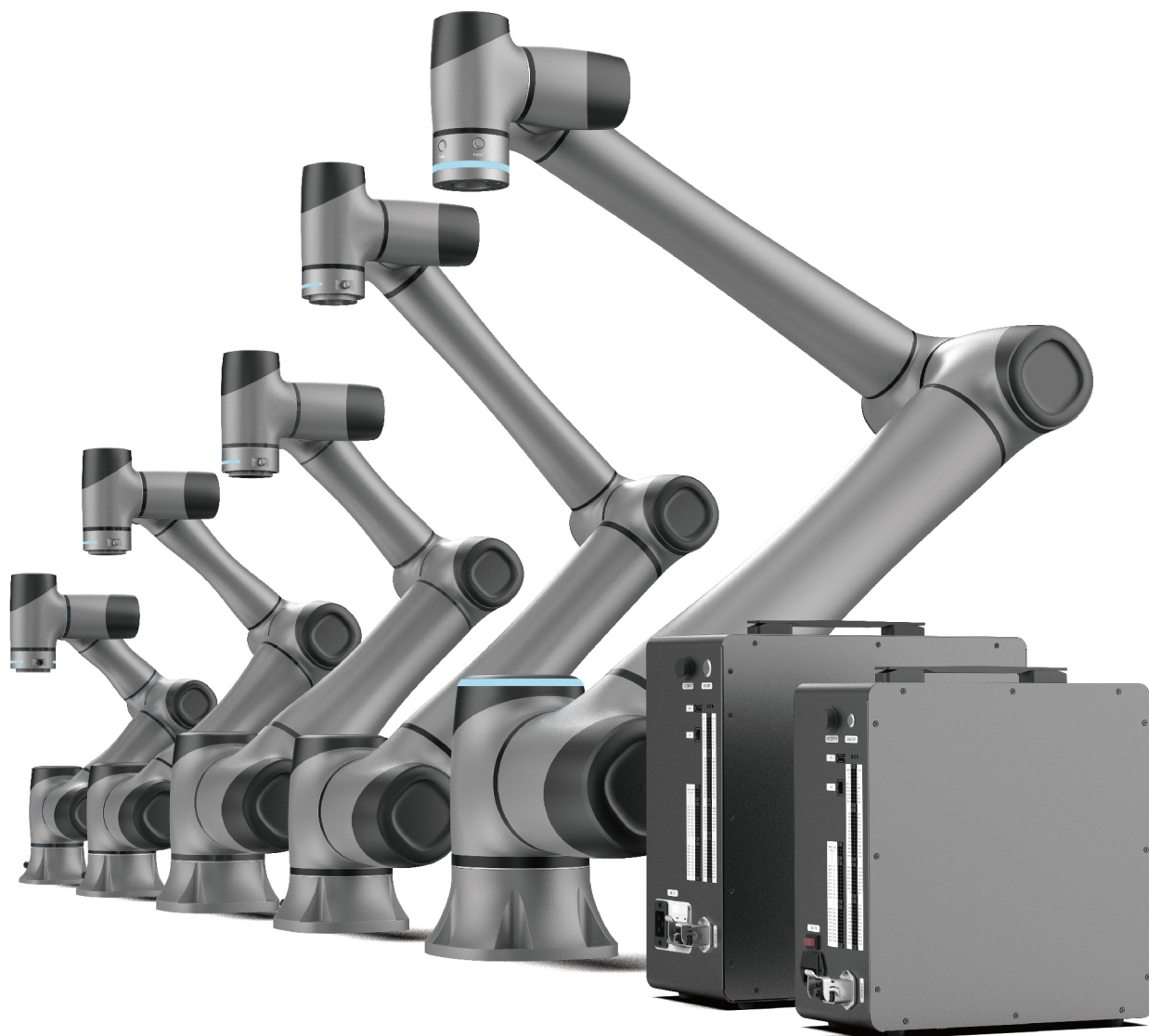




CRV Series

High Efficient, High Performance Collaborative Robots

CRV Cobot Series

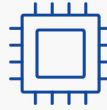
Designed for easy-to-use, safety, intelligence, flexibility, and high efficiency. The CRV Series provides high ROI for users with its high performance, and flexibility suited for such industries as automobile, 3C electronics, metal processing, and other diversified scenarios.



