

# i4H SCARA Robot

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# EXPERIENCE OMRON'S i4H LINE OF SCARA ROBOTS

The **i4H SCARA robot** provides a heavier payload and performance compared to its predecessor. Customers can complete machine loading, palletizing and mechanical assembly in industries such as food & beverage and automotive. Maximize uptime with a first ever on-board display and health lighting indicator. The i4H is available in multiple configurations that include different reach lengths, z-axis stroke lengths, and environmental protection ratings with wall and ceiling mounting options possible.



OMRON **i4H-650H**



OMRON **i4-750H**



OMRON **i4-850H**



# ENHANCED MECHANICAL DESIGN FOR DEMANDING TASKS

## Gain more out of production with a higher payload and faster cycle time

With a robust design, the i4H can achieve a more meaningful and efficient production for your factory needs.

- Higher payloads up to 15kg
- High-speed cycle times
- Available in 650, 750, 850mm reach lengths
- 210 or 410 quill options
- Standard model table mounts, with optional wall mount bracket and inverted version for ceiling mounting.



# MAXIMIZE UPTIME



## Discover OMRON's unique additions to the SCARA lineup

OMRON has added a few first ever features that will help reduce downtime, prevent accidents, and make maintenance an easier process.

- First ever on-board display for troubleshooting, maintenance, and visual inspections
- World's first robot health lighting indicator

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### i4H 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	Error is present
⦿ Blinking Red	Emergency Stop

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# TACKLE YOUR FOOD & BEVERAGE NEEDS WITH OMRON'S i4H FOOD GRADE EDITION

OMRON has added IP20 food grade & IP65 food grade robots to your automated solution. These industrial robots utilize high-performance extreme pressure lubricants specially developed for the grease lubrication of machinery in the food & beverage industry.

The IP65 utilizes a food grade grease and oil that is NSF H1 registered, ISO 21469 certified, and ideal for secondary packaging requirements.

## Benefits include:

- Allows use in food and beverage packaging and processing applications
- Helps protect and extend life of robot
- Advanced seal technology to reduce potential oil leaking on IP65
- Excellent water resistance
- Available in multiple configurations
- Same top performance & repeatability as standard i4H



IP20 food grade robot



IP65 food grade robot

# ESD/CLEANROOM MODEL

Address your electronic needs with OMRON's ESD/Cleanroom i4H industrial robot. These models are ideal for applications requiring minimal particle contribution. Prevent electrostatic discharges and optimize performance needs with the i4H.

## Benefits include:

- Cleanroom rated for Class 4 (ISO Standard (14644))
- Allows for entry into electronic component and consumer electronic markets
- Available in multiple configurations



# SEAMLESS INTEGRATION

## Getting started with the i4H has never been easier

Integrate with OMRON NJ through EtherCAT and programmable through IEC, along with the rest of OMRON'S-SYSMAC products.

OMRON's i4H EtherNET robot is the ideal solution for operations that demand less complexity but require top-performance and repeatability at a lower cost.



i4H EtherNET available spring '22

# AUTOMATE YOUR PRODUCTION LINE WITH OMRON'S i4H

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## AUTOMATE YOUR FULL PRODUCTION LINE WITH OMRON

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Easily program the i4H robot alongside the rest of OMRON's devices (vision, motion, IO, safety) from OMRON's single programming software, Sysmac Studio.

Additionally, OMRON's Sysmac software is able to simulate your entire production line which reduces troubleshooting time and allows you to achieve precise synchronization

between conveyors, servos, and other devices connected to the EtherCAT network, all connected through EtherCAT.





# TECHNICAL DETAILS

**The i4H 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 i4H is available in three different ranges: 650mm, 750mm, and 850mm.

**Payload:** All three models have a maximum payload of 15 kg.

**Mount:** The i4H can be mounted to a table, wall, or ceiling with an inverted orientation.

**Quill:** 210mm Standard, 410mm Long Quill.

**Controller/Amplifier:** The robot includes amplifiers and a robot controller in the base.

Product		i4-650H	i4-750H	i4-850H
Reach		650mm	750mm	850mm
Maximum Payload***		15kg		
Quill Length		210 / 410mm		
Repeatability	XY (mm)	±0.015		
	Z (mm)	±0.01		
	Theta (deg)	±0.005		
Cycle Times*	Burst (s)**	0.41	0.39	
	Sustained (s)	0.45	0.46	0.50
	Blended Burst (s)**	0.32	0.31	0.31
Protection	IP20, Standard Lubrication	IP20 / NEMA Type 1		
	IP20, Food Grade Lubrication			
	IP65, Food Grade Lubrication	IP65/ NEMA Type 4		

NOTE: STANDALONE ETHERNET OPTION AVAILABLE APRIL 2022.

