

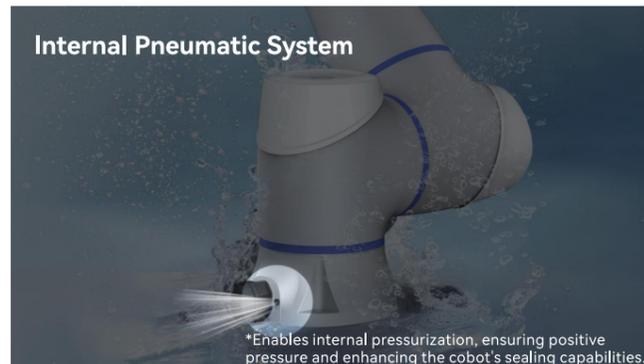## All-Around Protection Design

Full IP68 Waterproof Design

High-Seal Joint Enveloping Design

Superior Corrosion Resistant

Internal Pneumatic System

*Enables internal pressurization, ensuring positive pressure and enhancing the cobot's sealing capabilities.

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

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.
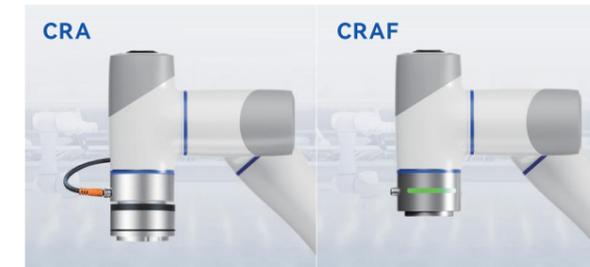
CRA   CRAF

CR5AF   CR10AF   CR20AF

Polishing	Precision Assembly	Welding	Healthcare

Product Structure

All-in-one Force Control Design	Flange with Ring Status Light	Non-Occupying End Interface
• The CRAF Series are factory-calibrated with pre-configured force sensors, enabling plug-and-play operation without additional calibration or setup.	• Features a ring status light for real-time robot state visibility and a press-to-drag button.	• 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 ±3N. 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.

DobotStudio 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.
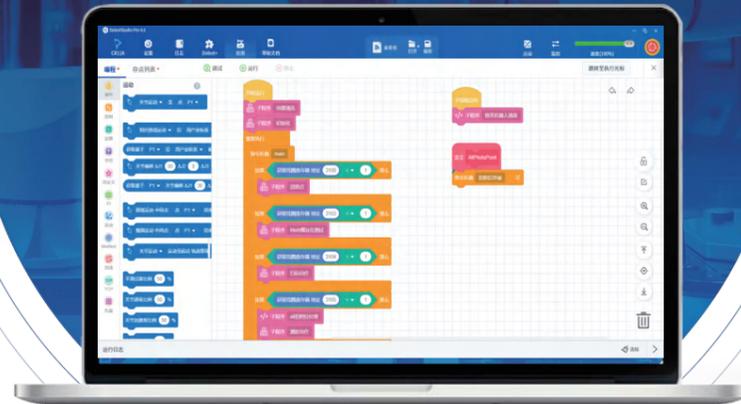
Cross-Platform Compatibility

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.
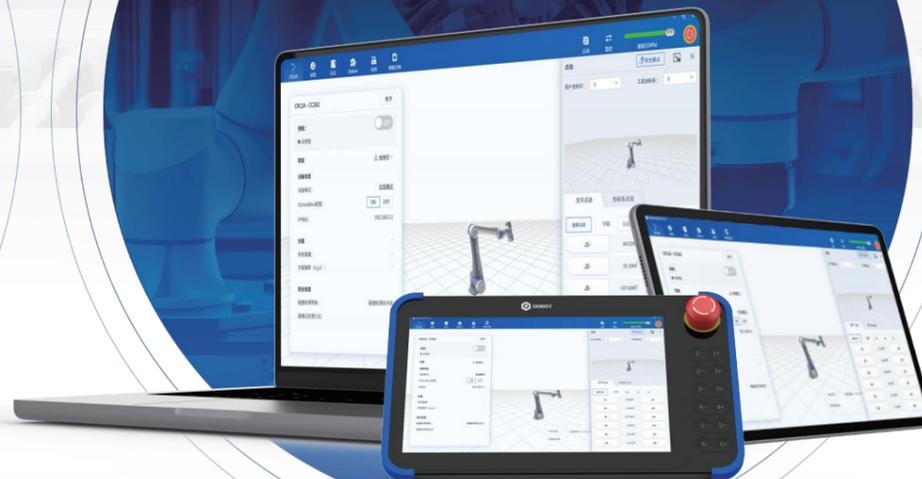
Offline Programming & Simulation

