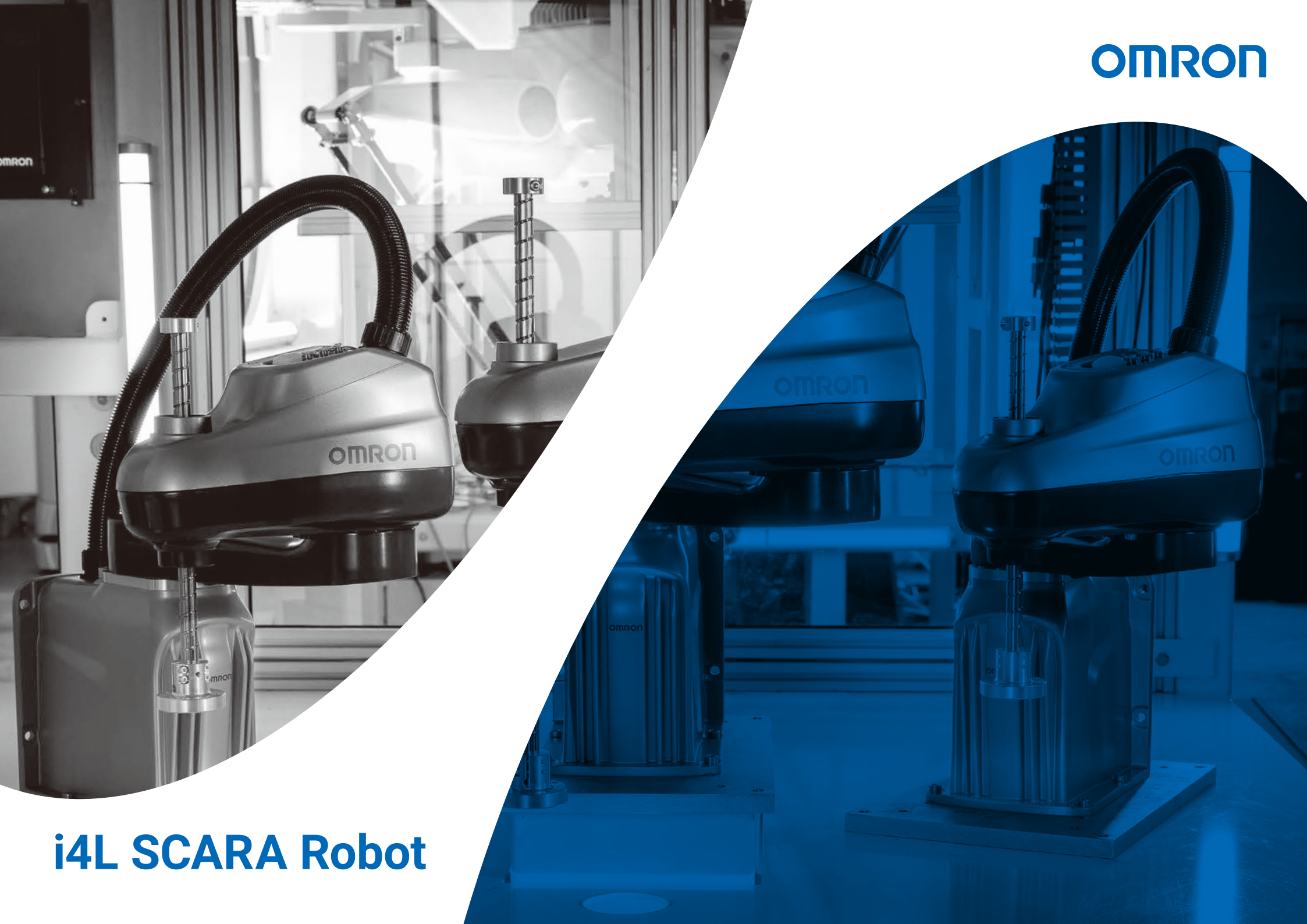


OMRON



**i4L SCARA Robot**

# INTRODUCING OMRON'S NEXT GENERATION **I4L SCARA** **ROBOT SERIES**

The **i4L** is a compact **SCARA robot** which offers strong performance at the lowest cost of ownership. Simple integration with compact design, easy wall or table mounting and unique Ethernet or EtherCAT connectivity in the base. Maximize uptime by means of interactive maintenance alarms and an RGB dome light.