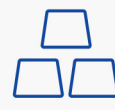
Automobile



3C



Semiconductors



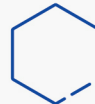
Metal Processing



New Energy



Food & Beverage



Chemical



Healthcare

High Precision

High-performance integrated joints with speeds up to 223%/s, utilizing EtherCAT for millisecond response times. Laser calibration achieves positioning accuracy of less than 0.4 mm.

Enhanced Safety

Independent safety controller for efficient safety event handling. 5-level adjustable collision detection for various scenarios, with a virtual fence function for customizable safety zones.

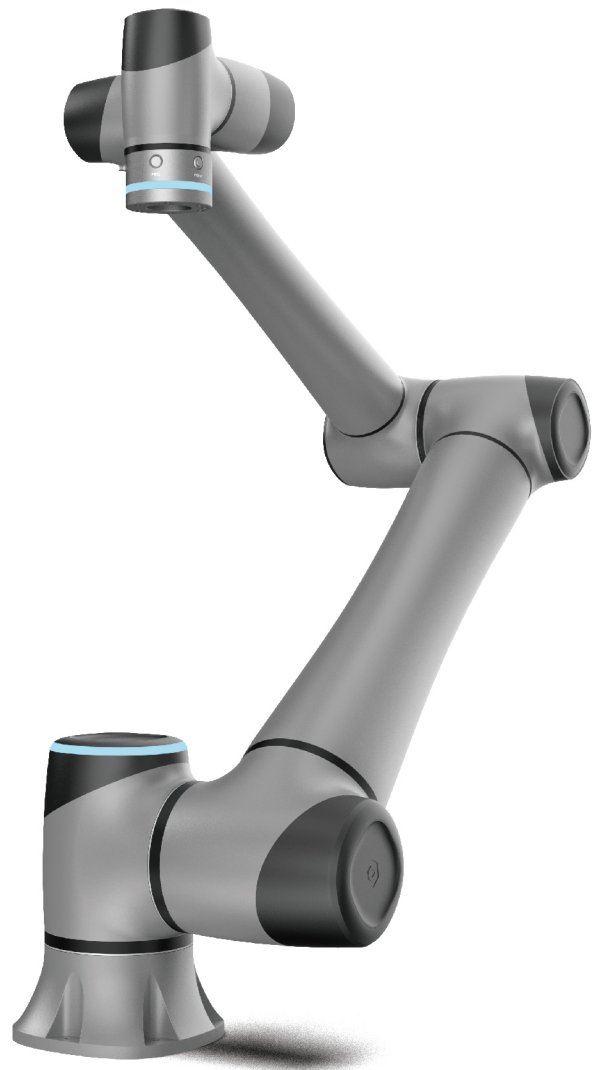
Brilliant Expandability

Control cabinet with 24 DI and 24 DO interfaces, supporting PNP/NPN switching. Robot end I/O is compatible with various devices, saving integration time and costs.

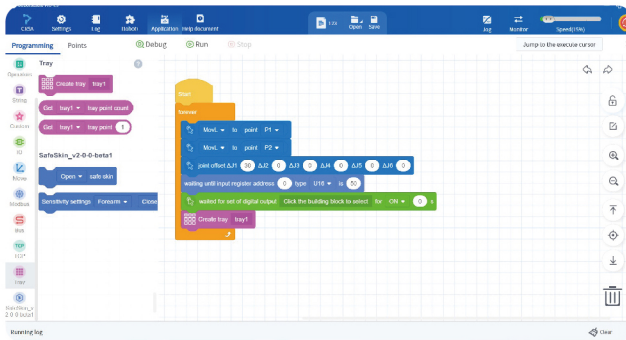
*Supports Modbus TCP/RTU and EtherNet/IP for easy PLC and HMI integration.

Easy to Use

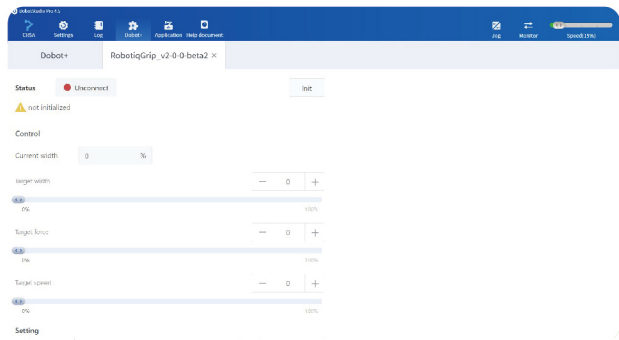
Supports multi-device control (PCs, tablets, teach pendants) for flexible operation and efficient debugging with NPN switching. Easy drag teaching and quick trajectory recording via a side button on the end effector.