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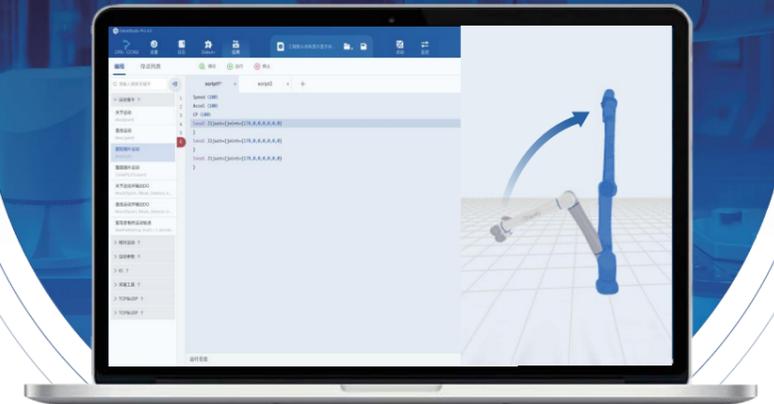
Rich Plug-in Ecosystem

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.

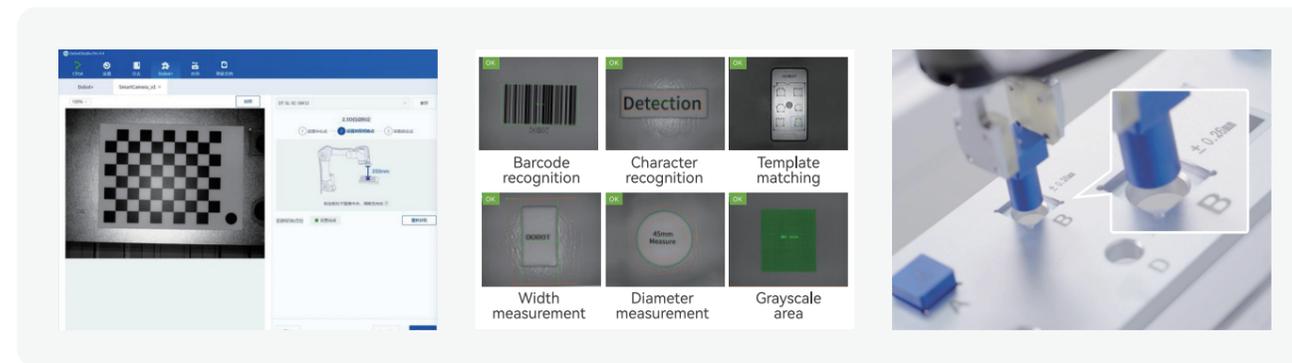# VX500 Smart Camera

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.

Mobil Platform

3D Vision

Suction Cup

2D Vision

Gripper

Force Sensor

Barcode recognition · Character recognition · Template matching

Width measurement · Diameter measurement · Grayscale area

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 Operationsi

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.

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.

One-Stop Palletizing Solution
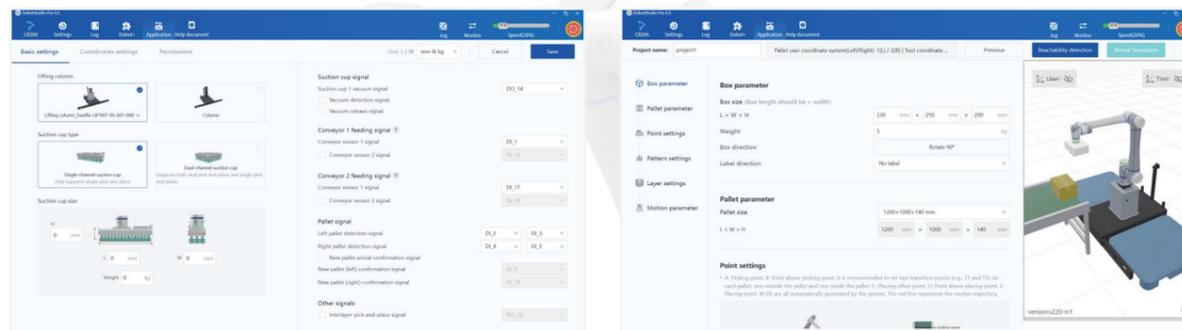
PALLETIZING SOLUTION