OMRON **I4-350L**

OMRON **I4-450L**

OMRON **I4L-550L**

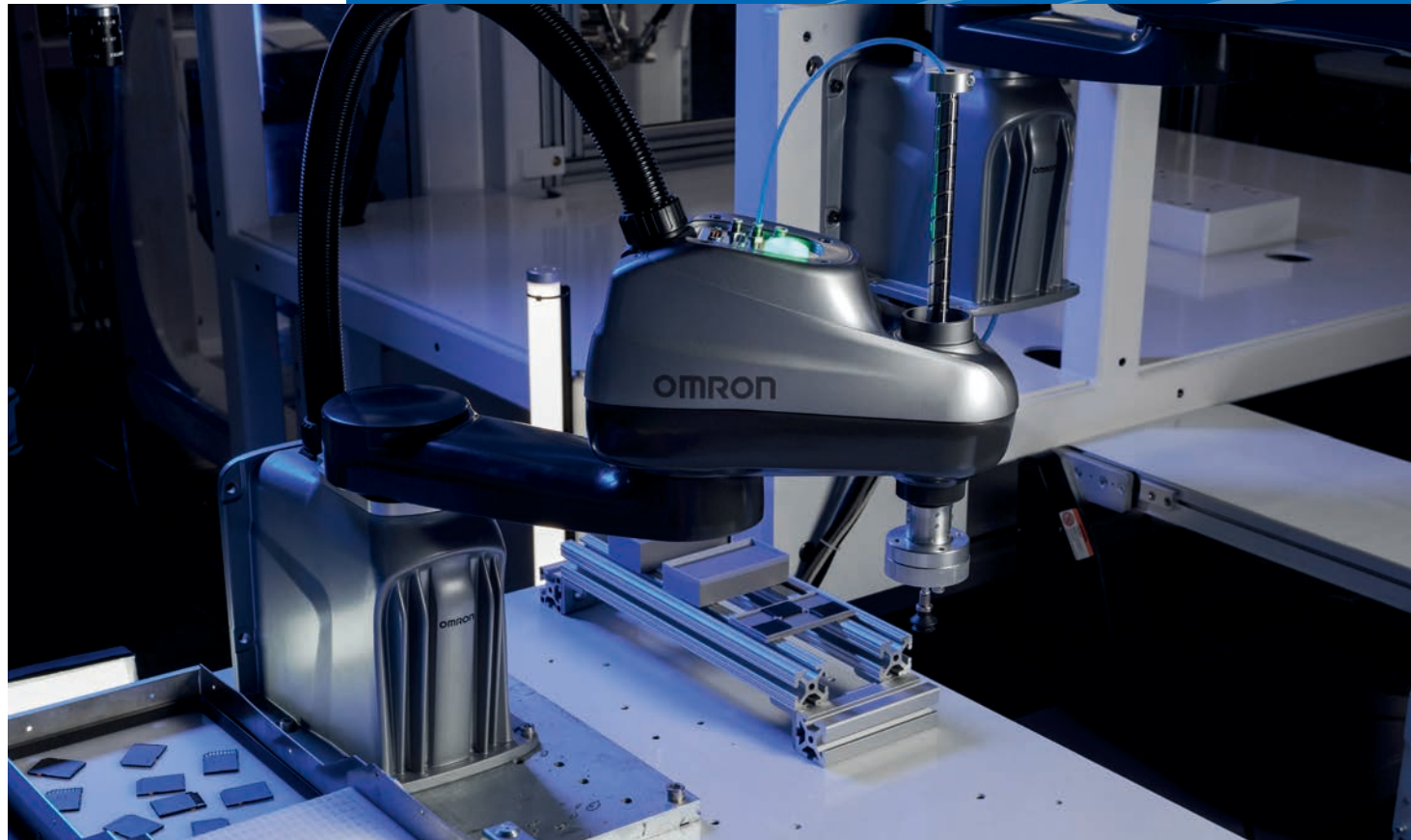


# OPTIMAL PERFORMANCE FOR THE LIGHT-DUTY MARKET

## Advanced performance at the lowest cost of ownership

Gain significantly greater performance for the lowest total cost of ownership. The i4L's speed, inertia, and repeatability offer advanced features providing the best performance necessary for your application.

