

Epson Robots

- SCARA Robots
- 6-axis Robots
- Controllers
- Software
- Vision System
- Part Feeding
- Force Sensing
- Options



*Market share based on revenue of industrial SCARA robots, 2024.
(Source: Fuji Keizai "2025 Reality and Future Outlook of Worldwide Robot Market").



**Engineering Precision.
Innovating Sustainability.**

Here at Epson, our technology is driven by our commitment to society and the environment. We focus on the essential and eliminate the unnecessary to create greater value. With this philosophy at our core, Epson has always strived to meet sustainability needs and will continue to do so.

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URL <https://corporate.epson/en/products/robot-systems.html>



Safety Precautions Please read associated manuals carefully before installing or using our robot products. Always use products properly per guidelines in the manuals.

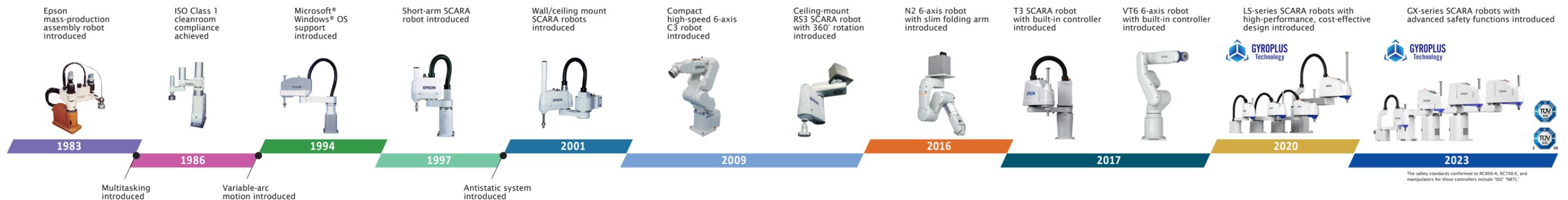
Why Epson Robots?

A proven reputation for precision and reliability at the forefront of industrial robot design

For more than 40 years - since the development of our first SCARA robots for wristwatch assembly - Epson has been a leader in advanced robotics. Our long-standing expertise in energy-efficient, compact, high-precision technologies enables us to offer a wide range of slim, lightweight, and highly reliable robots. With the addition of proprietary force-sensing and image-processing technologies, we continue to achieve even higher levels of reliability, speed, precision, and productivity in process automation.

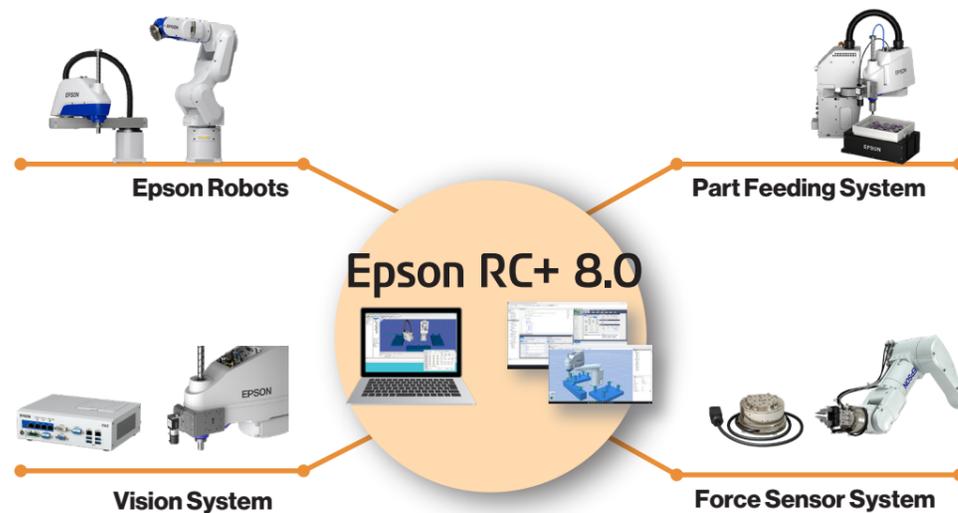
Whatever challenges you face, Epson industrial robots are continuously evolving to meet the diversifying needs of manufacturers worldwide.

Epson also supports customers globally through an international network of sales and service offices, providing guidance on equipment configuration and performing simulations of customer workflows. Through close collaboration with system integrators around the world, we can deliver end-to-end turnkey solutions to meet virtually any automation requirement.



The safety standards conformed to RC800-A, RC700-E, and manipulators for those controllers include "ISO" "NKTL"

Integrated robotics
Reliable performance
Maximum productivity

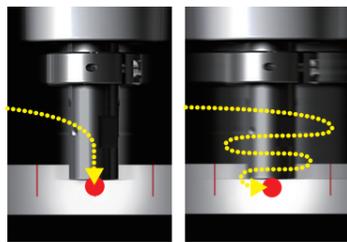


Integrated Value

Precision Automation Specialists

High Productivity

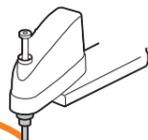
- Proprietary Epson technology reduces residual vibration, enabling higher speed, improved precision, and shorter takt time.
- Slim, lightweight robot designs reduce work-cell space requirements while maintaining high productivity.



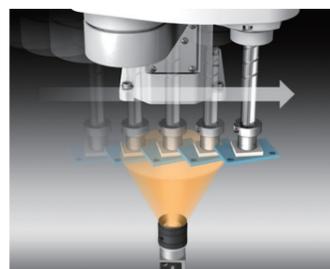
Epson robot Conventional robot
*Image

High Quality

- Extremely accurate toolhead positioning supports high-precision dispensing and cutting operations.

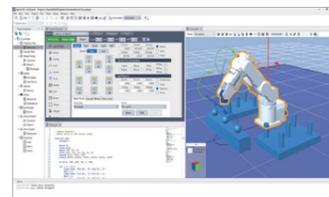


- Integrated machine-vision systems improve setup efficiency and enhance workpiece-handling accuracy.



Easy Operation

- Intuitive graphical interfaces make programming easy even for first-time users.
- From testing to full production, improved operating workflows reduce cost and manpower requirements.



3D simulator for workcell layout and toolpath program testing

GYROPLUS Technology

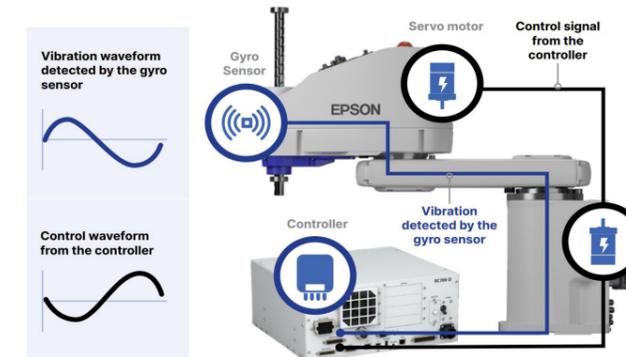
Taking Robot Performance to the Next Level



Innovations in robotic automation have allowed manufacturers in countless industries to achieve higher throughput, improved quality, and safer working environments. But choosing a robot for an automation task often involves balancing tradeoffs between three key performance criteria: speed, payload, and precision.

The underlying cause of these performance tradeoffs is vibration of the robot arm. Manufacturing processes increasingly demand shorter cycle times for improved throughput, which in turn, requires higher speed and acceleration rates from the robot.

But as speed and acceleration increase, so does vibration in the robot arm.



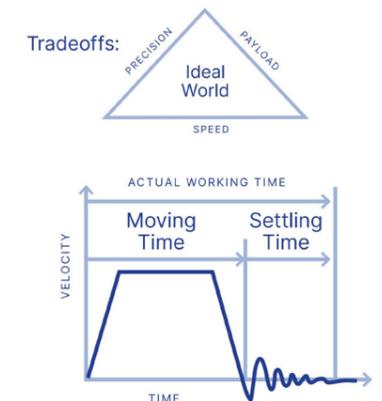
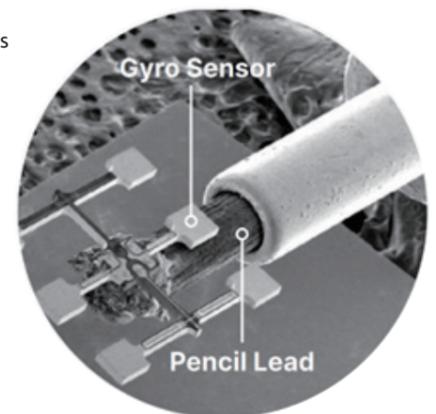
Conflicting Factors	Priority Factor	Compromised Factor	Impact on Process and Equipment
Speed vs Accuracy	Motion Speed	Vibration Control	Process quality deteriorates
Vibration Control vs Cycle Time	Vibration Damping	Cycle Time	Production efficiency decreases
Vibration Control vs Energy Efficiency	Arm Rigidity	Energy Efficiency	Robot body size becomes larger, requiring more power for operation
Vibration Control vs Compactness	Arm Rigidity	Footprint Area	Footprint to support robot increases, and equipment installation area expands
High Rigidity vs Cost	Arm Rigidity	Robot Price	Additional high-torque gears and motors are required, resulting in higher costs

For decades, these performance tradeoffs have been accepted as an inevitable part of robot selection and operation — the laws of physics haven't changed. But thanks to GYROPLUS Technology from Epson, the compromises between a robot's speed, payload, and precision are finally being addressed.

Epson's GYROPLUS Technology was born out of the company's experience as a leading manufacturer of high-quality quartz crystal materials. We've applied this quartz crystal technology - along with proprietary MEMS (Micro Electro Mechanical Systems) processing technology - to sensing devices, producing an extremely compact, high-performance, quartz-based gyro sensor.

The gyro sensor is configured as a "double-T" type crystal oscillator, which provides a very high signal-to-noise ratio, excellent resistance to vibration and shock, and high-temperature stability.

Traditional robot controls use angular velocity feedback located on the robot's motor. But the true angular velocity at the end of the robot arm often differs from the motor's angular velocity, due to mechanical tolerances, friction, and the influence of the attached load and peripherals such as end effectors and wiring. Now, with Epson's GYROPLUS Technology mounted at the end of the robot arm, the robot controller receives information about the behavior directly at the end of the arm, so it can deliver motion commands to address the exact movement of the arm, rather than an estimate based on the motor's angle and velocity. This means more precise control of positioning, along with significant vibration reduction.



As a result, the ratio of settling time to the overall cycle time increases, reducing throughput and precision. And the common workarounds to these problems, such as increasing the rigidity of the robot arm, result in different performance tradeoffs. Innovations in robotic automation have allowed manufacturers in countless industries to achieve higher throughput, improved quality, and safer working environments. But choosing a robot for an automation task often involves balancing tradeoffs between three key performance criteria: speed, payload, and precision.

The underlying cause of these performance tradeoffs is vibration of the robot arm. Manufacturing processes increasingly demand shorter cycle times for improved throughput, which in turn, requires higher speed and acceleration rates from the robot. As a result, the ratio of settling time to the overall cycle time increases, reducing throughput and precision. And the common workarounds to these problems, such as increasing the rigidity of the robot arm, result in different performance tradeoffs.

Mitigating Tradeoffs in Robot Performance
– GYROPLUS Technology –

SCARA Robots

GX Series

LS / LA Series

T Series

RS Series

	Top-class speed, repeatability, and low residual vibration					Proven reliability and functionality										Built-in controller for cost-efficient automation		Original space-saving design for high productivity	
Page	▶ P.9	▶ P.11	▶ P.15	▶ P.19	▶ P.19	▶ P.23	▶ P.25	▶ P.27	▶ P.29	▶ P.31	▶ P.33	▶ P.35	▶ P.37	▶ P.39	▶ P.41	▶ P.43	▶ P.45	▶ P.47	
Model Name	GX1 <small>NEW</small>	GX4	GX8	GX10	GX20	LS3	LS4 <small>NEW</small>	LS6	LS8 <small>NEW</small>	LS10	LS20 <small>NEW</small>	LS50 <small>NEW</small>	LA3 <small>NEW</small>	LA6 <small>NEW</small>	T3	T6	RS4 <small>NEW</small>	RS6 <small>NEW</small>	
Payload (kg)	4-axis 3-axis 1 1.5	Max 4	Max 8	Max 10	Max 20	Max 3	Max 4	Max 6	Max 8	Max 10	Max 20	Max 50	Max 3	Max 6	Max 3	Max 6	Max 4	Max 6	
Arm Length (mm)	175 225	250 300 350	450 550 650	650 850	850 1000	400	400	500 600 700	500 600 700	600 700 800	800 1000	1000	400	500 600 700	400	600	350	550	
Installation Environment	STD CL & ESD Class 3	STD ^{*1} CL & ESD Class 3 ESD	STD ^{*1} CL & ESD Class 3 ESD FZ ^{*2} IP65	STD ^{*1} CL & ESD Class 3 IP65	STD ^{*1} CL & ESD Class 3 IP65	STD Clean Class 4	STD CL & ESD Class 4	STD Clean Class 4	STD CL & ESD Class 4	STD Clean Class 4 FZ ^{*1}	STD Clean Class 4	STD Clean Class 4	STD	STD	STD	STD ^{*1} FZ ^{*1}	STD ^{*1}	STD CL & ESD Class 3	STD CL & ESD Class 3
Mounting Method	Tabletop	Tabletop ^{*3} Ceiling ^{*3} Wall ^{*3}	Tabletop ^{*4} Ceiling ^{*4} Wall ^{*4}	Tabletop ^{*4} Ceiling ^{*4} Wall ^{*4}	Tabletop ^{*4} Ceiling ^{*4} Wall ^{*4}	Tabletop	Tabletop	Tabletop	Tabletop	Tabletop	Tabletop	Tabletop	Tabletop	Tabletop	Tabletop	Tabletop	Tabletop	Tabletop	Tabletop
Compatible Controller	RC800-A	RC700-E RC800-A	RC700-E ^{*5} RC800-A	RC700-E RC800-A	RC700-E RC800-A	RC90-B	RC800-A	RC90-B	RC800-A	RC90-B	RC800-A	RC800-A	RC800L	RC800L	Built-in controller	Built-in controller	RC800-A	RC800-A	

Icon Description

- Installation Environment -

- STD Standard
- CL & ESD Cleanroom & ESD
- Clean Cleanroom
- ESD ESD
- FZ Food grease for Z-axis
- Class 3 Cleanroom model ISO 3 (Class 1 equiv.) ESD suppression
- Class 4 Cleanroom model ISO 4 (Class 10 equiv.)
- IP65 Protection model IP65
- IP67 Protection model

- Mounting Method -

- Tabletop mounting
- Ceiling mounting
- Wall mounting
- Wall / Ceiling Multi-layout

*1: IP20 *2: IP65 *3: 300, 350mm only
*4: FZ model - Tabletop mounting only *5: FZ model - RC700-E only

6-axis Robots

	C Series		CX Series		N Series			VT6
	Slim, lightweight body for greater installation flexibility		Realize compact body and high productivity		Original compact design for greater freedom of movement in tight quarters			Built-in controller, All-in-one 6-axis robot
Page	▶ P.49	▶ P.53	▶ P.55	▶ P.57	▶ P.59	▶ P.61	▶ P.63	▶ P.65
Model Name	C8 	C12 	NEW CX4 	NEW CX7 	N2 	N6-A850 	N6-A1000 	VT6 
Payload (kg)	Max 8	Max 12	Max 4 <small>*Downward position : 5kg</small>	Max 7	Max 2.5	Max 6	Max 6	Max 6
Arm Length (mm)	700 900 1400	1400	600	700 900	450	850	1000	900
Installation Environment	STD CL & ESD Class 3 C8-A701 C8-C901	STD CL & ESD Class 4 IP67	STD CL & ESD Class 3 IP67	STD CL & ESD Class 3 IP67	STD	STD CL & ESD Class 5	STD CL & ESD Class 5	STD Clean Class 4 IP67
Mounting Method	  		   ^{*1}	   ^{*1}	 		 	  ^{*2}  ^{*2}
Compatible Controller	RC700-A C8-A RC800-A C8-C	RC800-A	RC800-A	RC800-A	RC700-A	RC700-A	RC700-A	Built-in controller

Icon Description

- Environmental Specifications -

STD Standard
CL & ESD Cleanroom & ESD
Clean Cleanroom
ESD ESD

Class 3 Cleanroom model ISO 3 (Class 1 equiv.) ESD suppression
Class 4 Cleanroom model ISO 4 (Class 10 equiv.)
Class 5 Cleanroom model ISO 05 (Class 100 equiv.)
IP65 Protection model IP65
IP67 Protection model IP67

- Installation Specifications -

 Tabletop mounting
  Ceiling mounting
  Wall mounting

*1: Requires configuration in Epson RC+ *2: Standard model only

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- P. 97** Option quick-reference table
- P. 98** Option setup example

GX1

**NEW
PRODUCT**

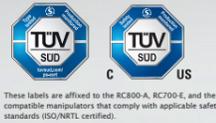
Smallest Size of Epson Robots

- Compact and lightweight body for space-saving installation (main unit mass : 8 kg)
- Cycle time for high-speed transfer of fine parts (C/T 0.292s^{*1})
- High repeatability for precision component assembly (± 0.005 mm^{*1})
- Highly rigid body for pushing insertion work (Pushing force 50N)
- Total of 6 models to choose from according to workspace, installation environment
- Battery-less encoder for reduced maintenance



Model Number **GX1-C171S**

Payload	Axis
1 : 1kg	[] : 4-axis spec
	[Z] : 3-axis spec
Arm length	Installation Environment
[17] : 175mm	[S] : Standard
[22] : 225mm	[C] : Cleanroom & ESD
Joint #3 stroke	
1 : 100mm	
	80mm: Cleanroom-model



These labels are affixed to the RC800-A, RC700-E, and their compatible manipulators that comply with applicable safety standards (ISO/NRTL certified).