- 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.
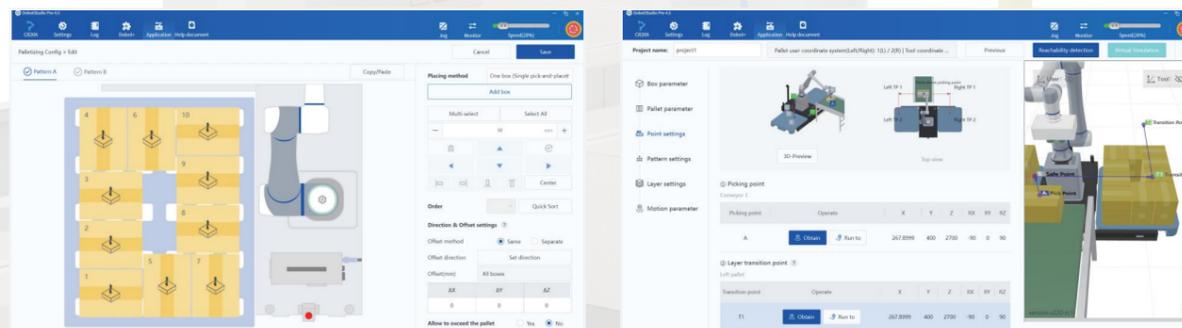
2100 mm

1740 mm

Lift Type

Column Type
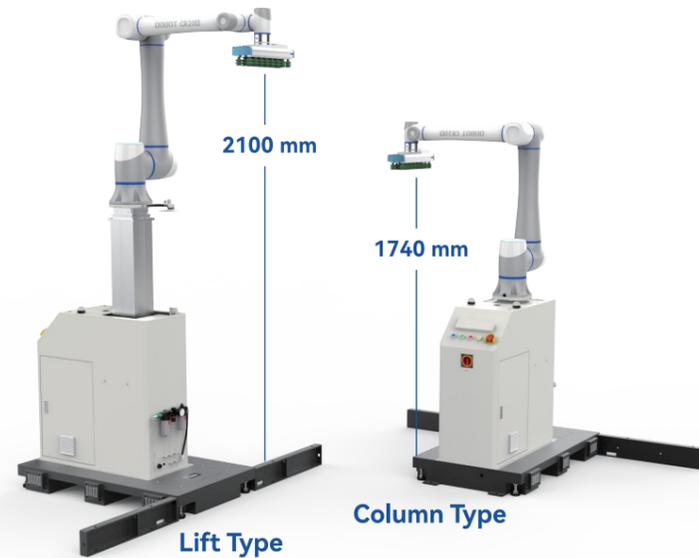
Easy to Set up with DOBOT Palletizing Process Package

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 Solutions

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
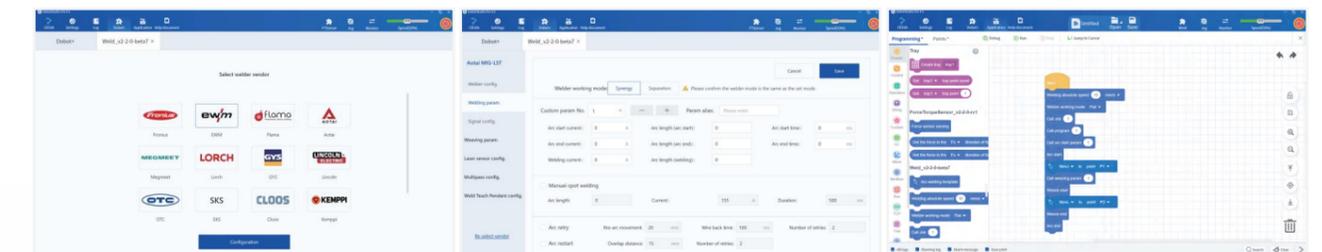
① Select the Welding Machine Brand.