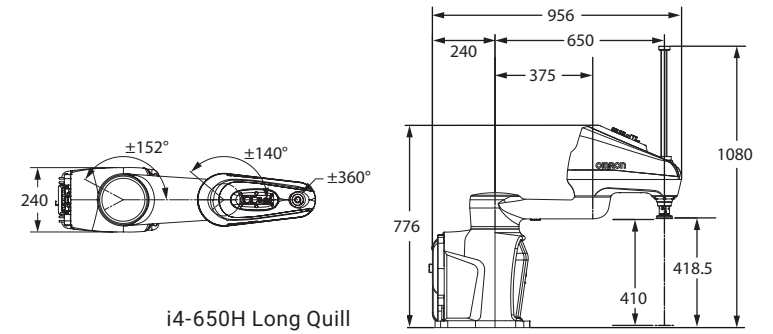
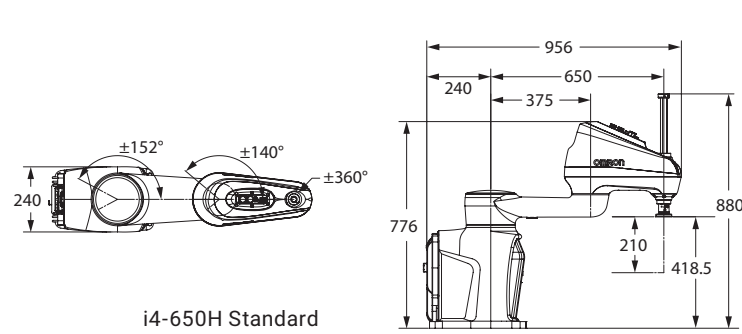
\*CYCLE TIME, IN MM (25/305/25) (SECONDS, AT 20C AMBIENT) WITH 2.0KG PAYLOAD

\*\*BURST AND BLENDED BURST CIRCLE TIME, IN MM (25/305/25) (SECONDS, AT 20C AMBIENT) WITH 2.0KG PAYLOAD BUT WITH ARC MOTION

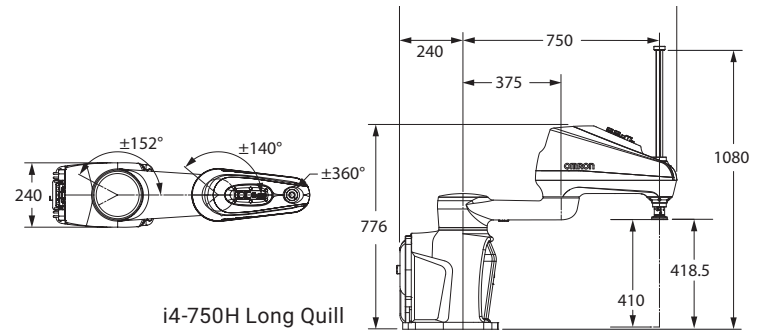
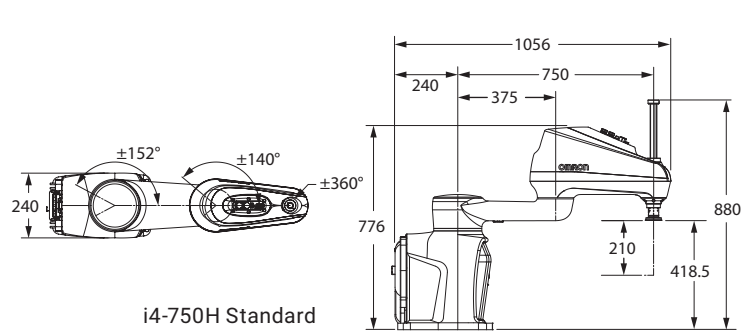
\*\*\* PAYLOAD INCLUDES ANY OBJECT(S) ATTACHED TO A ROBOT LINK OR TOOL FLANGE, INCLUDING END-EFFECTORS, TOOLING, VALVES, GRIPPERS, AND OBJECTS BEING HANDLED BY THE ROBOT.

# TECHNICAL DETAILS

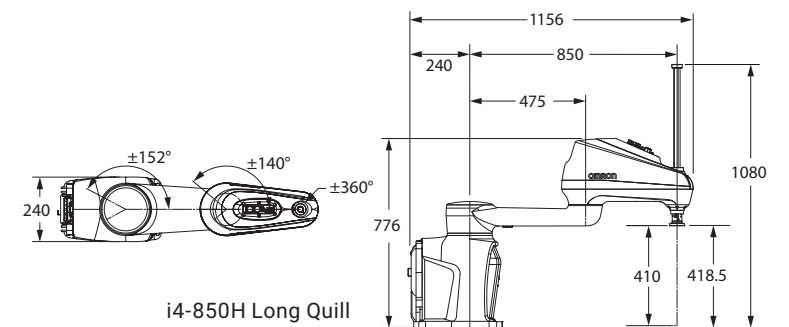
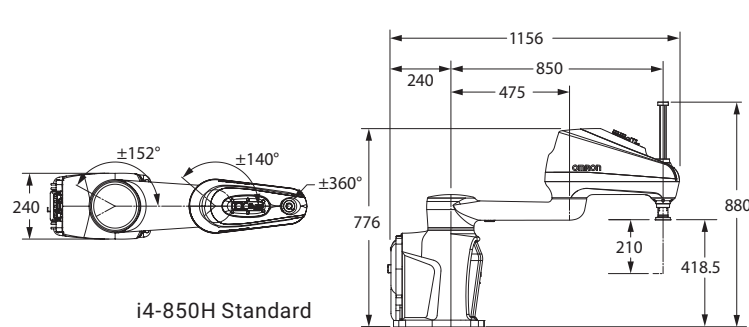
## i4-650H



## i4-750H



## i4L-850H



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