Specifications

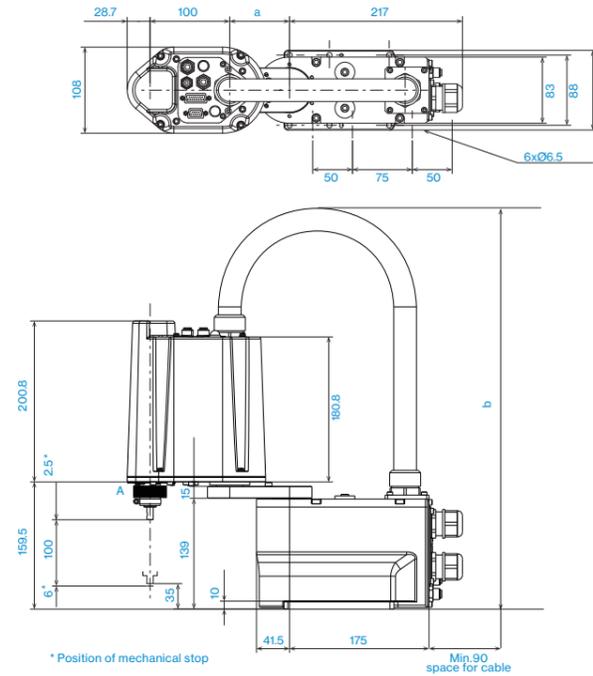
Model number	4-axis model				3-axis model	
	GX1-C171S	GX1-C171C	GX1-C221S	GX1-C221C	GX1-C171SZ	GX1-C221SZ
Arm length	Arm #1+#2	175 mm		225 mm		
	Arm #3	100 mm (80 mm ^{*2})	80 mm	100 mm (80 mm ^{*2})	80 mm	100 mm
Payload ^{*3}	Rated	0.5 kg				
	Max.	1.0 kg				
Repeatability	Joints #1+#2	± 0.005 mm		± 0.008 mm		
	Joint #3	± 0.01 mm				
	Joint #4	± 0.010 deg				
	Joint #4	3000 deg/sec				
Standard cycle time ^{*4}	Joints #1+#2	0.292 sec		0.288 sec		
	Joint #3	1200 mm/sec				
	Joint #4	3000 deg/sec				
Maximum operating speed	Rated	2630 mm/sec		3000 mm/sec		
	Max.	0.0003 kg·m ²		0.0003 kg·m ²		
Joint #4 allowable moment of inertia ^{*5}	Rated	0.004 kg·m ²				
	Max.	0.004 kg·m ²				
Joint #3 press force	50 N					
Installation environment	Standard	Cleanroom ^{*6} & ESD ^{*7}	Standard	Cleanroom ^{*6} & ESD ^{*7}	Standard	
Mounting method	Tabletop mounting					
Weight (not include the weight of cables)	8 kg					
Installed wire for customer use	D-sub (15 pin x 1), D-sub (9 pin x 1, Current capacity 1 A (Rated))					
Installed pneumatic tube for customer use	$\phi 4$ mm x 1, $\phi 6$ mm x 2 (Allowable pressure: 0.59 Mpa [6 kgf/cm ² : 86 psi])					
Compatible Controller	RC800-A					
Power supply	AC200-240 V Single phase					
Maximum rated capacity ^{*8}	0.5 kVA					
Cable length	3 / 5 / 10 / 15 / 20 m					
Safety standard	CE, KCs, NRTL					

^{*1}: In case of GX1-C171S ^{*2}: When using belows option. ^{*3}: Do not apply the load exceeding the maximum payload. ^{*4}: Cycle time based on round-trip arch motion (100 mm horizontal, 25 mm vertical) at rated payload setting, path coordinates optimized for maximum speed. ^{*5}: Set the parameters by the Inertia command according to the load and end effector status (refer to the manual for the parameter calculation method). ^{*6}: Complies with ISO Class 3 (ISO14644-1) and Fed-std209D Class 1 cleanroom standards. ^{*7}: Main resin parts of the ESD model use conductive materials or apply plate processing. For the tip of the Manipulator (tool mounting part), we have confirmed that it is +/- 5V or less even immediately after operating the measurement under our standard. ^{*8}: Varies according to operating environment and program. The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

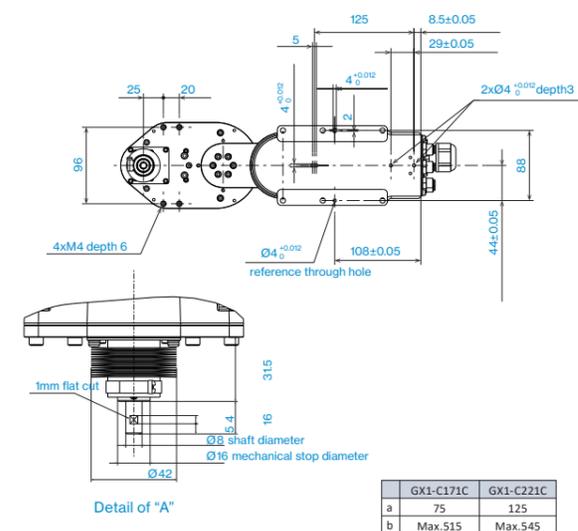
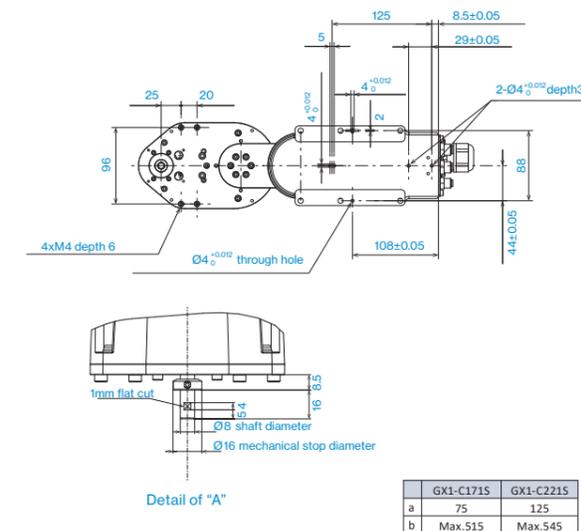
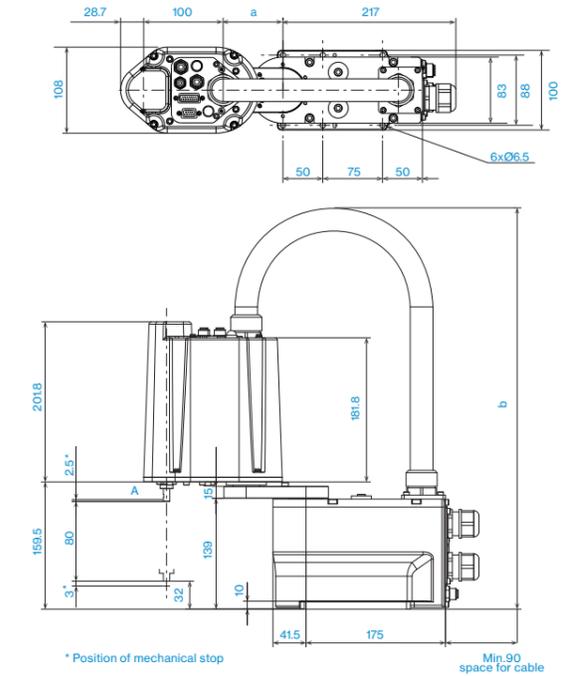
Outer Dimensions

[Unit: mm]

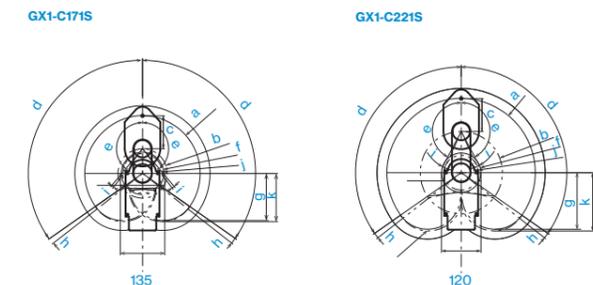
Standard-model



Cleanroom-model



Motion Range



Model	4-axis				3-axis	
	GX1-C171S	GX1-C171C	GX1-C221S	GX1-C221C	GX1-C171SZ	GX1-C221SZ
a Length of Arm #1 (mm) + Arm #2 (mm)	175	225	175	225		
b Length of Arm #1 (mm)	75	125	75	125		
c Length of Arm #2 (mm)	100	100	100	100		
d Joint #1 motion (°)	125					
e Joint #2 motion (°)	140	152	149	135		
f Work envelope	64.3	59.6	64.8	70.8	89.1	
g (Work envelope of the back side)	143	171.7	143	171.7		
h Angle of Joint #1 mechanical stop (°)	3					
i Angle of Joint #2 mechanical stop (°)	3	4	5	1.3	4	
j (Mechanical stop area)	60.4	52.8	56.2	69.1	82.2	
k (Mechanical stop area of the back side)	146.2	177	146.2	177		

GX4

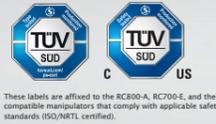


Compact body with rank-above technology for high speed and low vibration

- Handles small, heavy components and payloads up to 4kg
- Available with left- or right-curved arm for greater operating versatility
- A small robot with a long reach
- Battery-less encoder for reduced maintenance



Model Number	GX4-□25 1 S □ □ □ □			
Controller	□ B : RC700-E	□ C : RC800-A		
Arm length	□ 25 : 250mm	□ 30 : 300mm	□ 35 : 350mm	
Joint #3 stroke	□ 1 : 150mm Standard, ESD	□ : 120mm Cleanroom-model		
Installation environment	□ S : Standard	□ E : ESD	□ C : Cleanroom & ESD	
UL specification	□ : Non UL compliant	□ -UL : UL compliant		
Arm Type	□ : Standard	□ R : Right-curved	□ L : Left-curved	
Cable mounting direction	□ : Standard	□ B : Bottom side (Tabletop mounting only)		
Mounting method	□ : Tabletop mounting	□ M : Multiple mounting		



These labels are affixed to the RC800-A, RC700-E, and their compatible manipulators that comply with applicable safety standards (ISO/NRTL certified).

Specifications

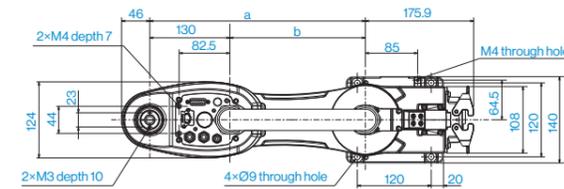
Model number		GX4-□25□□□□	GX4-□30□□□□	GX4-□35□□□□
Arm length	Arm #1+#2	250 mm	300mm	350 mm
	Arm #3	150 mm : GX4-□□1S□, E□ 120 mm : GX4-□□1C□		
Arm type		Standard		Standard, Left-curved, Right-curved*1
Payload *2	Rated	2kg		
	Max.	4kg		
Repeatability	Joints #1+#2	±0.008 mm		
	Joint #3	±0.01 mm		
	Joint #4	±0.005 deg		
Standard cycle time *3	Joints #1+#2	0.33 sec	0.34 sec	0.35 sec
Maximum operating speed	Joints #1+#2	3550 mm/sec	3950 mm/sec	4350 mm/sec
	Joint #3	1100 mm/sec		
	Joint #4	3100 deg/sec		
Joint #4 allowable moment of inertia **	Rated	0.005 kg·m ²		
	Max.	0.05 kg·m ²		
Joint #3 press force		150 N		
Installation Environment		Standard (equivalent to IP20), Cleanroom*5 & ESD*6, ESD*6		
Mounting method		Tabletop mounting	Tabletop mounting, Multiple mounting	
Weight (not include the weight of cables)		Tabletop : 15 kg	Tabletop : 15 kg Multiple : 17 kg	Tabletop : 16 kg Multiple : 17 kg
Installed wire for customer use		D-sub (15 pin x 1), RJ45 (8 pin x 1)		
Installed pneumatic tube for customer use		ø4 mm x 1, ø6 mm x 2 (Allowable pressure: 0.59 MPa [6 kgf/cm ²])		
Compatible controller		GX4-B: RC700-E GX4-C: RC800-A		
Power supply		AC200-240 V Single phase		
Maximum rated capacity *7		1.2kVA		
Cable length		Standard: 3 / 5 / 10 / 15 / 20 m Flexible: 5 / 10 / 15 / 20 m		
Safety standard		CE, KCs, NRTL		

*1: The curved arm is only supported in 350mm arm tabletop model. *2: Do not apply the load exceeding the maximum payload. *3: Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) at rated payload setting of tabletop model boost mode (path coordinates optimized for maximum speed) *4: Set the parameters by the Inertia command according to the load and end effector at status (refer to the instruction manual for the parameter calculation method). *5: Complies with ISO Class 3 (ISO14644-1) and Fed-std209D Class 1 (less than 10 0.1 μm particles per 28,317cm³:1cf) cleanroom standards. *6: Main resin parts of the ESD model use conductive materials or apply plate processing. For the tip of the Manipulator (tool mounting part), we have confirmed that it is +/- 5 V or less even immediately after operating the measurement under our standard. *7: Varies according to operating environment and program. The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

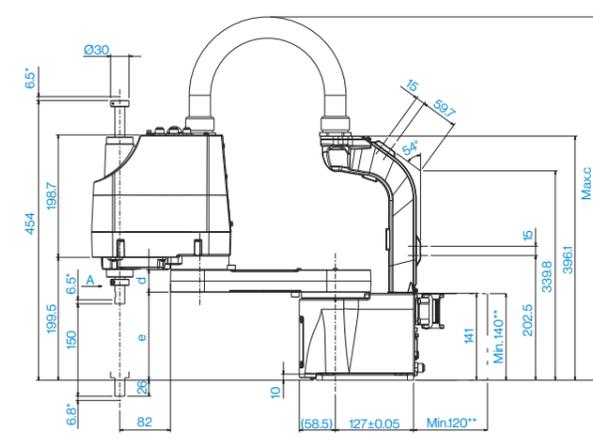
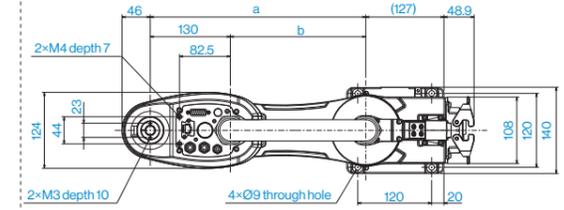
Outer Dimensions (Tabletop Mounting)

[Unit: mm]

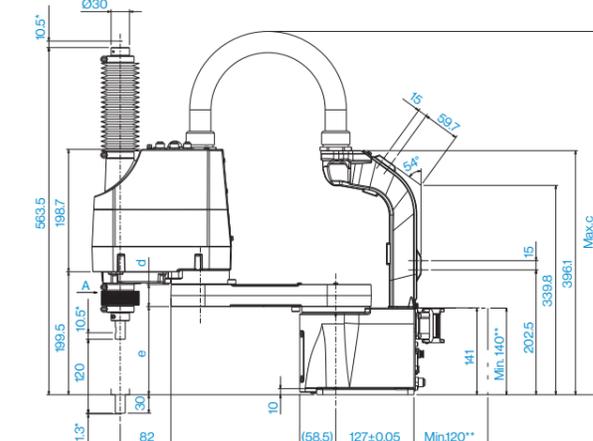
Standard-model



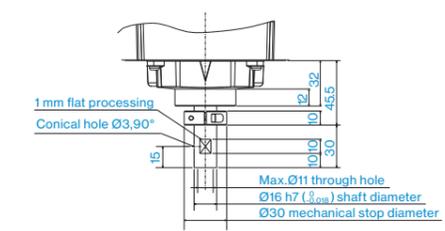
Cleanroom-model



* indicates the stroke margin by mechanical stop.