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.

Sawtooth | Spiral | Trapezoid | Sine | Crescent | Triangle
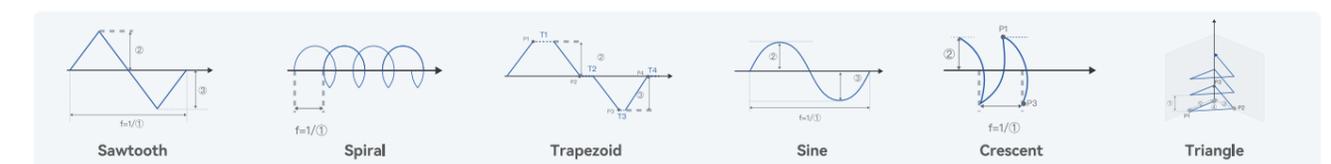
Wide Compatibility

Widely Compatible with 10+ Leading Welding Machine Brands Globally

Fronius | MEGMEET | LINCOLN ELECTRIC | ESAB | Miller | OTC OTC DAIHEN EUROPE GmbH | Panasonic | KEMPPI

LORCH | ewm | CLOOS | AOTAI | SKS | GYS | flama | Laser Welding

Supports 4 Communication Methods:

DeviceNet | EtherNet/IP | Modbus | ANALOG Communication

*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

3C Industry

PCB Board Loading & Unloading
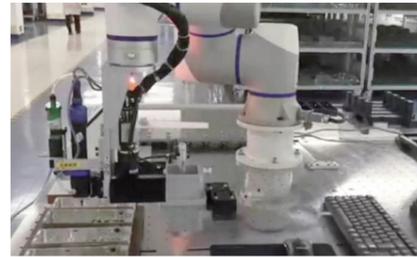
Smartphone Dispensing

Electronic Component Sorting

Palletizing & Packaging

Home Appliance Production Line Palletizing

Automated Candy Packaging

Plastic Bottle Capping

Metal Processing

CNC Machine Loading & Unloading

CNC Machine Loadin & Unloading (with SafeSkin Technology)