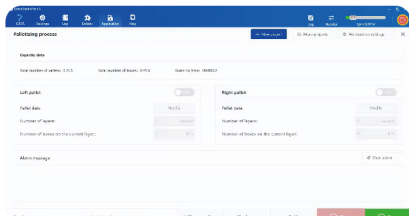
DobotStudioPro System



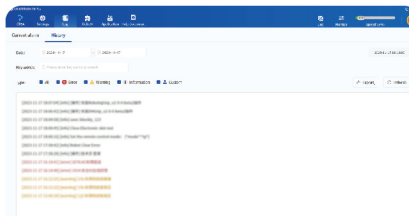
Blocky programming for flexibility and convenience, providing LUA script programming for advanced operation.



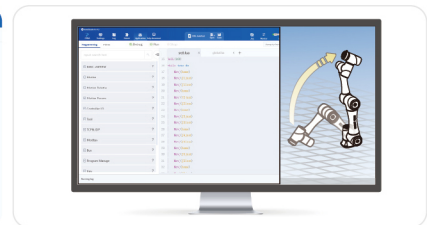
Diverse plugins for various grippers, sensors, and 2D/3D vision.



Built-in Process Packages for welding and palletizing with easy setup.



Log function for quick status access, minimizing downtime.



Offline programming enables execution, debugging, and validation without robot connection

Teach Pendant (Optional)

- 12 physical step buttons for easy multi-point debugging.
- 3-position enable button can be set as a switch or drag button.
- 10.1-inch HD capacitive screen for enhanced multi-touch experience.



VX500 Smart Camera (Optional)

- Self-developed 2.5D algorithm with ± 0.26 mm accuracy for complex handling.
- Supports visual positioning, detection, counting, barcode/OCR recognition, and measurement.

CRV Robot Arms						
Product Name	CR3V	CR5V	CR10V	CR16V	CR20V	
Body Weight (Including Heavy Load Cable)	17.5 kg	25 kg	40 kg	38 kg	70 kg	
Maximum Payload	3 kg	5 kg	10 kg	16 kg	20 kg	
Working Radius	620 mm	900 mm	1300 mm	1000 mm	1700 mm	
Maximum Linear Speed	2m/s					
Joint Activity Range	J1/J2	±360°				
	J3	±155°	±160°	±160°	±160°	±165°
	J4/J5/J6	±360°				
Maximum Joint Speed	J1/J2	180°/s	180°/s	150°/s	150°/s	120°/s
	J3	223°/s	180°/s	180°/s	180°/s	150°/s
	J4/J5/J6	223°/s				180°/s
End Effector I/O	DI/DO	2 Channels				
	AI	2 Channels (RS485 Multiplexed)				
	AO	None				
	RS485	Supported				
Repeatability Accuracy	±0.02 mm	±0.02 mm	±0.03 mm	±0.03 mm	±0.05 mm	
IP Rating	IP54					
Noise Level	70dB(A)					
Temperature Range	0~50°C					
Typical Power Consumption	120W	150W	350W	350W	500W	
Mounting Method	Any Angle					
Cable Length (from Body to Control Cabinet)	5 m					

Control Cabinet			
Product Name		CC262V	CC263V
Size		345 mm*345 mm*145 mm	400 mm*400 mm*175 mm
Weight	AC Version	9 kg	15kg
	DC Version	8.5 kg	/
Input Power Supply	AC Version	100~240V, 47~63Hz	
	DC Version	30~60V	/
I/O Power Supply		24V, Max 3A, Single Channel Max 0.5A	
I/O Interface	DI/DO	24 Channels (NPN or PNP)	
	AI/AO	2 Channels, Voltage/Current Mode, 0-10V, 4-20mA	
Remote Power On/Off		Supported	
Communication Interface	Ethernet Port	1 for TCP/IP, Modbus TCP, Ethernet/IP Communication	
	USB	1 for File Import/Export	
	RS485 Interface	1 for RS485, Modbus RTU Communication	
	Encoder	1 ABZ Incremental Encoder Interface	
Environment	Temperature	0~50℃	
	Humidity	≤95%, Non-Refrigerated	
Protection Rating		IP20	
Cooling Method		Fan Cooling	
Teaching Method		PC, APP (Android), Teach Pendant	
Compatible Models		CR3V~CR16V	CR20V