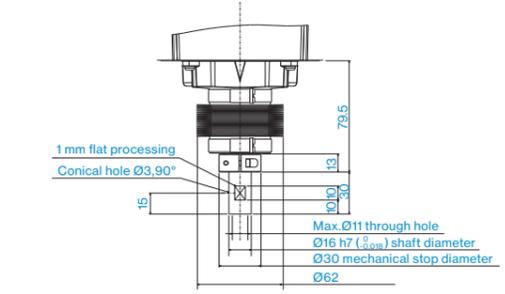


* indicates the stroke margin by mechanical stop.



Detail of "A" (Calibration point position of Joints #3 and #4)

	GX4-□251S	GX4-□301S	GX4-□351S
a	250	300	350
b	120	170	220
c	560	585	610
d	30	36	36
e	146	143	143



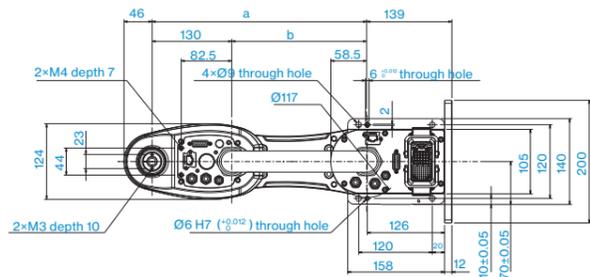
Detail of "A" (Calibration point position of Joints #3 and #4)

	GX4-□251C	GX4-□301C	GX4-□351C
a	250	300	350
b	120	170	220
c	560	585	610
d	30	36	36
e	146	143	143

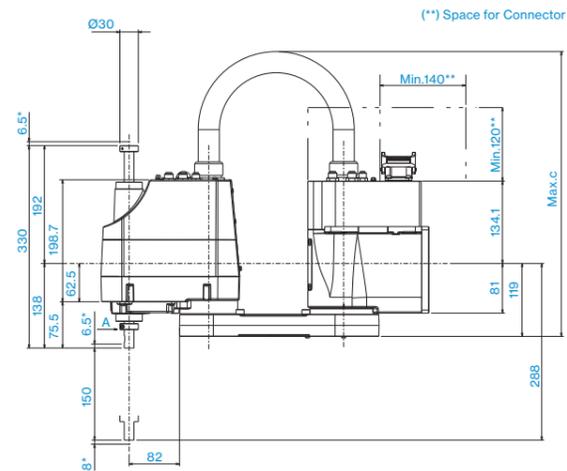
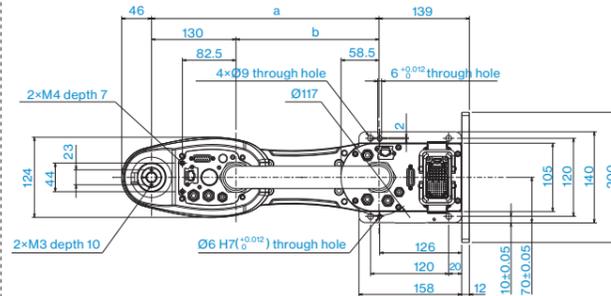
Outer Dimensions (Multiple Mounting)

[Unit: mm]

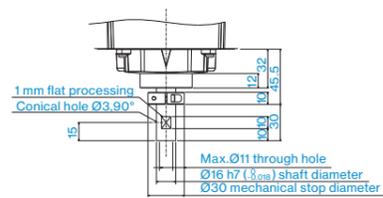
Standard-model



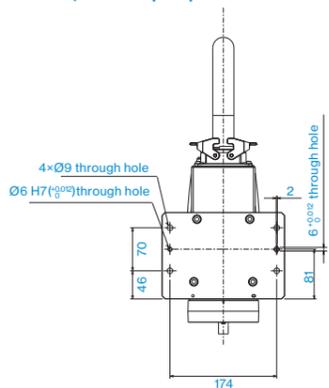
Cleanroom-model



* indicates the stroke margin by mechanical stop.

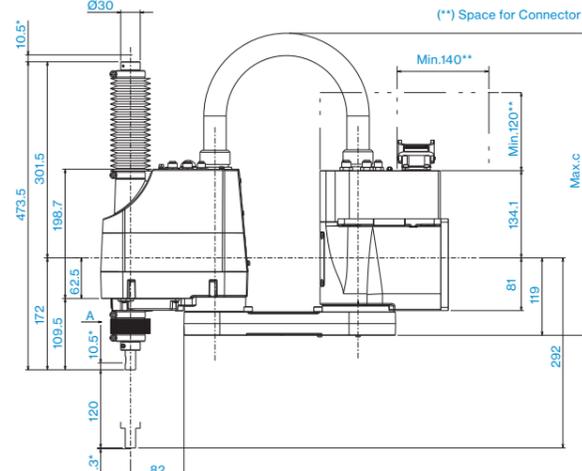


Detail of "A"
(Calibration point position of Joints #3 and #4)

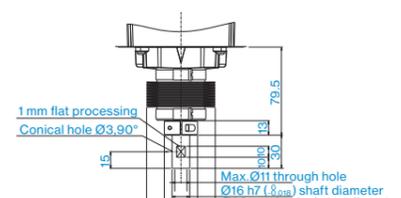


Reference through hole
(View from the bottom of the base)

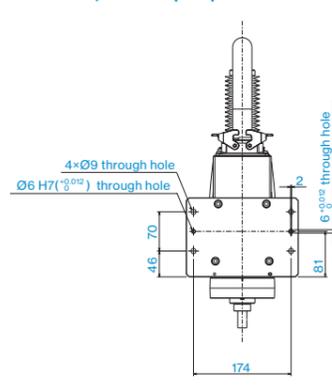
	GX4-□301SM	GX4-□351SM
a	300	350
b	170	220
c	475	500



* indicates the stroke margin by mechanical stop.



Detail of "A"
(Calibration point position of Joints #3 and #4)



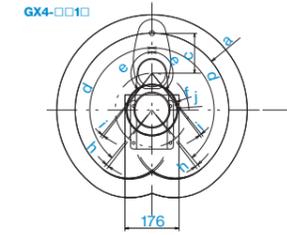
Reference through hole
(View from the bottom of the base)

	GX4-□301CM	GX4-□351CM
a	300	350
b	170	220
c	475	500

Motion Range (Tabletop Mounting)

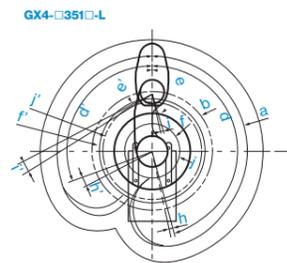
[Unit: mm]

Straight Arm



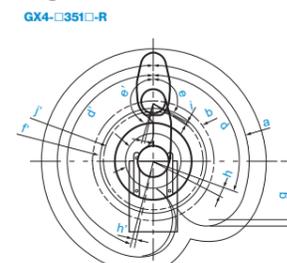
Model	Straight Arm					
	GX4-□251S	GX4-□251C	GX4-□301S	GX4-□301C	GX4-□351S	GX4-□351S
a	250		300		350	
c	130					
d	140					
e	141	137	142	141	142	
f	87	95	105	107	142	
h	2.5					
i	1.5		2.4		1.6	
j	84	92	99	103	137	

Left-Curved Arm



Model	Left-Curved Arm	
	GX4-□351S-L	GX4-□351C-L
a	350	
c	130	
d/d'	165 / 110	
e/e'	165 / 120	160 / 120
f/f'	100 / 192	107 / 192
h/h'	3.0 / 7.0	
i/i'	2.8 / 3.8	3.5 / 3.8
j/j'	97 / 183	102 / 183

Right-Curved Arm

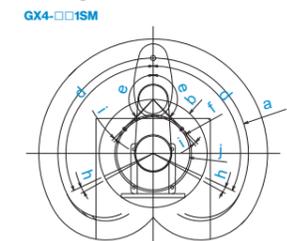


Model	Right-Curved Arm	
	GX4-□351S-R	GX4-□351C-R
a	350	
c	130	
d/d'	110 / 165	
e/e'	120 / 165	120 / 160
f/f'	192 / 100	192 / 107
h/h'	7.0 / 3.0	
i/i'	3.8 / 2.8	3.8 / 3.5
j/j'	183 / 97	183 / 102

Motion Range (Multiple Mounting)

[Unit: mm]

Straight Arm



Model	Straight Arm	
	GX4-□301SM	GX4-□351SM
a	300	350
c	130	
d/d'	115	120
e/e'	135	142
f/f'	121	142
h/h'	4.0	
i/i'	2.5	
j/j'	115	137

GX8



High speed and precision for small component assembly

- Handles payloads up to 8kg
- Available with 450mm, 550mm, or 650mm arm
- Internal cabling and ducting minimizes interference worries
- IP65 dust and water-resistant cleanroom models available
- Tabletop, ceiling, and wall mounting models available
- Battery-less encoder for reduced maintenance



Model Number	GX8-□45□2□S□□		
Controller	□ B : RC700-E □ C : RC800-A		
Arm length	□ 45 : 450mm □ 55 : 550mm □ 65 : 650mm		
Joint #3 stroke	□ 2 : 200mm: (Standard, ESD) □ 170mm: (Cleanroom & ESD, Protection) □ 330mm: (Standard, ESD) □ 300mm: (Cleanroom & ESD, Protection, P-FZ)		
Cable mounting direction	□ Standard □ B : Bottom side (Tabletop mounting only)		
Mounting method	□ Tabletop mounting □ W : Wall mounting □ R : Ceiling mounting		
Installation environment	□ S : Standard (equivalent to IP20) □ E : ESD (anti-static) □ C : Cleanroom & ESD (anti-static) □ P : Protection class: IP 65 □ P-FZ : Food grease for Z-axis (GX8-B only)		



These labels are affixed to the RC800-A, RC700-E, and their compatible manipulators that comply with applicable safety standards (ISO/NRTL certified).

Specifications

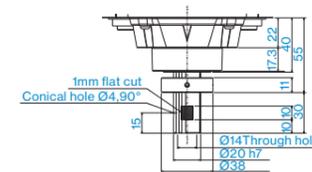
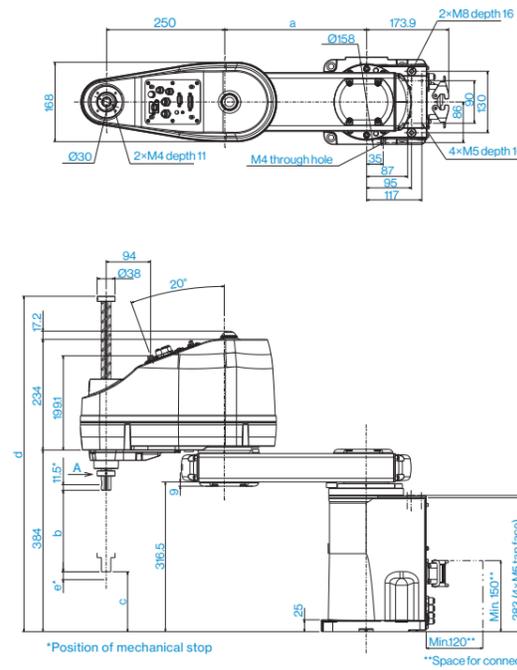
Model number		GX8-□45□□□□	GX8-□55□□□□	GX8-□65□□□□
Arm length	Arm #1+#2	450 mm	550 mm	650 mm
	Arm #3	2: 200 mm: GX8-□□25□, E□ 170 mm: GX8-□□2C□, P□ 3: 330 mm: GX8-□□3S□, E□ 300 mm: GX8-□□3C□, P□, P-FZ□		
Payload *1	Rated	4kg		
	Max.	8kg		
Repeatability	Joints #1+#2	±0.015 mm		
	Joint #3	±0.010 mm		
	Joint #4	±0.005 deg		
Standard cycle time *2		0.28 sec	0.30 sec	0.33 sec
Maximum operating speed	Joints #1+#2	7450 mm/sec	8450 mm/sec	9460 mm/sec
	Joint #3	2350 mm/sec		
	Joint #4	2800 deg/sec		
Joint #4 allowable moment of inertia *3	Rated	0.01 kg·m²		
	Max.	0.16 kg·m²		
Joint #3 press force		150 N		
Installation environment		Standard (equivalent to IP20), Cleanroom *4 & ESD*5, IP65, ESD*5, P-FZ		
Mounting method		Tabletop mounting, Wall mounting, Ceiling mounting (P-FZ: Tabletop mounting)		
Weight (not include the weight of cables)		Tabletop / Ceiling : 33 kg, Wall : 35 kg	Tabletop / Ceiling : 34 kg, Wall : 36 kg	Tabletop / Ceiling : 35 kg, Wall : 37 kg
Installed wire for customer use		D-sub (15 pin x 1), D-sub (9 pin x 1), RJ45 (8 pin x 1, CAT 5e)		
Installed pneumatic tube for customer use		φ4 mm x 2, φ6 mm x 2 : 0.59 MPa (6 kgf/cm²) (86 psi)		
Compatible controller		GX8-B: RC700-E GX8-C: RC800-A (P-FZ: GX8-B only)		
Power supply		AC200-240 V Single phase		
Maximum rated capacity *6		2.2 kVA		
Cable length		Standard: 3 / 5 / 10 / 15 / 20 m, Flexible: 5 / 10 / 15 / 20 m		
Safety standard		CE, KCs, NRTL		

*1: Do not apply the load exceeding the maximum payload. *2: Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) at rated payload setting of tabletop model boost mode (path coordinates optimized for maximum speed). *3: Set the parameters by the Inertia command according to the load and end effector status (refer to the instruction manual for the parameter calculation method). *4: Complies with ISO Class 3 (ISO14644-1) and Fed-std209D Class 1 (less than 10.0.1 m particles per 28.317cm³(1cft) cleanroom standards. *5: Main resin parts of the ESD model use conductive materials or apply plate processing. For the tip of the Manipulator (tool mounting part), we have confirmed that it is +/- 5 V or less even immediately after operating the measurement under our standard. *6: Varies according to operating environment and program. The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

Outer Dimensions (Tabletop Mounting)

[Unit: mm]

