

OMRON

OMRON TM COLLABORATIVE ROBOT

THE OMRON TM COLLABORATIVE ROBOT

For more than 85 years, OMRON has excelled at building machines that help humans. Now we are taking that legacy one step further. Introducing the new **OMRON TM Collaborative Robot**.

Designed to work with both humans and machines, this robot is the latest in a long line of innovations in automation technology for industrial applications.

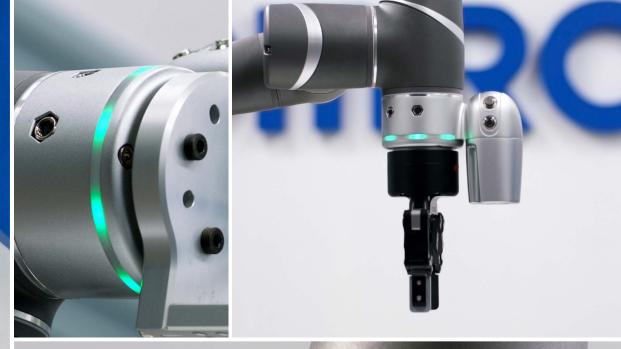
Safe and transportable, with **built-in vision**, this robot allows for **quick start-ups** and **rapid changeovers**. Its intuitive software enables the robot to be easily trained to perform almost any task wherever you may need it, freeing your workforce from repetitive tasks and increasing your productivity.



HUMAN AND MACHINE IN PERFECT HARMONY

DISCOVER OUR KEY BENEFITS

- VERSATILE
- QUICK CHANGEOVER
- BUILT-IN VISION
- SAFE
- TRANSPORTABLE





ADAPTABLE TO YOUR NEEDS

Whether you're working in automotive, semiconductors, secondary packaging for food, or cosmetics, the OMRON TM Collaborative Robot is designed to adapt to almost any industry.

Featured Industries:



Semiconductor

Automotive

Cosmetics



FLEXIBLE FOR YOUR FACTORY



The OMRON TM Collaborative Robot is so versatile it can be assigned to almost any task. Respond to any manufacturing need by configuring the robot at will, maximizing your resources and increasing productivity.

EASILY SWITCH END-EFFECTORS TO COMPLETE ANY TASK



QUICK START-UP AND CHANGEOVER

Downtime costs money, which means you need a robot that can start fast and stay running. Our Plug and Play software enables this robot to work right out of the box. It is so intuitive it allows for quick programming during startups and changeovers, getting your production up and running as fast as possible.

INTUITIVE SOFTWARE FOR EASY PROGRAMMING



FASTER SET-UP WITH BUILT-IN VISION

The OMRON TM Collaborative Robot features a built-in vision system. The integrated camera localizes objects in a wide field of vision, and the image-enhancement light enables object recognition under almost any conditions. The vision system improves reliability, consistency, and high-precision placement, and includes functions such as pattern matching, barcode reading, and color classification which enable inspection, measurements and sorting with no additional cost or effort.



IMAGE-ENHANCING LIGHT GUARANTEES OUTSTANDING OBJECT RECOGNITION

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FIVE MEGAPIXEL CAMERA WITH EXCEPTIONAL FIELD OF VISION

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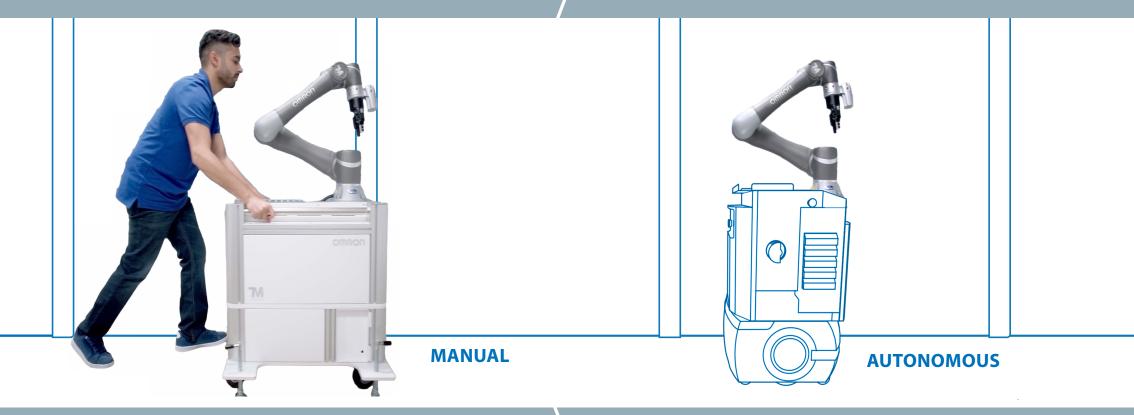
SAFETY