Steel Frame Welding

Lithium Battery Industry

Energy Battery Screw Locking

Battery Inspection Loading & Unloading

Cell Welding Loading & Unloading

Semiconductor Industry

Die Bonder Loading & Unloading

IC Packaging Loading & Unloading

Wafer Loading & Unloading

Plastics & Chemical Industry

Injection Molding Assistance

Glue Dispensing Machine Loading & Unloading

Plastic Cap Handling

Medical & Healthcare Automation

Orthopedic Surgical Robot Assistance

Medical Sample Testing

Laboratory Automation

Product Specifications

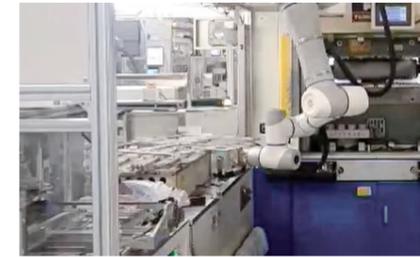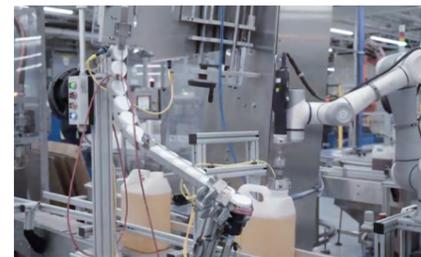| Product Name	CR3A	CR5A	CR7A	CR10A	CR12A	CR16A	CR20A
Weight	16.5 kg	25 kg	24.5 kg	40 kg	39.5 kg	40 kg	73 kg
Max. Payload	3 kg	5 kg	7 kg	10 kg	12 kg	16 kg	20 kg *1
Working Radius	620 mm	900 mm	800 mm	1300 mm	1200 mm	1000 mm	1700 mm
Range of Motion (Joints)	J3: ±155° Other Joints ±360°	J3: ±160° Other 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°
Max Joint Speed — J1/J2	180°/s	180°/s	180°/s	150°/s	150°/s	150°/s	120°/s
Max Joint Speed — J3	223°/s	180°/s	180°/s	180°/s	180°/s	180°/s	150°/s
Max Joint Speed — J4/J5/J6	223°/s	223°/s	223°/s	223°/s	223°/s	223°/s	180°/s
End I/O — DI	2 Channels	2 Channels	2 Channels	2 Channels	2 Channels	2 Channels	4 Channels
End I/O — DO	2 Channels	2 Channels	2 Channels	2 Channels	2 Channels	2 Channels	4 Channels
End I/O — 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)	4 Channels (Shared with RS485)
Repeatability	±0.02 mm	±0.02 mm	±0.02 mm	±0.03 mm	±0.03 mm	±0.03 mm	±0.05 mm
IP Rating	IP54	IP54	IP54	IP54	IP54	IP54	IP54
Temperature Range	0~50℃	0~50℃	0~50℃	0~50℃	0~50℃	0~50℃	0~50℃
Power Consumption	120W	150W	150W	350W	350W	350W	500W
Cable Length (Robot-to-Cabinet)	5 m	5 m	5 m	5 m	5 m	5 m	6 m
Full SafeSkin Model (Optional)	CR3AS*3	CR5AS*3	CR7AS*2	CR10AS*3	CR12AS*2	CR16AS*2	-

*1 : For palletizing applications, the CR20A supports a maximum payload of up to 25 kg. For specific details, please consult DOBOT Robotics technical support.
*2 : Equipped with 3 SafeSkin modules, located on J4, J5, and J6 axes.
*3 : Equipped with 4 SafetSkin modules, located on the forearm, J4, J5, and J6 axes.

CRA-IP68 Series

Product Name	CR5AP	CR10AP	CR20AP
Weight	25 kg	40 kg	73 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	120°/s
Max Joint Speed — J3	180°/s	180°/s	150°/s
Max Joint Speed — J4/J5/J6	223°/s	223°/s	180°/s
End I/O — DI	2 Channels	2 Channels	4 Channels
End I/O — DO	2 Channels	2 Channels	4 Channels
End I/O — 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	IP68	IP68	IP68
Temperature Range	0~50℃	0~50℃	0~50℃
Power Consumption	150W	350W	500W
Cable Length (Robot-to-Cabinet)	5 m	5 m	6 m

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		CR5AF	CR10AF	CR20AF
	J1/J2	180°/s	150°/s	120°/s
	J3	180°/s	180°/s	150°/s
	J4/J5/J6	223°/s	223°/s	180°/s

Force Sensor		CR5AF	CR10AF	CR20AF
	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 I/O		CR5AF	CR10AF	CR20AF
	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)

	CR5AF	CR10AF	CR20AF
Repeatability	±0.02 mm	±0.03 mm	±0.05 mm
IP Rating	IP54	IP54	IP54
Temperature Range	0~50℃	0~50℃	0~50℃
Power Consumption	150W	350W	500W
Installation Method	Forward Installation		
Cable Length (Robot-to-Cabinet)	5 m	5 m	6 m
Material(s)	Aluminum Alloy & ABS Plastic		

Robot Control Cabinet

Model	CC262		CC263	
	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
Weight	9.5 kg	8.5 kg	15.5 kg	11.5 kg
Input Power	100~240V, 47~63Hz	30~60V	100~240V, 47~63Hz	40~60V
I/O Power	24V, Max 3A, per channel Max 0.5A			
I/O Interface	DI DO AI AO	DI: 24 channels (NPN or PNP) DO: 24 channels (NPN or PNP) AI: 2 channels, voltage/current mode (0~10V, 4~20mA) AO: 2 channels, voltage/current mode (0~10V, 4~20mA)		
Communication Interfaces	48S Interface USB RS485 Encoder	2 ports for TCP/IP, Modbus TCP, EtherNet/IP, PROFINET 2 ports for external file transfer 1 port for RS485, Modbus RTU communication 1 ABZ incremental encoder interface		
Protection Rating	IP20 (optional IP54)			
Teaching Methods	PC, APP (Android), Teach Pendant			
Compatible Models	CR3A~CR16A		CR20A	

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