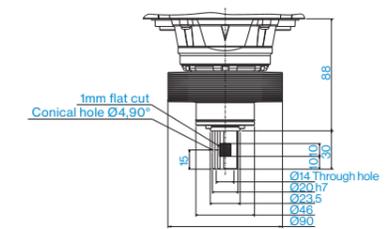
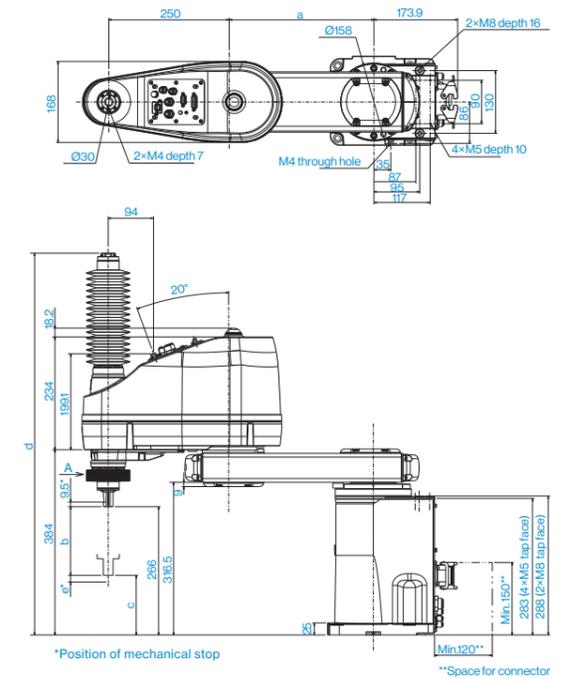
Standard-model



Detail of "A"
(Calibration point position of Joints #3 and #4)

	GX8-□4525,E	GX8-□4535,E	GX8-□5525,E	GX8-□5535,E	GX8-□6525,E	GX8-□6535,E
a	200	200	300	300	400	400
b	200	330	200	330	200	330
c	99	-31	99	-31	99	-31
d	709	834	709	834	709	834
e	15.6	10.6	15.6	10.6	15.6	10.6

Cleanroom-model

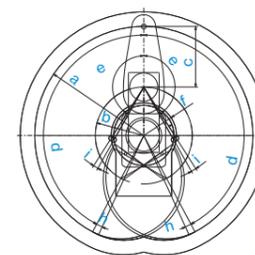


Detail of "A"
(Calibration point position of Joints #3 and #4)

	GX8-□452C	GX8-□453C	GX8-□552C	GX8-□5535,E	GX8-□652C	GX8-□653C
a	200	200	300	300	400	400
b	170	300	170	330	170	300
c	96	-34	96	-34	96	-34
d	791.5	910.5	791.5	910.5	791.5	910.5
e	12.6	7.6	12.6	7.6	12.6	7.6

Motion Range (Tabletop Mounting)

GX8-□45□□□□

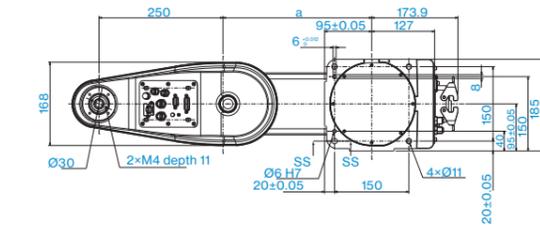


Model	GX8-□45□□□□		GX8-□45□□C□□	
	GX8-□45□□□□	GX8-□45□□□□	GX8-□45□□C□□	GX8-□45□□C□□
a	Length of Arm #1+ Arm #2 (mm)			
b	Length of Arm #1 (mm)			
c	Length of Arm #2 (mm)			
d	Motion range of Joint #1 (°)			
e	0 ≥ Z ≥ -270		147.5	0 ≥ Z ≥ -240
	-270 ≥ Z ≥ -330		145	-240 ≥ Z ≥ -300
f	0 ≥ Z ≥ -270		134.8	0 ≥ Z ≥ -240
	-270 ≥ Z ≥ -330		145	-240 ≥ Z ≥ -300
h	Joint #1 angle to hit mechanical stop (°)			
i	0 ≥ Z ≥ -270		3.1	0 ≥ Z ≥ -240
	-270 ≥ Z ≥ -330		5.6	-240 ≥ Z ≥ -300
j	0 ≥ Z ≥ -270		124	0 ≥ Z ≥ -240
	-270 ≥ Z ≥ -330		124	-240 ≥ Z ≥ -300

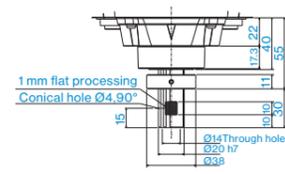
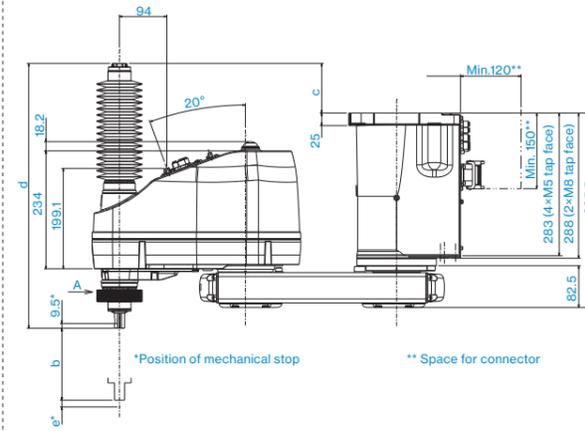
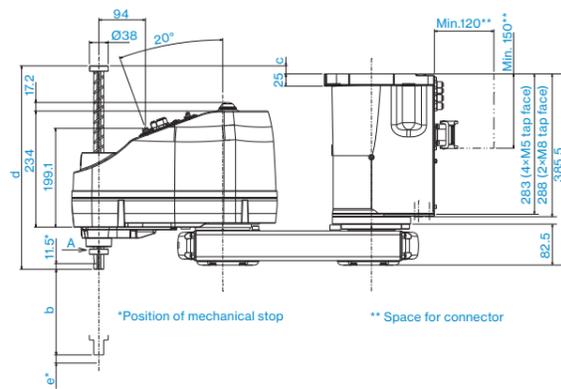
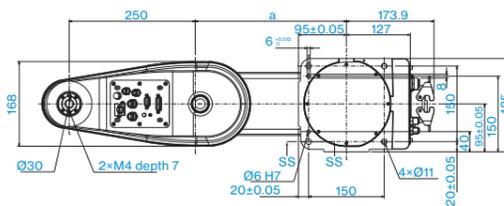
Outer Dimensions (Ceiling Mounting)

[Unit: mm]

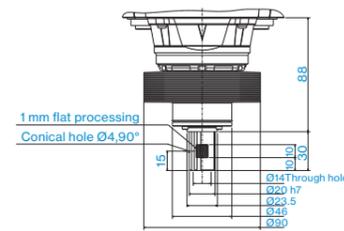
Standard-model



Cleanroom-model



Detail of "A"
(Calibration point position of Joints #3 and #4)



Detail of "A"
(Calibration point position of Joints #3 and #4)

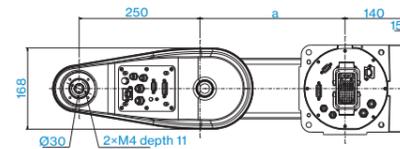
	GX8-□452SR,ER	GX8-□453SR,ER	GX8-□552SR,ER	GX8-□553SR,ER	GX8-□652SR,ER	GX8-□653SR,ER
a	200	300	300	300	400	400
b	200	330	200	330	200	330
c	16	141	16	141	16	141
d	410	535	410	535	410	535
e	15.6	10.6	15.6	10.6	15.6	10.6

	GX8-□452CR	GX8-□453CR	GX8-□552CR	GX8-□553CR	GX8-□652CR	GX8-□653CR
a	200	300	300	300	400	400
b	170	300	170	300	170	300
c	98.5	223.5	98.5	223.5	98.5	223.5
d	525.5	650.5	525.5	650.5	525.5	650.5
e	12.6	7.6	12.6	7.6	12.6	7.6

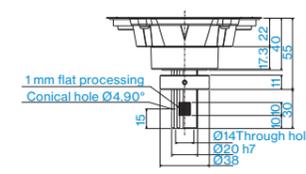
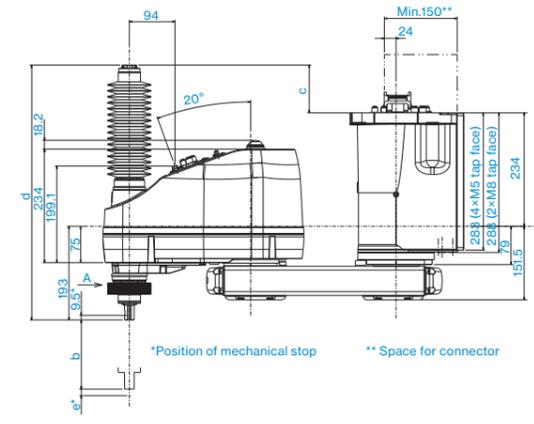
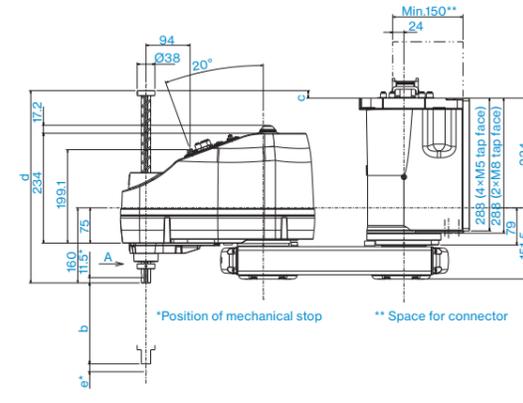
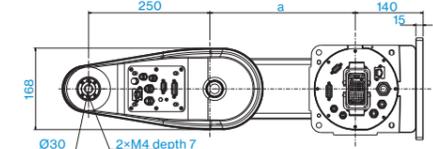
Outer Dimensions (Wall Mounting)

[Unit: mm]

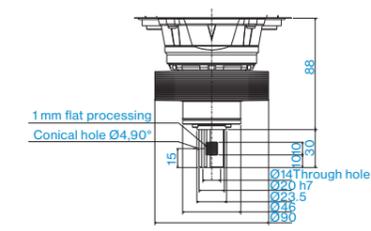
Standard-model



Cleanroom-model



Detail of "A"
(Calibration point position of Joints #3 and #4)



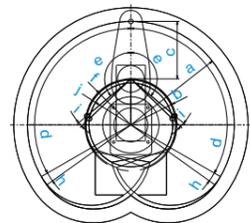
Detail of "A"
(Calibration point position of Joints #3 and #4)

	GX8-□452SW,EW	GX8-□453SW,EW	GX8-□552SW,EW	GX8-□553SW,EW	GX8-□652SW,EW	GX8-□653SW,EW
a	200	300	300	300	400	400
b	200	330	200	330	200	330
c	16	141	16	141	16	141
d	410	535	410	535	410	535
e	15.6	10.6	15.6	10.6	15.6	10.6

	GX8-□452CW	GX8-□453CW	GX8-□552CW	GX8-□553CW	GX8-□652CW	GX8-□653CW
a	200	300	300	300	400	400
b	170	300	170	300	170	300
c	98.5	223.5	98.5	223.5	98.5	223.5
d	525.5	650.5	525.5	650.5	525.5	650.5
e	12.6	7.6	12.6	7.6	12.6	7.6

Motion Range (Ceiling Mounting)

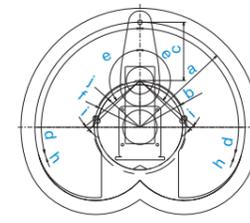
GX8-□□□□R



Model	GX8-□45□□R		GX8-□55□□R		GX8-□65□□R	
	S,E	C,P	S,E	C,P	S,E	C,P
a Length of Arm #1+Arm #2 (mm)	450		550		650	
b Length of Arm #1 (mm)	200		300		400	
c Length of Arm #2 (mm)			250			
d Motion range of Joint #1 (°)	105		135		147.5	
e Motion range of Joint #2 (°)	125		147.5	145	147.5	
f Motion range	212.5		161.2	172.1	232	
g Joint #1 angle to hit mechanical stop (°)	0.9			1.4		
h Joint #2 angle to hit mechanical stop (°)	6.1		3.1	5.6	3.1	
i Mechanical stop area	191.7		147.7		219.7	

Motion Range (Wall Mounting)

GX8-□□□□W



Model	GX8-□45□□W		GX8-□55□□W		GX8-□65□□W	
	S,E	C,P	S,E	C,P	S,E	C,P
a Length of Arm #1+Arm #2 (mm)	450		550		650	
b Length of Arm #1 (mm)	200		300		400	
c Length of Arm #2 (mm)			250			
d Motion range of Joint #1 (°)	105		135		147.5	
e Motion range of Joint #2 (°)	125		147.5	145	147.5	
f Motion range	212.5		161.2	172.1	232	
g Joint #1 angle to hit mechanical stop (°)	0.9		11.2	5.4		
h Joint #2 angle to hit mechanical stop (°)	6.1		3.1	5.6	3.1	
i Mechanical stop area	191.7		147.7		219.7	

GX10 / GX20



For high-speed, high-precision, multi-hand batch handling and packing of heavier loads

- Handles payloads of up to 10/20kg
- Choice of 650mm, 850mm, and 1000mm arm
- Internal cabling and ducting minimizes interference worries
- IP65 dust and water-resistant cleanroom models available
- Tabletop, ceiling, and wall mounting models available
- Battery-less encoder for reduced maintenance



Model Number **GX** **65** **1** **S**

Payload	<input type="checkbox"/> 10 : 10 kg	<input type="checkbox"/> 20 : 20 kg	Mounting method	<input type="checkbox"/> : Tabletop mounting	<input type="checkbox"/> W : Wall mounting	<input type="checkbox"/> R : Ceiling mounting		
Controller	<input type="checkbox"/> B : RC700-E	<input type="checkbox"/> C : RC800-A	Installation environment	<input type="checkbox"/> S : Standard (equivalent to IP20)	<input type="checkbox"/> C : Cleanroom & ESD (anti-static)	<input type="checkbox"/> P : Protection class: IP 65		
Arm length	<input type="checkbox"/> 65 : 650mm (GX10 series only)	<input type="checkbox"/> 85 : 850mm	<input type="checkbox"/> A0 : 1000mm (GX20 series only)	Joint #3 stroke	<input type="checkbox"/> 1 : 180mm: (Standard)	<input type="checkbox"/> 150mm: (Cleanroom & ESD, Protection)	<input type="checkbox"/> 420mm: (Standard)	<input type="checkbox"/> 390mm: (Cleanroom & ESD, Protection)



These labels are affixed to the RC800-A, RC700-E, and their compatible manipulators that comply with applicable safety standards (ISO/NRTL certified).