Harmony between humans and machines requires the highest standards of safety. The OMRON TM Collaborative Robot is designed to promote a safer workplace.

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COMING SOON



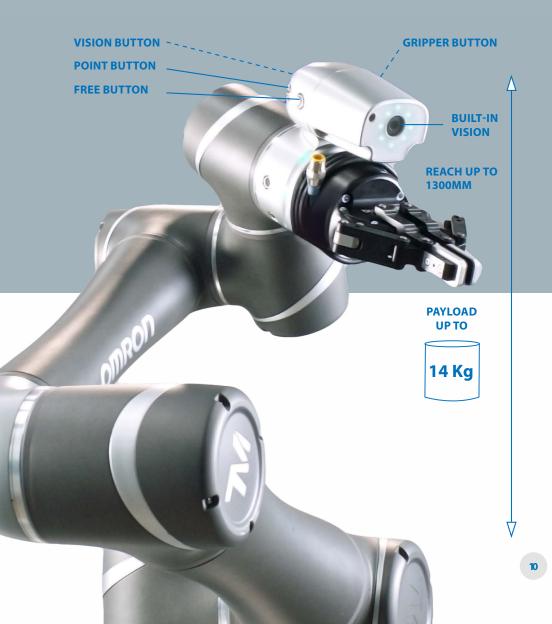
TRANSPORTABLE: The mobility of the OMRON TM Collaborative Robot allows you to easily relocate and recommission it for any new task.

AUTONOMOUS MOBILITY: Combining the OMRON TM Collaborative Robot with its industry-leading mobile robots provides maximum versatility in your workspace.

TECHNICAL DETAILS

		TM5			TM12		TM14		
		TM5-700	TM5M-700	TM5-900	TM5M-900	TM12	TM12M	TM14	TM14M
Weight (kg)		22.1		22.6		33.3		32.6	
Max Payload (kg)		6		4		12		14	
Reach (mm)		700		900		1300		1100	
Max Speed (m/s)		1.1		1.4		1.3		1.1	
Joint Ranges	J1	±270°				±270°			
	J2, J4, J5	±180°			±180°				
	J3	±155°			±166° ±163°				
	J6	±270°				±270°			
Joint Speeds	J1, J2	180°/s				120°/s			
	J3	180°/s			180°/s				
	J4, J5	225°/s			180°/s			150°/s	
	J6	225°/s				180°/s			
Repeatability (mm)		±0.05				±0.1			
IP (arm)		IP54							
Operating Temperature (°c)		0 to 50							
Power Supply		100-240 VAC, 50- 60 Hz	20-60 VDC	100-240 VAC, 50-60 Hz	20-60 VDC	100-240 VAC, 50-60 Hz	20-60 VDC	100-240 VAC, 50- 60 Hz	20-60 VDC
Max Power Capacity (w)		1400	1500	1400	1500	2200	1500	2200	1500
I/O Ports		CONTROL BOX				TOOL			
	Digital In	16				4			
	Digital Out	16				4			
	Analog In	2				1			
	Analog Out	1				0			
I/O Interface		3 X COM, 1 X HDMI, 3 X LAN, 4 X USB2.0, 2 X USB3.0							
Communication		3 X RS232, TCP/IP(Master), Modbus TCP/RTU(Master & Slave)							
Integrated Camera		5M pixels, color (AOI tasks: 5M; Others: 1.2M)							
I/O Power Supply		24V 1.5A (CONTROL BOX and TOOL)							
Programming Environment SEMI S2 Certified		TMFlow, flow chart based Yes, as an option							
SEMI S2 Ce	ertified				Yes, as	an option			







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