- Fast cycle time with an unprecedented range of movement and repeatability
- Exceptionally powerful built-in servos to handle payloads with ease
- Advanced and robust industrial design
- Lowest total cost of ownership



# MAXIMIZE UPTIME



**Easy to service with interactive maintenance features to prevent accidents and reduce unplanned downtime**

The i4L helps you maximize uptime and precision with its interactive maintenance features. The interactive maintenance features are a set of controls which help you monitor your robot with alerts from the RGB dome light and OMRON's ACE software. These features help to:

- Reduce unplanned downtime
- Simplify maintenance
- Prevent accidents before they happen

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## I4 ROBOT STATUS LIGHT CODES

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● Off	24V Not present
○ Solid White	System initializing
● Solid Blue	System booting
⦿ Blinking Blue	Idle, 24V present
⦿ Blinking Green	Operational, Servo enabled
● Solid Red	FPGA Communication loss
⦿ Blinking Red	ESTOP or ERROR

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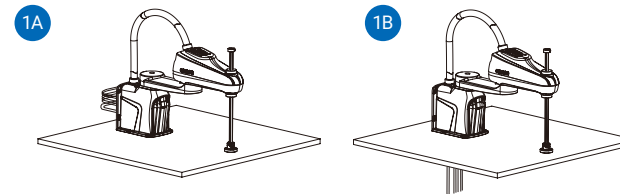
# SIMPLE INTEGRATION

## Get to work faster with simple integration and synchronization

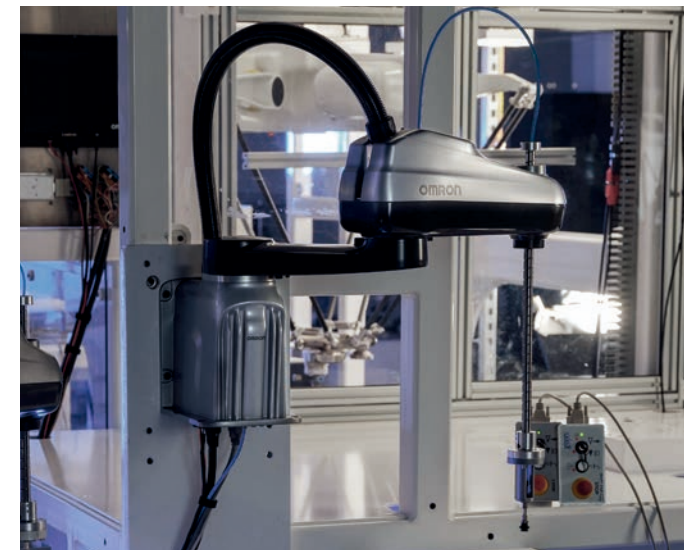
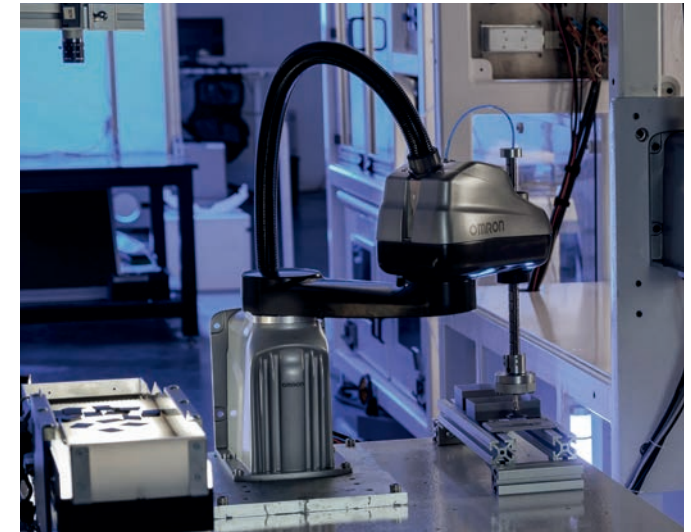
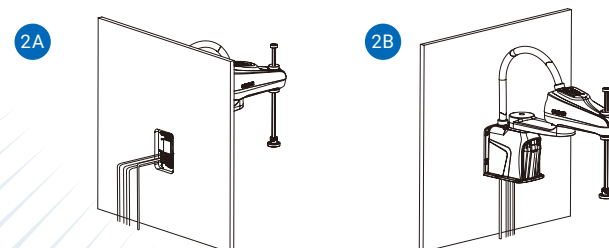
The i4L offers big features in a small footprint. It is compact and simple to install, and provides EtherCAT or Ethernet connectivity in the same controller. The i4L offers mount options for the wall or table. Also, the i4L's fully integrated controller reduces wiring expenses and simplifies mounting while all mounting hardware is included in the base.