Specifications

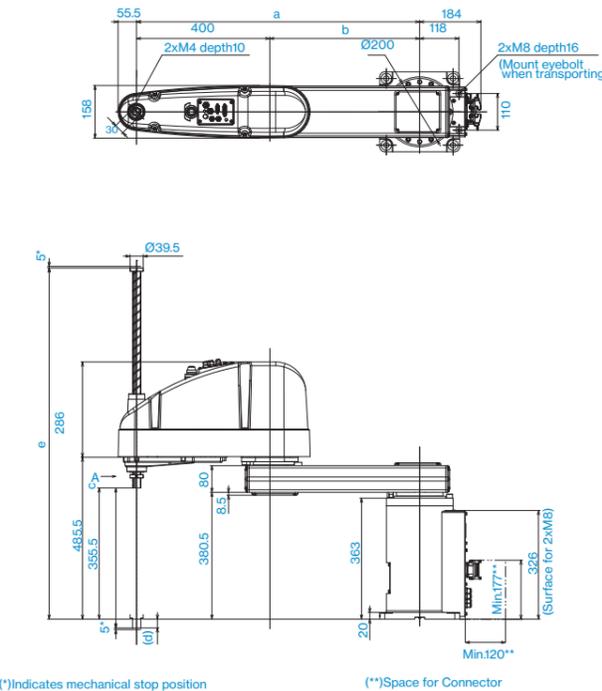
Model number		GX10-B65□□□	GX10-B85□□□	GX20-B85□□□	GX20-BA0□□□
Arm length	Arm #1+#2	650 mm		850 mm	
	Arm #3	1: 180 mm: GX□-□□1S□		150 mm: GX□-□□1C□, P□	
Payload *1	Rated	5 kg		10 kg	
	Max.	10 kg		20 kg	
Repeatability	Joints #1+#2	±0.025 mm			
	Joint #3	±0.01 mm			
	Joint #4	±0.005 deg			
	Joint #3 stroke	2350 mm/s			
Standard cycle time *2	Joints #1+#2	0.338 sec	0.377 sec	0.365 sec	0.422 sec
	Joint #3	2350 mm/s			
Maximum operating speed	Joints #1+#2	8800 mm/s	11000 mm/s	11000 mm/s	11500 mm/s
	Joint #3	2350 mm/s			
Joint #4 allowable moment of inertia *3	Rated	0.02 kg·m ²		0.05 kg·m ²	
	Max.	0.25 kg·m ²		0.45 kg·m ²	
Joint #3 press force	250 N				
Installation environment	Standard (equivalent to IP20), Cleanroom*4 & ESD*5, IP65				
Mounting method	Tabletop mounting, Wall mounting, Ceiling mounting				
Weight (not include the weight of cables)	Tabletop/Ceiling: 46 kg, Wall: 51 kg	Tabletop/Ceiling: 49 kg, Wall: 53 kg		Tabletop/Ceiling: 50 kg, Wall: 55 kg	
Installed wire for customer use	D-sub (15 pin x 1), D-sub (9 pin x 1)				
Installed pneumatic tube for customer use	Φ4 mm x 2, Φ6 mm x 2: 0.59 MPa (6 kgf/cm ²) (86 psi)				
Compatible controller	GX10-B, GX20-B: RC700-E GX10-C, GX20-C: RC800-A				
Power supply	AC200-240 V Single phase				
Maximum rated capacity *6	2.4 kVA				
Cable length	Standard: 3 / 5 / 10 / 15 / 20 m, Flexible: 5 / 10 / 15 / 20 m				
Safety standard	CE, KCs, NRTL				

*1: Do not apply the load exceeding the maximum payload. *2: Cycle time based on round-trip arch motion (300mm horizontal, 25mm vertical) with 2kg payload (path coordinates optimized for maximum speed). *3: Set the parameters by the Inertia command according to the load and end effector status (refer to the instruction manual for the parameter calculation method). *4: Complies with ISO Class 3 (ISO14644-1) and Fed-std209D Class 1 (less than 10.0.1 m particles per 28,317cm³:1cft) cleanroom standards. *5: Main resin parts of the ESD model use conductive materials or apply plate processing. For the tip of the Manipulator (tool mounting part), we have confirmed that it is +/- 5 V or less even immediately after operating the measurement under our standard. *6: Varies according to operating environment and program. The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

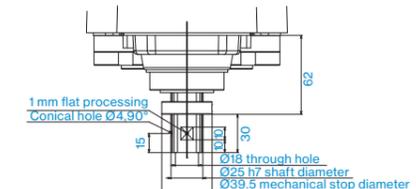
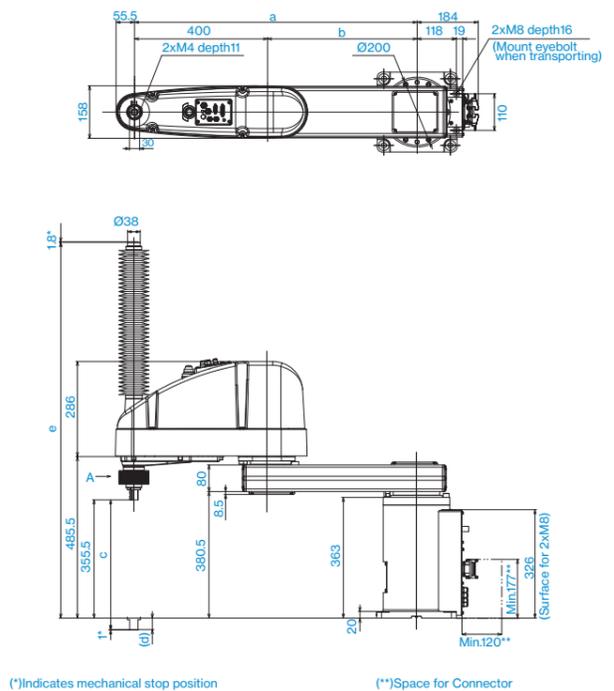
Outer Dimensions (Tabletop Mounting)

[Unit: mm]

Standard-model



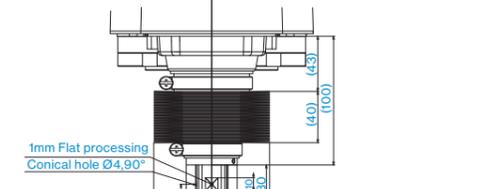
Cleanroom-model



Detail of "A" (Calibration point position of Joints #3 and #4)

	GX10-B65□□	GX10-B85□□	GX20-B85□□	GX20-BA0□□
a	650	850	850	1000
b	250	450	450	600

	GX10/20-B□□1S	GX10/20-B□□4S
c	180	420
d	-213.5	26.5
e	813.5	1053.5



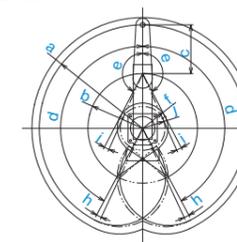
Detail of "A" (Calibration point position of Joints #3 and #4)

	GX10-B65□□C	GX10-B85□□C	GX20-B85□□C	GX20-BA0□□C
a	650	850	850	1000
b	250	450	450	600

	GX10/20-B□□1C	GX10/20-B□□4C
c	150	390
d	-205.5	34.5
e	870.5	1129.5

Motion Range (Tabletop Mounting)

GX10/20-B□□□□



Model	GX10-B65□□S GX10-B65□□C GX10-B65□□P	GX10-B85□□S GX20-B85□□S	GX10-B85□□C GX20-B85□□P	GX20-BA0□□S GX20-BA0□□C GX20-BA0□□P
a Length of Arm #1 + Arm #2 (mm)	650	850		1000
b Length of Arm #1 (mm)	250	450		600
c Length of Arm #2 (mm)			400	
d Motion range of Joint #1 (°)	152			
e Motion range of Joint #2 (°)	152.5	152.5	0 ≥ Z ≥ -360	152.5
			-360 ≥ Z ≥ -390	151
f Motion range	212.4	207.8	0 ≥ Z ≥ -360	207.8
			-360 ≥ Z ≥ -390	218.3
h Joint #1 angle to hit mechanical stop (°)	3			
i Joint #2 angle to hit mechanical stop (°)	3.5	3.5	0 ≥ Z ≥ -360	3.5
			-360 ≥ Z ≥ -390	5
j Mechanical stop area	199.4		183.3	285.4

Achieve higher productivity and heavier payloads - with proven reliability

- Successor to Epson's best-selling LS series, delivering enhanced productivity and payload while maintaining trusted reliability
- Cycle time improved for greater throughput and efficiency
- Supports heavier payloads for higher-load applications
- Compatible with the RC800-A controller for advanced functions and flexible system integration
- Battery-less encoder for reduced maintenance



Model Number **LS4-C401S**

Payload	4 : 4kg	Installation environment
Arm length	40 : 400mm	
Joint #3 stroke	1 : 150mm: Standard-model : 120mm: Cleanroom-model (with bellows)	S : Standard C : Cleanroom & ESD



Specifications

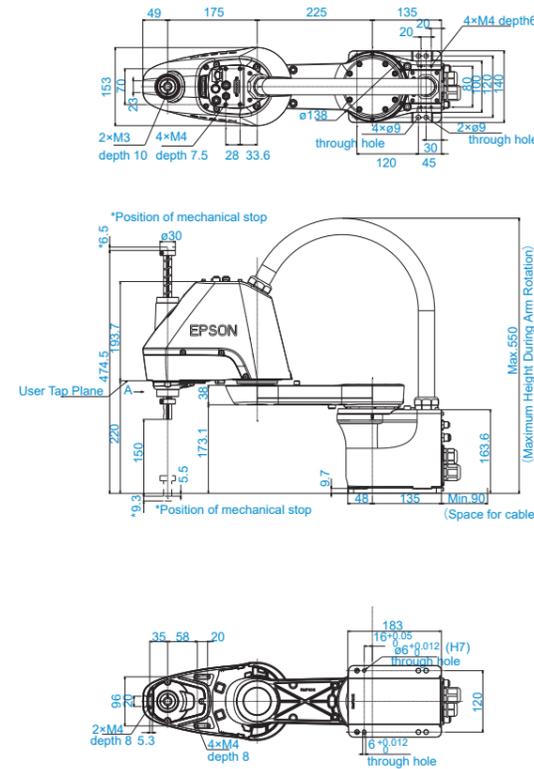
Model number		LS4-C401S	LS4-C401C
Arm length	Arm #1+#2	400 mm	400 mm
	Arm #3	150 mm	120 mm
Payload *1	Rated	2.0 kg	2.0 kg
	Max.	4.0 kg	4.0 kg
Repeatability	Joints #1+#2	±0.01 mm	±0.01 mm
	Joint #3	±0.01 mm	±0.01 mm
	Joint #4	±0.01 deg	±0.01 deg
Standard cycle time *2		0.336 sec	0.336 sec
Maximum operating speed	Joints #1+#2	7200 mm/sec	7200 mm/sec
	Joint #3	1100 mm/sec	1100 mm/sec
	Joint #4	2600 deg/sec	2600 deg/sec
Joint #4 allowable moment of inertia *3	Rated	0.005 kg·m ²	0.005 kg·m ²
	Max.	0.05 kg·m ²	0.05 kg·m ²
Joint #3 press force		100 N	100 N
Installation environment		Standard	Cleanroom *4 & ESD *5
Mounting method		Tabletop mounting	
Weight (not include the weight of cables)		14 kg	
Installed wire for customer use		D-sub (15 pin x 1, Current capacity 1 A(Rated)), RJ45 (8 pin x 1)	
Installed pneumatic tube for customer use		ø4 mm x 1, ø6 mm x 2 (Allowable pressure: 0.59 Mpa [6 kgf/cm ² : 86 psi])	
Compatible controller		RC800-A	
Power supply		AC200-240 V Single phase	
Maximum rated capacity*6		1.2 kVA	
Cable length		Standard: 3 / 5 / 10 / 15 / 20 m Flexible: 5 / 10 / 15 / 20 m	
Safety standard		CE, KCs, NRTL	

*1: Do not apply the load exceeding the maximum payload. *2: Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) at payload setting 2kg, path coordinates optimized for maximum speed.
 *3: Set the parameters by the Inertia command according to the load and end effector status (refer to the manual for the parameter calculation method). *4: Complies with ISO Class 4 (ISO14644-1).
 *5: Main resin parts of the ESD model use conductive materials or apply plate processing. For the tip of the Manipulator (tool mounting part), we have confirmed that it is +/- 5 V or less even immediately after operating the measurement under our standard.
 *6: Varies according to operating environment and program.
 The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

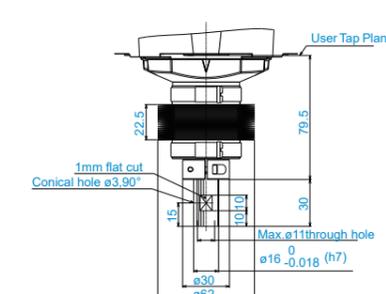
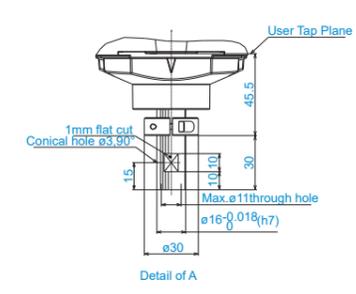
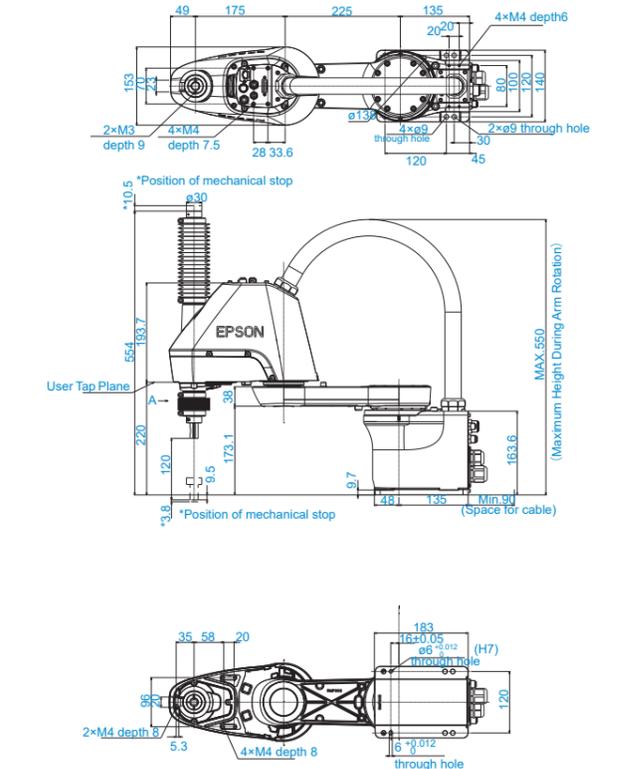
Outer Dimensions

[Unit: mm]

Standard-model

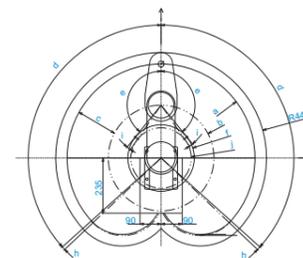


Cleanroom-model

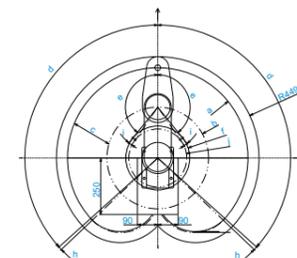


Motion Range

LS4-C401S



LS4-C401C



Model	LS4-C401□	
	Standard-model	Cleanroom-model
a Arm #1+ Arm #2 (mm)	400	400
b Arm #1 length (mm)	225	225
c Arm #2 length (mm)	175	175
d Joint #1 motion angle (°)	132	132
e Joint #2 motion angle (°)	141	141
f Motion range (mm)	141.6	141.6
h Angle to the mechanical stop of Joint #1 (°)	1.5	1.5
i Angle to the mechanical stop of Joint #2 (°)	4.3	4.3
j Mechanical stop area (mm)	128.5	128.5

LS series reliability and performance with improved operating ease

- Built-in Ethernet port on arm for easier camera connectivity
- Diagonally oriented rear ducting for a lower profile that helps reduce installation space requirements
- Battery-less encoder for reduced maintenance



Model Number	LS6 - B 60 2 S		
Payload	6	6 kg	
Arm length	50	60	70
Installation environment	S	Standard	
	C	Cleanroom	
Joint #3 stroke	2	200mm: Standard-model 170mm: Cleanroom-model (with bellows)	

Specifications

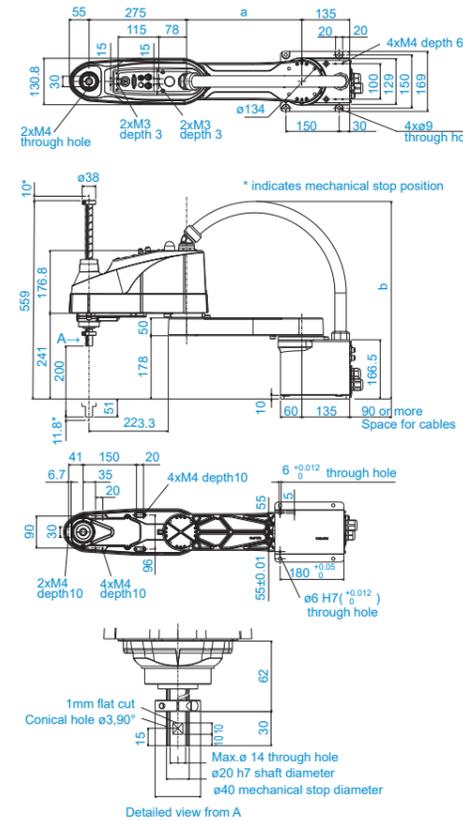
Model number		LS6-B502□	LS6-B602□	LS6-B702□
Arm length	Arm #1+#2	500 mm	600 mm	700 mm
	Arm #3	200 mm: LS6-B□2S 170 mm: LS6-B□2C		
Payload *1	Rated	2 kg		
	Max.	6 kg		
Repeatability	Joints #1+#2	±0.02 mm		
	Joint #3	±0.01 mm		
	Joint #4	±0.01 deg		
Standard cycle time *2		0.39 sec	0.40 sec	0.42 sec
Maximum operating speed	Joints #1+#2	7120 mm/sec	7850 mm/sec	8590 mm/sec
	Joint #3	1100 mm/sec		
	Joint #4	2000 deg/sec		
Joint #4 allowable moment of inertia *3	Rated	0.01 kg·m ²		
	Max.	0.12 kg·m ²		
Joint #3 press force		100 N		
Installation environment		Standard / Cleanroom *4		
Mounting method		Tabletop mounting		
Weight (not include the weight of cables)		17 kg	18 kg	
Installed wire for customer use		D-sub (15 pin x 1), RJ45 (8 pin x 1, CAT 5e)		
Installed pneumatic tube for customer use		ø4 mm x 1, ø6 mm x 2 (Allowable pressure: 0.59 MPa [6 kgf/cm ²])		
Compatible controller		RC90-B		
Power supply		AC200-240 V Single phase		
Maximum rated capacity *5		1.1 kVA		
Cable length		3 / 5 / 10 m		
Safety standard		CE, KCs		

*1: Do not apply the load exceeding the maximum payload. *2: Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) with Accel 120% and 2 kg payload (path coordinates optimized for maximum speed). *3: If the center of gravity is at the center of each arm. If the center of gravity is not at the center of each arm, set the eccentric quantity using INERTIA command. *4: Complies with ISO Class 4 cleanroom standards. *5: It depends on environment and motion program. The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

Outer Dimensions

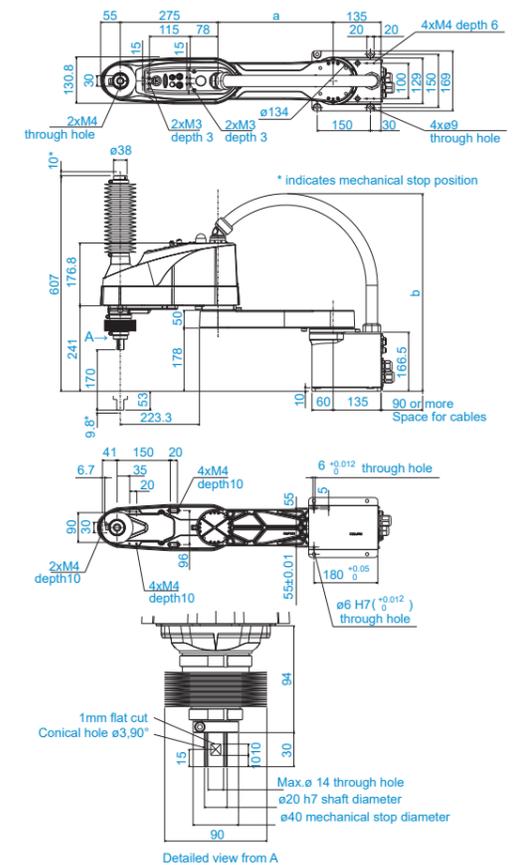
[Unit: mm]

Standard-model



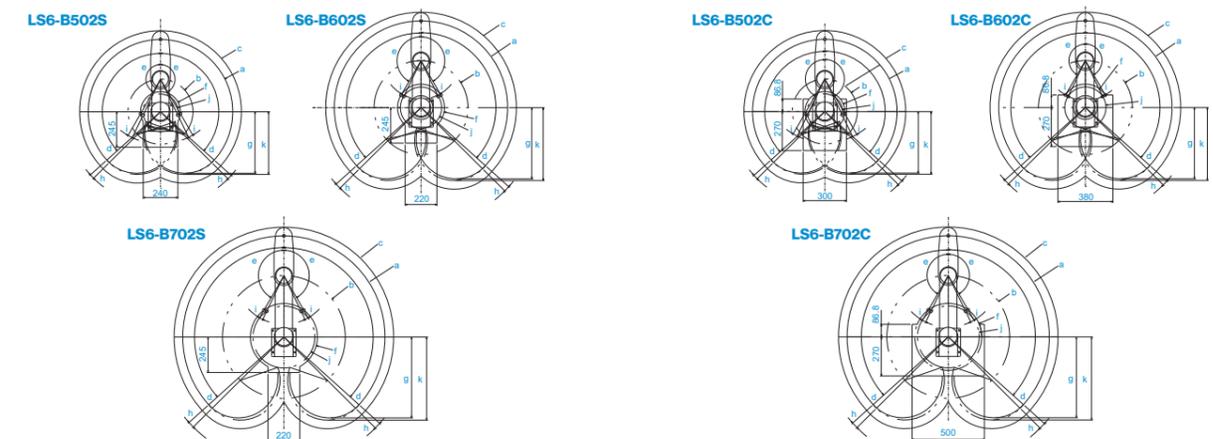
	LS6-B502S	LS6-B602S	LS6-B602S-V1	LS6-B702S
a	225	325	325	425
b	529	559	559	589

Cleanroom-model



	LS6-B502S	LS6-B602S	LS6-B702C
a	225	325	425
b	529	559	589

Motion Range



Model	LS6-B502□	LS6-B602□	LS6-B702□
a Arm #1 + Arm #2 length (mm)	500	600	700
b Arm #1 length (mm)	225	325	425
d Joint #1 motion angle (°)	132		
e Joint #2 motion angle (°)	150		
f Motion range (mm)	138.1	162.6	232
g Motion range at the rear (mm)	425.6	492.5	559.4
h Angle of the Joint #1 mechanical stop (°)	2.8		
i Angle of the Joint #2 mechanical stop (°)	4.2		
j Mechanical stop area (mm)	121.8	142.5	214

Achieve higher productivity and heavier payloads - with proven reliability

- Successor to Epson's best-selling LS series, delivering enhanced productivity and payload while maintaining trusted reliability
- Cycle time improved for greater throughput and efficiency
- Supports heavier payloads for higher-load applications
- Compatible with the RC800-A controller for advanced functions and flexible system integration
- Battery-less encoder for reduced maintenance



Model Number **LS8-C602S**

Payload	8 : 8kg	Installation environment	S : Standard
Arm length	50 : 500mm		C : Cleanroom
	60 : 600mm		
	70 : 700mm	Joint #3 stroke	2 : 200mm: Standard-model
			1 : 170mm: Cleanroom-model (with bellows)



These labels are affixed to the RC800-A, RC700-E, and their compatible manipulators that comply with applicable safety standards (ISO/NRTL certified).

Specifications

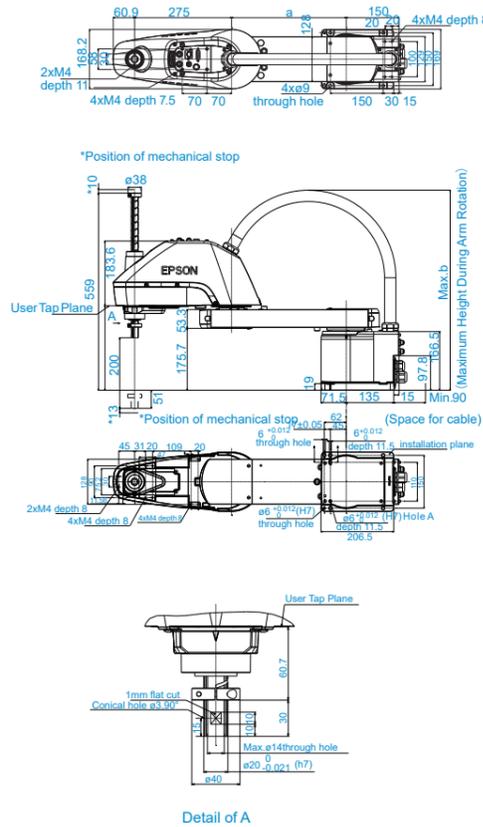
Model number	LS8-C502S	LS8-C502C	LS8-C602S	LS8-C602C	LS8-C702S	LS8-C702C
Arm length	Arm #1+#2	500 mm		600 mm		700 mm
	Arm #3	200 mm	170 mm	200 mm	170 mm	200 mm
Payload *1	Rated	3.0 kg				
	Max.	8.0 kg				
Repeatability	Joints #1+#2	±0.02 mm				
	Joint #3	±0.01 mm				
	Joint #4	±0.01 deg				
Standard cycle time *2	0.298 sec		0.314 sec		0.344 sec	
Maximum operating speed	Joints #1+#2	7120 mm/sec		7850 mm/sec		8590 mm/sec
	Joint #3	1100 mm/sec				
	Joint #4	2000 deg/sec				
Joint #4 allowable moment of inertia *3	Rated	0.01 kg·m ²				
	Max.	0.12 kg·m ²				
Joint #3 press force	100 N					
Installation environment	Standard	Cleanroom *4 & ESD *5	Standard	Cleanroom *4 & ESD *5	Standard	Cleanroom *4 & ESD *5
Mounting method	Tabletop mounting					
Weight (not include the weight of cables)	19 kg		20 kg		21 kg	
Installed wire for customer use	D-sub (15 pin x 1, Current capacity 1 A(Rated)), RJ45 (8 pin x 1)					
Installed pneumatic tube for customer use	ø4 mm x 1, ø6 mm x 2 (Allowable pressure: 0.59 Mpa [6 kgf/cm ² : 86 psi])					
Compatible controller	RC800-A					
Power supply	AC200-240 V Single phase					
Maximum rated capacity*6	1.5 kVA					
Cable length	Standard: 3 / 5 / 10 / 15 / 20 m Flexible: 5 / 10 / 15 / 20 m					
Safety standard	CE, KCs, NRTL					

*1: Do not apply the load exceeding the maximum payload. *2: Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) at payload setting 2kg, path coordinates optimized for maximum speed.
 *3: Set the parameters by the Inertia command according to the load and end effector status (refer to the manual for the parameter calculation method). *4: Complies with ISO Class 4 (ISO14644-1).
 *5: Main resin parts of the ESD model use conductive materials or apply plate processing. For the tip of the Manipulator (tool mounting part), we have confirmed that it is +/- 5 V or less even immediately after operating the measurement under our standard.
 *6: Varies according to operating environment and program.
 The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

Outer Dimensions

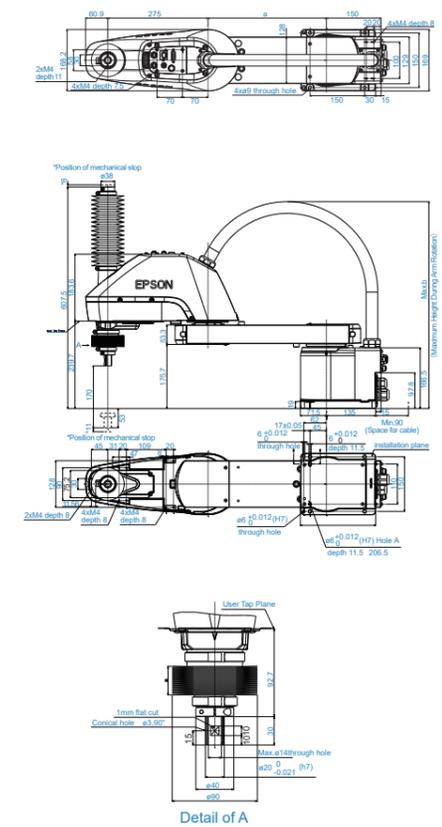
[Unit: mm]

Standard-model



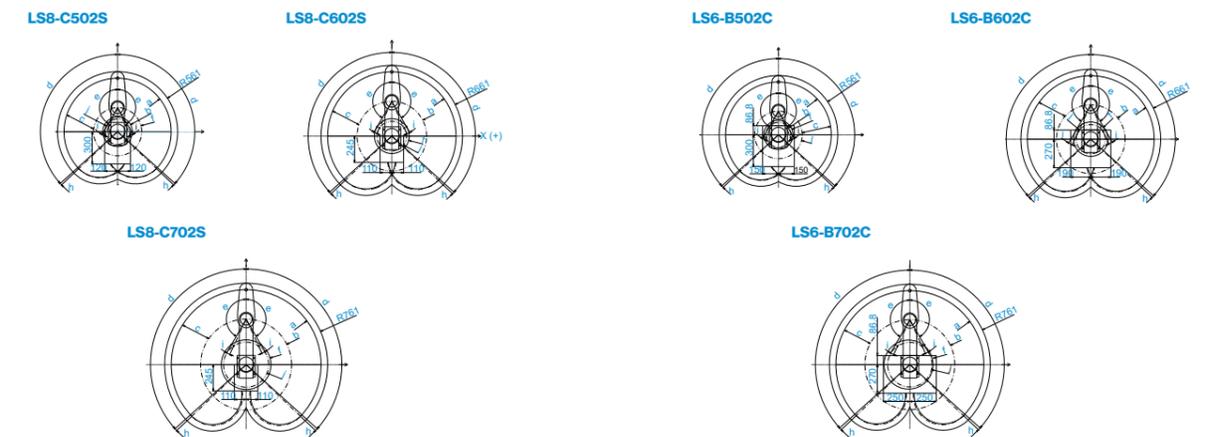
	LS8-C502S	LS8-C602S	LS8-B702S
a	225	325	425
b	560	590	620

Cleanroom-model



	LS8-C502C	LS8-C602C	LS8-B702C
a	225	325	425
b	560	590	620

Motion Range



Model	LS8-C502□	LS8-C602□	LS8-C702□
a Arm #1+Arm #2 (mm)	500	600	700
b Arm #1 length (mm)	225	325	425
c Arm #2 length (mm)	275		
d Joint #1 motion angle (°)	132		
e Joint #2 motion angle (°)	150		
f Motion range (mm)	138.1	162.6	232
h Angle to the mechanical stop of Joint #1 (°)	1.5		
i Angle to the mechanical stop of Joint #2 (°)	5.1		
j Mechanical stop area (mm)	118.3	138.3	210.3

A versatile new addition to the proven reliability and performance of the LS series

- 10kg payload for applications requiring high inertia or the use of complex effectors
- A choice of three arm lengths and two ball screw lengths for high configurability to suit a variety of application requirements
- Built-in Ethernet port for easy camera connectivity
- Battery-less encoder for reduced maintenance



Model Number		LS10 - B	
Payload	10	10kg	
Arm length	60 / 70 / 80	600mm / 700mm / 800mm	
Installation environment	S / C / C-FZ	Standard / Cleanroom / Food grease for Z-axis	
Joint #3 stroke	2 / 3	200mm / 170mm / 300mm / 270mm (with bellows)	

Specifications

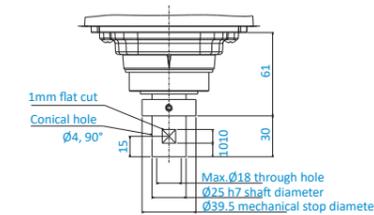
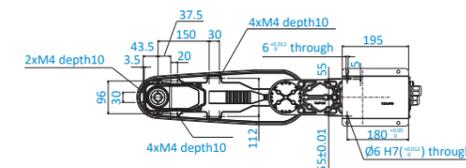
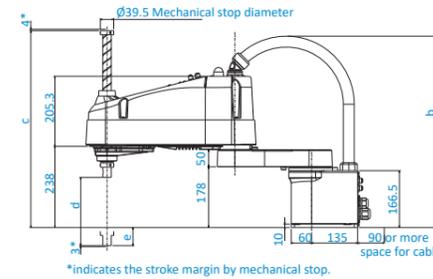
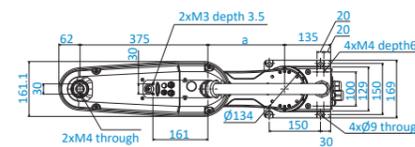
Model number		LS10-B60	LS10-B70	LS10-B80
Arm length	Arm #1+#2	600 mm	700 mm	800 mm
	Arm #3	200 mm: LS10-B□2S 170 mm: LS10-B□2C 300 mm: LS10-B□3S 270 mm: LS10-B□3C, LS10-B□3C-FZ		
Payload *1	Rated	5 kg		
	Max.	10 kg		
Repeatability	Joints #1+#2	±0.02 mm		
	Joint #3	±0.01 mm		
	Joint #4	±0.01 deg		
Standard cycle time *2		0.39 sec	0.41 sec	0.44 sec
Maximum operating speed	Joints #1+#2	9100 mm/sec	9800 mm/sec	10500 mm/sec
	Joint #3	1100 mm/sec		
	Joint #4	2700 deg/sec		
Joint #4 allowable moment of inertia *3	Rated	0.02 kg·m ²		
	Max.	0.3 kg·m ²		
Joint #3 press force		200 N		
Installation environment		Standard / Cleanroom *4 / C-FZ (ISO4, Not ESD applied)		
Mounting method		Tabletop mounting		
Weight (not include the weight of cables)		23 kg	24 kg	
Installed wire for customer use		D-sub (15 pin x 1, Current capacity 1A(Rated)), RJ45 (8 pin x 1, CAT 5e)		
Installed pneumatic tube for customer use		ø4 mm x 1, ø6 mm x 2 (Allowable pressure: 0.59 Mpa [6 kgf/cm ² : 86 psi])		
Compatible controllers		RC90-B		
Power supply		AC200-240 V Single phase		
Maximum rated capacity *5		1.8 kVA		
Cable length		3 / 5 / 10 m		
Safety standard		CE, KCs		