## MOUNT OPTIONS AND THE WIRING

### Table Mount



### Wall Mount

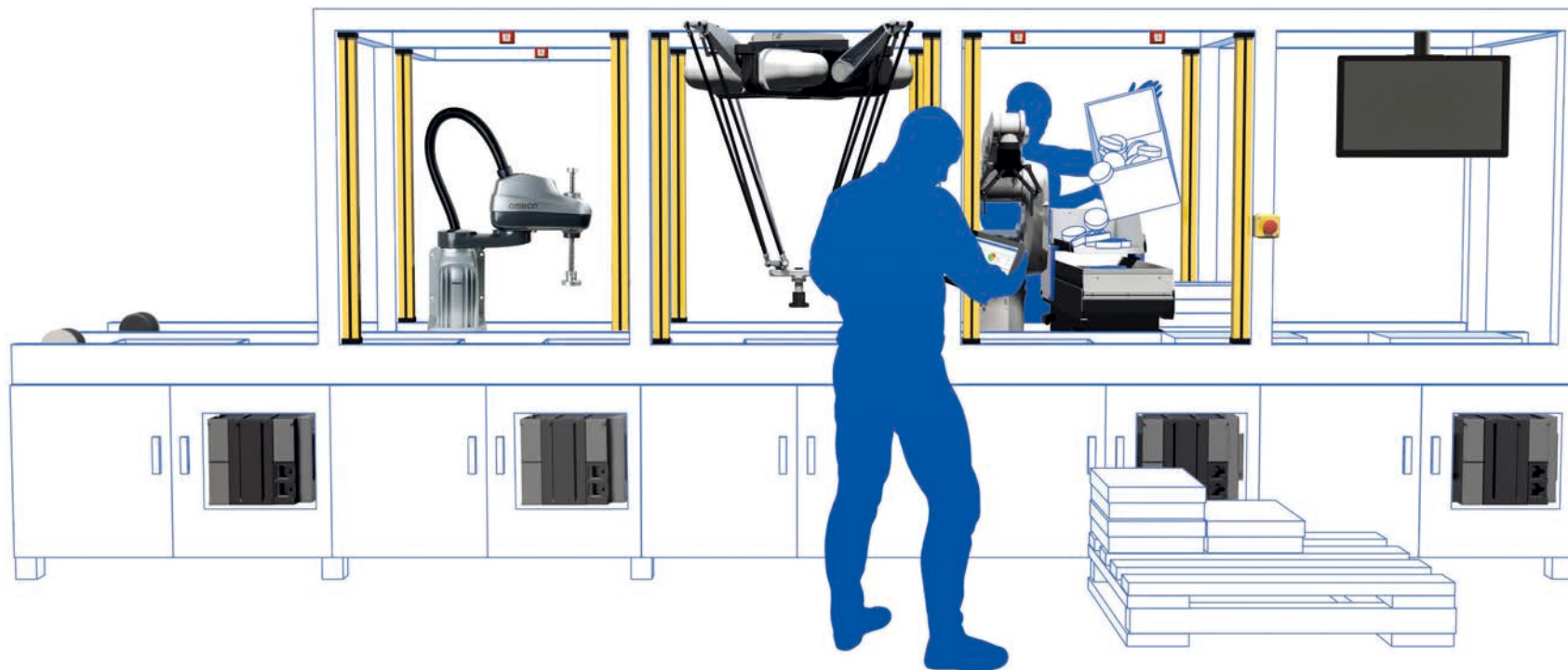


# AUTOMATE YOUR PRODUCTION LINE WITH OMRON'S i4L

## Automate your full production line with OMRON

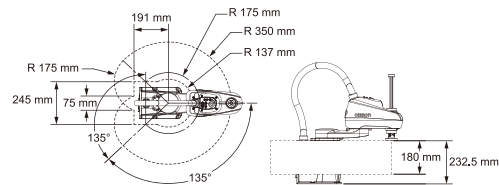
You can easily program the i4L robot alongside the rest of OMRON's devices (vision, motion, IO, safety) from OMRON's single programming software, Sysmac.