*1: Do not apply the load exceeding the maximum payload. *2: Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) with Accel 120% and 2 kg payload (path coordinates optimized for maximum speed). *3: If the center of gravity is at the center of each arm. If the center of gravity is not at the center of each arm, set the eccentric quantity using INERTIA command. *4: Complies with ISO Class 4 cleanroom standards. *5: It depends on environment and motion program. The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

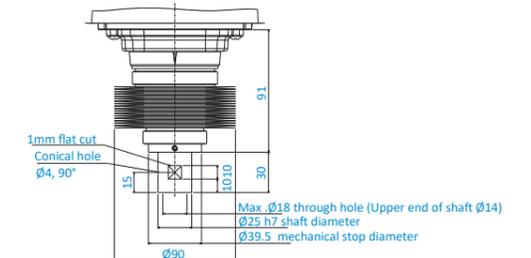
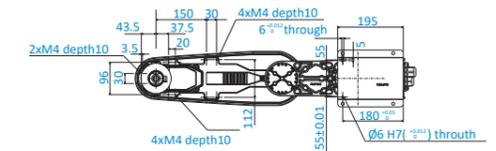
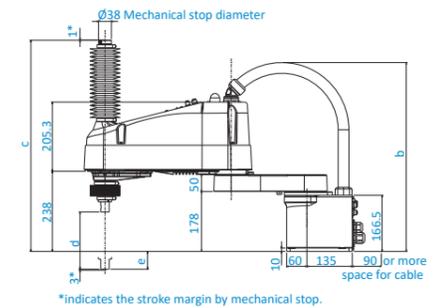
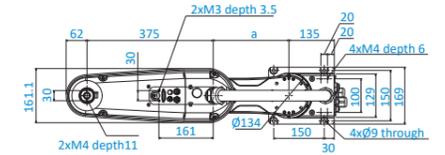
Outer Dimensions

[Unit: mm]

Standard-model



Cleanroom-model

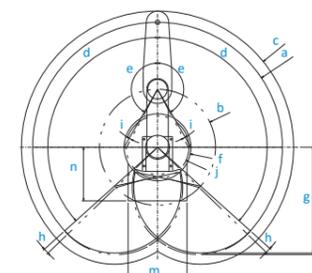


	LS10-B602S	LS10-B603S	LS10-B702S	LS10-B703S	LS10-B802S	LS10-B803S
a	225	225	325	325	425	425
b	Max.565	Max.565	Max.580	Max.580	Max.580	Max.580
c	577	677	577	677	577	677
d	200	300	200	300	200	300
e	53	153	53	153	53	153

	LS10-B602C	LS10-B603C	LS10-B702C	LS10-B703C	LS10-B802C	LS10-B803C
a	225	225	325	325	425	425
b	Max.565	Max.565	Max.580	Max.580	Max.580	Max.580
c	627	727	627	727	627	727
d	170	270	170	270	170	270
e	53	153	53	153	53	153

Motion Range

Standard-model / Cleanroom-model



Model	Standard			Cleanroom		
	LS10-B602S/B603S	LS10-B702S/B703S	LS10-B802S/B803S	LS10-B602C/B603C	LS10-B702C/B703C	LS10-B802C/B803C
a Length of Arm #1+Arm #2 (mm)	600	700	800	600	700	800
b Length of Arm #1 (mm)	225	325	425	225	325	425
c Max. motion range (mm)	663	763	863	663	763	863
d Motion range of Joint #1 (°)	132			132		
e Motion range of Joint #2 (°)	150			150		
f Motion range (mm)	212	188	213	212	188	213
g Motion range at the rear (mm)	526	592	659	526	592	659
h Joint #1 angle to hit mechanical stop (°)	2			2		
i Joint #2 angle to hit mechanical stop (°)	2			2		
j Mechanical stop area (mm)	206	176	200	206	176	200
k Mechanical stop area at the rear (mm)	531	601	670	531	601	670
m Motion range (mm)	420	330	320	420	400	480
n Motion range (mm)	300			320		

LS20

NEW
PRODUCT



Proven LS performance - now enhanced with RC800-A functionality

- Maintains the high productivity and reliability of the LS20 series
- Compatible with the RC800-A controller for advanced functions and flexible system integration
- Battery-less encoder for reduced maintenance



Model Number **LS20 - C 80 4 S**

Payload	Installation environment
20 : 20kg	S : Standard
	C : Cleanroom
Arm length	Joint #3 stroke
80 : 800mm	4 : 420mm : Standard-model
A0 : 1000mm	4 : 390mm : Cleanroom-model (with bellows)



These labels are affixed to the RC800-A, RC700-E, and their compatible manipulators that comply with applicable safety standards (ISO/NRTL certified).

Specifications

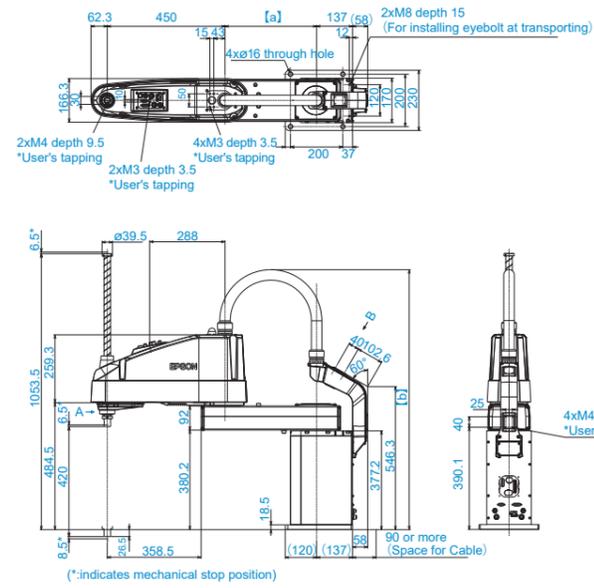
Model number		LS20-C804□	LS20-CA04□
Arm length	Arm #1+#2	800 mm	1000 mm
	Arm #3	4 : 420 mm : LS20-C□4S 390 mm : LS20-C□4C	
Payload *1	Rated	10 kg	
	Max.	20 kg	
Repeatability	Joints #1+#2	±0.025 mm	
	Joint #3	±0.01 mm	
	Joint #4	±0.01 deg	
Standard cycle time *2		0.39 sec	0.43 sec
Maximum operating speed	Joints #1+#2	9940 mm/sec	11250 mm/sec
	Joint #3	2300 mm/sec	
	Joint #4	1400 deg/sec	
Joint #4 allowable moment of inertia *3	Rated	0.05 kg·m ²	
	Max.	1.00 kg·m ²	
Joint #3 press force		250 N	
Installation environment		Standard / Cleanroom *4	
Mounting method		Tabletop mounting	
Weight (not include the weight of cables)		48 kg	51 kg
Installed wire for customer use		D-sub (15 pin x 1, Current capacity 1 A (Rated)), D-sub (9 pin x 1, Current capacity 1 A (Rated)), RJ45 (8 pin x 1)	
Installed pneumatic tube for customer use		ø6 mm x 2, ø8 mm x 2 (Allowable pressure: 0.59 Mpa [6 kgf/cm ² : 86 psi])	
Compatible controller		RC800-A	
Power supply		AC200-240 V Single phase	
Maximum rated capacity *5		2.4 kVA	
Cable length		3 / 5 / 10 m	
Safety standard		CE, KCs, NRTL	

*1 : Do not apply the load exceeding the maximum payload. *2 : Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) with Accel 120% and 2 kg payload (path coordinates optimized for maximum speed).
 *3 : If the center of gravity is at the center of each arm. If the center of gravity is not at the center of each arm, set the eccentric quantity using INERTIA command.
 *4 : Complies with ISO Class 4 cleanroom standards. *5 : It depends on operating environment and operation program.
 *These information is based on the LS20-C series; for information on the LS20-B series, Please contact sales representative.
 The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

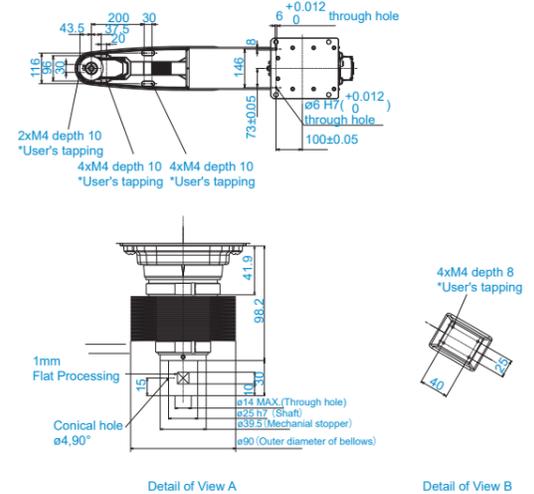
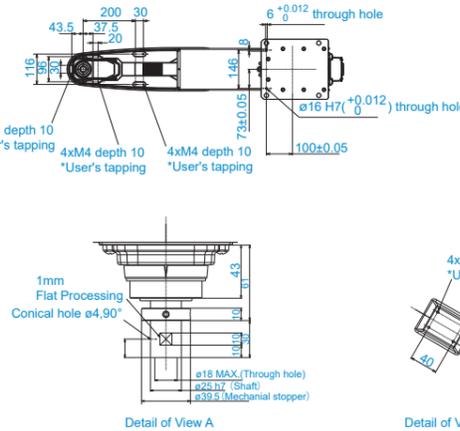
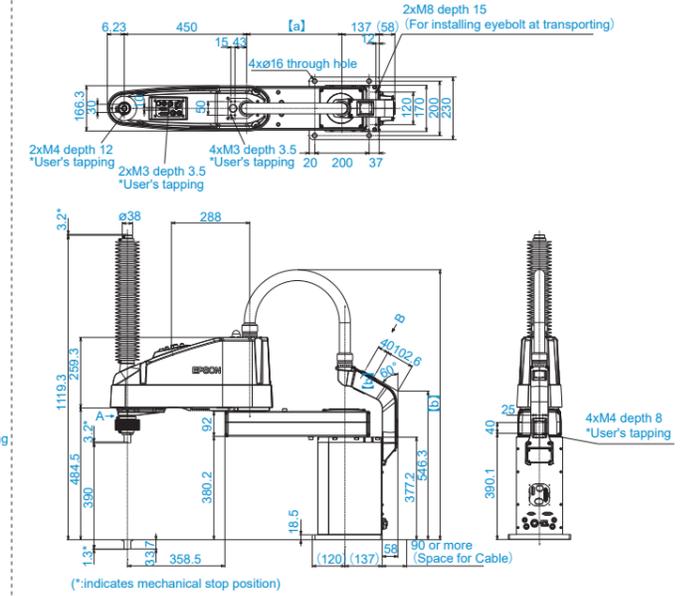
Outer Dimensions

[Unit: mm]

Standard-model



Cleanroom-model

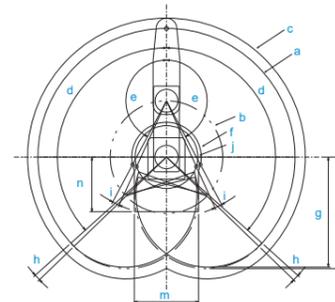


	LS20-C804S	LS20-CA04S
a	350	550
b	Max.1000	Max.1100

	LS20-C804C	LS20-CA04C
a	350	550
b	Max.1000	Max.1100

Motion Range

Standard-model / Cleanroom-model



Model	Standard		Cleanroom	
	LS20-C804S	LS20-CA04S	LS20-C804C	LS20-CA04C
a Length of Arm #1+Arm #2 (mm)	800	1000	800	1000
b Length of Arm #1 (mm)	350	550	350	550
c Length of Arm #2 (mm)	864	1064	864	1064
d Motion range of Joint #1 (°)	132			
e Motion range of Joint #2 (°)	152			
f Motion range (mm)	216.5	260.7	216.5	260.7
g Motion range at the rear (mm)	684.2	818	684.2	818
h Joint #1 angle to hit mechanical stop (°)	2			
i Joint #2 angle to hit mechanical stop (°)	3.6			
j Mechanical stop area (mm)	195.3	232.8	195.3	232.8
k Mechanical stop area at the rear (mm)	693.1	832.1	693.1	832.1
m Motion range (mm)	400	290	400	330
n Motion range (mm)	340	265	340	265

LS50

NEW
PRODUCT



Unleash higher payload and productivity - without changing footprint

■ With the same compact footprint and slim profile as the LS20, the LS50 delivers higher payload and allowable moment of inertia, meeting the demand to handle heavier loads faster - without redesigning your system.

■ Battery-less encoder for reduced maintenance



Model Number	LS50 - CA0 □ S	
Payload	50 : 50kg	Installation environment
Arm length	A0 : 1000mm	S : Standard
		Joint #3 stroke
		2 : 210mm
		4 : 400mm



These labels are affixed to the RC800-A, RC700-E, and their compatible manipulators that comply with applicable safety standards (ISO/NRTL certified).

Specifications

Model number		LS50-CA02□S	LS50-CA04□S
Arm length	Arm #1+#2	210 mm	1000 mm
	Arm #3		400 mm
Payload *1	Rated		30 kg
	Max.		50 kg
Repeatability	Joints #1+#2	±0.05 mm	
	Joint #3	±0.02 mm	
	Joint #4	±0.01 deg	
Maximum operating speed	Joints #1+#2	6100 mm/sec	
	Joint #3	770 mm/sec	
	Joint #4	660 deg/sec	
Joint #4 allowable moment of inertia *3	Rated	1 kg·m ²	
	Max.	2.45 kg·m ²	
Installation environment	Standard		
Mounting method	Tabletop mounting		
Weight (not include the weight of cables)	60 kg	61 kg	
Installed wire for customer use	D-sub (15 pin x 1), D-sub (9 pin x 1), RJ45 (8 pin x 1, CAT 5e)		
Installed pneumatic tube for customer use	ø6 mm x 2, ø8 mm x 2 (Allowable pressure: 0.59 Mpa [6 kgf/cm ² : 86 psi])		
Compatible controller	RC800-A		
Power supply	AC200-240 V Single phase		
Maximum rated capacity *5	2.4 kVA		
Cable length	Standard: 3 / 5 / 10 / 15 / 20 m Flexible: 5 / 10 / 15 / 20 m		
Safety standard	CE, KCs, NRTL		

*1 : Do not apply the load exceeding the maximum payload.