Additionally, OMRON's Sysmac software is able to simulate your entire production line which reduces troubleshooting time and allows you to achieve very high levels of synchronization between multiple robots or robots and servos, all connected through EtherCAT.

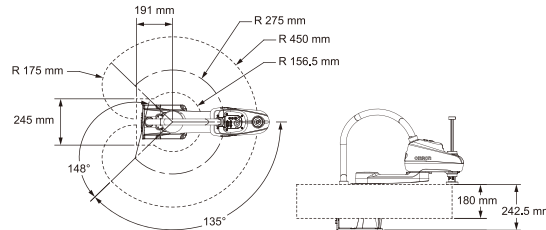


# TECHNICAL DETAILS

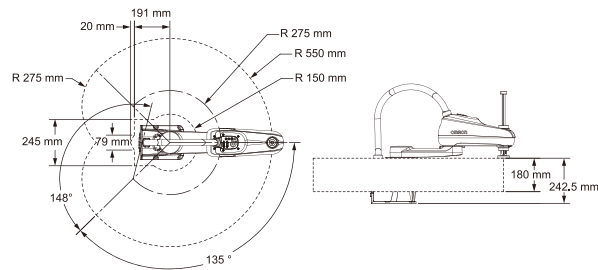
## OMRON I4-350L



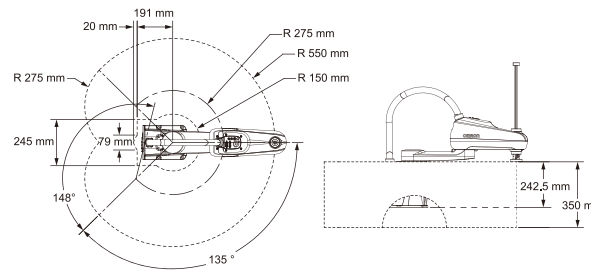
## OMRON I4-450L



## OMRON I4L-550L 180MM



## OMRON I4L-550L 350MM



The i4L SCARA (Selective Compliance Assembly Robot Arm) is a 4-axis robot with 3 rotational axes and one translational/linear axis, ideal for high-speed repeatable applications

**Reach:** The OMRON i4L family comes in three different ranges: 350mm, 450mm, and 550mm.

**Payload:** All i4L models have a payload of 5KG.

**Mount:** The i4L can be table mounted and wall mounted.

**Quill:** The robot can be configured with a 180mm quill. The large model (550mm) can support a longer quill (350mm) with a z stroke of 350mm.

**Controller/Amplifier:** The robot includes amplifiers and a robot controller in the base. Two robot controllers are provided, the iCS- ECAT (EtherCAT slave controller), and the iCS-ENET (Standalone Ethernet/ IP controller).

Product		i4-350L	i4-450L	i4-550L	
Reach		350mm	450mm	550mm	
Maximum Payload		5kg			
Quill Length		180mm	180mm	180mm	350mm
Repeatability	XY (mm)	±0.01	±0.01	±0.01	±0.01
	Z (mm)	±0.01	±0.01	±0.01	±0.01
	Theta (deg)	±0.01	±0.01	±0.01	±0.01
Cycle Times*	Burst	0.54	0.48		
	Sustained	0.57	0.57	0.54	
	Blended Burst (s)**	0.45	0.42	0.38	

\* ADEPT CYCLE, IN MM 25/305/25 (SECONDS, AT 20C AMBIENT) WITH 2.0KG PAYLOAD

\*\* FAST CYCLE, IN MM 25/305/25 (SECONDS, AT 20C AMBIENT) WITH 2.0KG PAYLOAD BUT WITH ARC MOTION

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