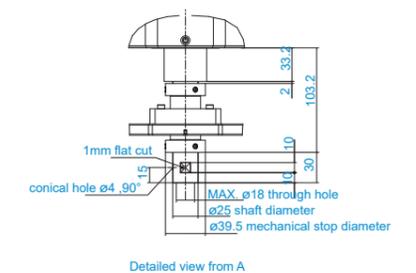
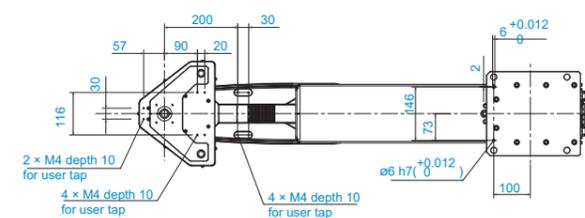
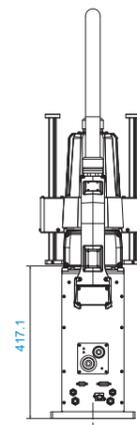
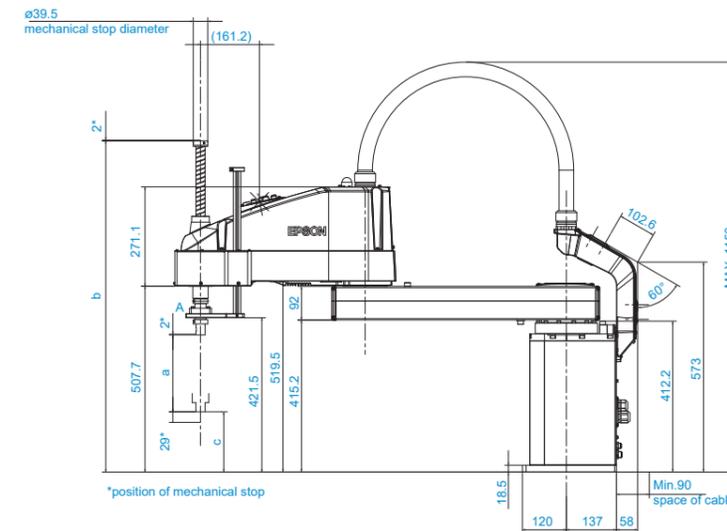
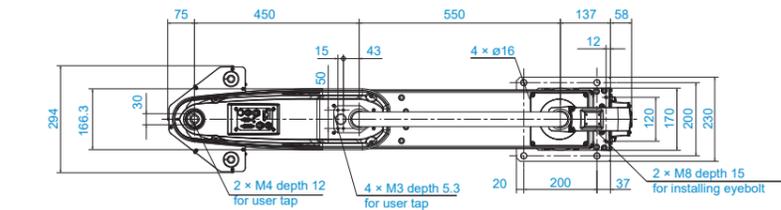
*2 : In the case where the center of gravity is at the center of Joint #4. If the center of gravity is not at the center of Joint #4, set the parameter using Inertia setting.

*3 : It depends on operating environment and operation program.

*4 : The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

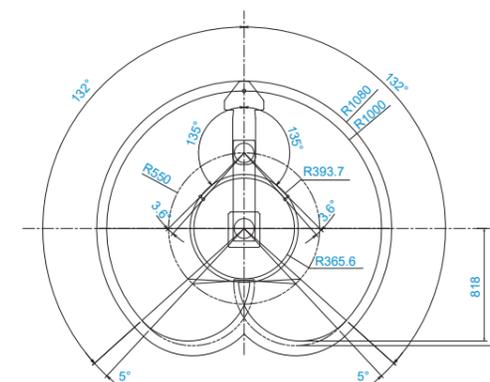
Outer Dimensions

[Unit: mm]



Detailed view from A

Motion Range



Essential functionality Smart choice for parts transfer

- 400mm Reach; 3Kg Payload
- Exceptional Price Performance
- Compact, low-profile body saves space
- Same Powerful yet easy to use Epson RC+ software as our high end robots



Model Number LA3 - A 40 1 S

Model Number	LA3 - A 40 1 S
Payload	3 : 3kg
Arm length	40 : 400mm
Joint #3 stroke	1 : 150mm
Installation environment	S : Standard

Specifications

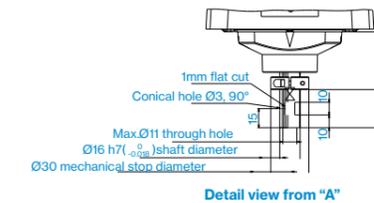
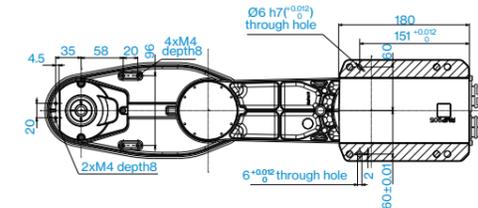
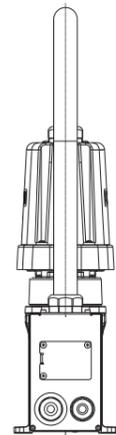
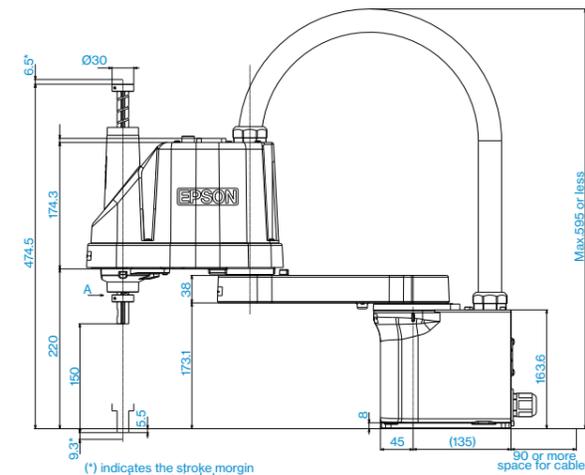
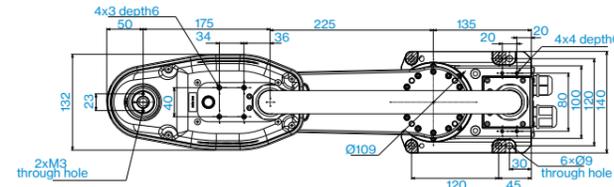
Model number		LA3-A401S
Arm length	Arm #1+#2	400 mm
	Arm #3	150 mm
Payload *1	Rated	1 kg
	Max.	3 kg
Repeatability	Joints #1+#2	±0.01 mm
	Joint #3	±0.01 mm
	Joint #4	±0.01 deg
Standard cycle time *2		0.404 sec
Maximum operating speed	Joints #1+#2	6000 mm/sec
	Joint #3	1100 mm/sec
	Joint #4	2600 deg/sec
Joint #4 allowable moment of inertia *3	Rated	0.005 kg·m ²
	Max.	0.05 kg·m ²
Joint #3 press force		100 N
Installation environment		Standard
Mounting method		Tabletop mounting
Weight (not include the weight of cables)		12 kg
Installed wire for customer use		-
Installed pneumatic tube for customer use		-
Compatible controller		RC800L
Power supply		AC200-240 V Single phase
Maximum rated capacity*4		0.8KVA
Cable length		Standard: 3 / 5 / 10 / 15 / 20 m
Safety standard		CE

*1: Do not apply the load exceeding the maximum payload. *2: Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) at rated payload setting, path coordinates optimized for maximum speed.
*3: Set the parameters by the Inertia command according to the load and end effector status (refer to the instruction manual for the parameter calculation method).
*4: Varies according to operating environment and program.

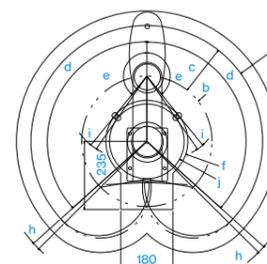
The values of the products listed on this page are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

Outer Dimensions

[Unit: mm]



Motion Range



Model	LA3-A401S	
a	Arm #1+Arm #2 length (mm)	400
b	Arm #1 length (mm)	225
c	Arm #2 length (mm)	175
d	Joint #1 motion angle (°)	132
e	Joint #2 motion angle (°)	141
f	Motion range (mm)	141.6
h	Angle of the Joint #1 mechanical stop (°)	2.8
i	Angle of the Joint #2 mechanical stop (°)	4.2
j	Mechanical stop area (mm)	128.8

LA6

NEW PRODUCT

Essential functionality Smart choice for parts transfer

- Max. 700mm Reach; 6Kg Payload
- Exceptional Price Performance
- Compact, low-profile body saves space
- Same Powerful yet easy to use Epson RC+ software as our high end robots



Model Number	LA6 - A □ 0 2 S		
Payload	6	5	2
Arm length	50	60	70
Installation Environment	5	2	
Joint #3 stroke			2

Payload: 6: 6kg
 Arm length: 50: 500mm, 60: 600mm, 70: 700mm
 Installation Environment: 5: Standard
 Joint #3 stroke: 2: 200mm

Specifications

Model number		LA6-A502S	LA6-A602S	LA6-A702S
Arm length	Arm #1+#2	500mm	600mm	700mm
	Arm #3		200mm	
Payload *1	Rated		2kg	
	Max.		6kg	
Repeatability	Joints #1+#2		±0.02mm	
	Joint #3		±0.01mm	
	Joint #4		±0.01deg	
Standard cycle time *2		0.396 sec	0.404 sec	0.428 sec
Maximum operating speed	Joints #1+#2	6150 mm/sec	6800 mm/sec	7450 mm/sec
	Joint #3		1100 mm/sec	
	Joint #4		2000 deg/sec	
Joint #4 allowable moment of inertia *3	Rated		0.01 kg·m ²	
	Max.		0.12 kg·m ²	
Joint #3 press force			100N	
Installation environment			Standard	
Mounting method		Tabletop mounting		
Weight (not include the weight of cables)		16 kg		17 kg
Installed wire for customer use				-
Installed pneumatic tube for customer use				-
Compatible controller		RC800L		
Power supply		AC200-240 V Single phase		
Maximum rated capacity*4		0.9kVA		
Cable length		Standard: 3 / 5 / 10 / 15 / 20 m		
Safety standard		CE		

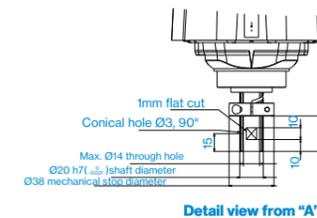
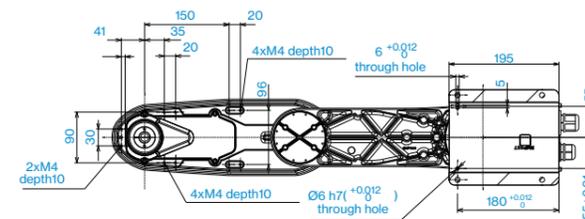
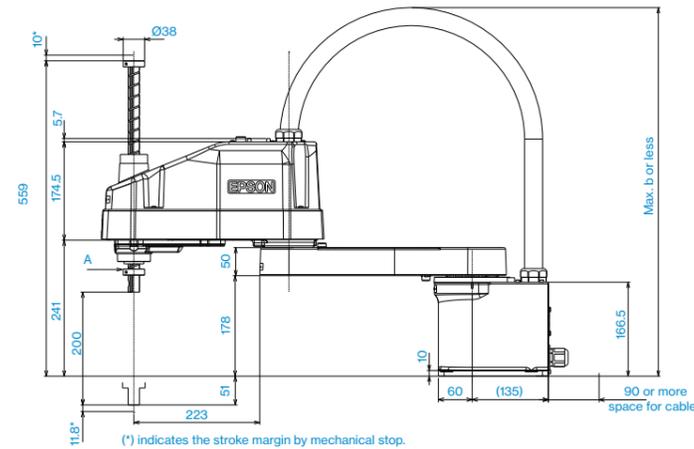
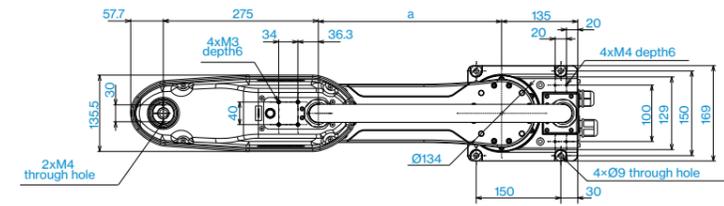
*1: Do not apply the load exceeding the maximum payload. *2: Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) at rated payload setting, path coordinates optimized for maximum speed.
 *3: Set the parameters by the Inertia command according to the load and end effector status (refer to the instruction manual for the parameter calculation method).
 *4: Varies according to operating environment and program.

The values of the products listed on this page are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

Outer Dimensions

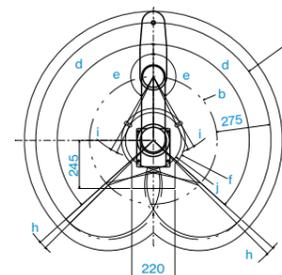
[Unit: mm]

Standard-model



	LA6-A502S	LA6-A602S	LA6-A702S
a	225	325	425
b	610	660	685

Motion Range



Model	LA6-A502S	LA6-A602S	LA6-A702S
a Arm #1 + Arm #2 length (mm)	500	600	700
b Arm #1 length (mm)	225	325	425
c Arm #2 length (mm)		275	
d Joint #1 motion angle (°)		132	
e Joint #2 motion angle (°)		150	
f Motion range (mm)	138.1	162.6	232
h Angle of the Joint #1 mechanical stop (°)		2.8	
i Angle of the Joint #2 mechanical stop (°)		4.2	
j Mechanical stop area (mm)	121.8	142.5	214

T6

An all-in-one model that redefines efficiency -smarter installation, smarter costs-

- Handles up to 6kg with 600mm arm length
- Built-in controller reduces installation space and cabling requirements
- Convenient I/O ports located close to effector (including 24V power supply)
- Operates on AC100V-240V power
- Battery-less encoder for reduced maintenance



Model Number	T6 - B60 2 S
Payload	6 : 6kg
Installation environment	S : Standard
Arm length	60 : 600mm
Joint #3 stroke	2 : 200mm

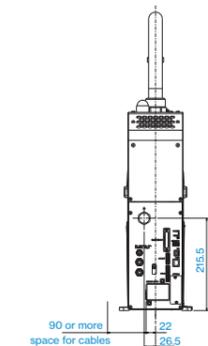
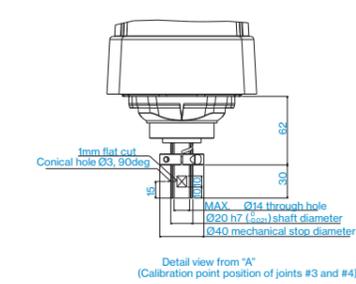
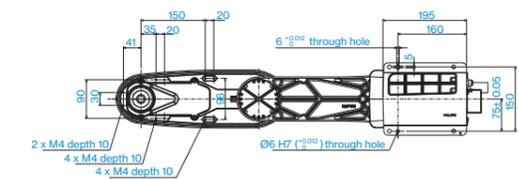
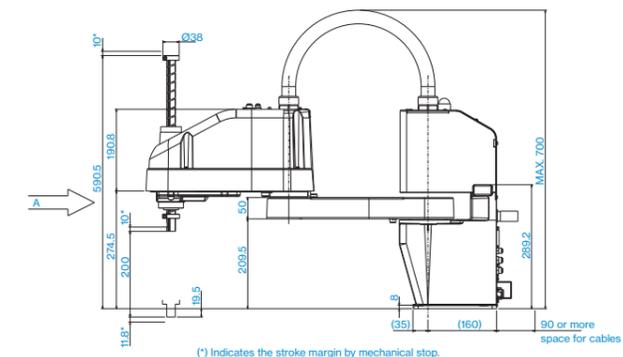
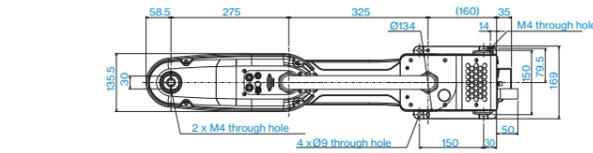
Specifications

Model number		T6-B602S
Arm length	Arm #1+#2	600 mm
	Arm #3	200 mm
Payload *1	Rated	2 kg
	Max.	6 kg
Repeatability	Joints #1+#2	± 0.04 mm
	Joint #3	± 0.02 mm
	Joint #4	± 0.02 deg
Standard cycle time *2		0.46 sec
Maximum operating speed	Joints #1+#2	4180 mm/sec
	Joint #3	1000 mm/sec
	Joint #4	1800 deg/sec
Joint #4 allowable moment of inertia *3	Rated	0.01 kg·m ²
	Max.	0.08 kg·m ²
Joint #3 press force		83 N
Installation environment		Standard (IP20)
Mounting method		Tabletop mounting
Weight (not include the weight of cables)		21 kg
Installed wire for customer use		Hand I/O: IN6/OUT4(D-sub 15 pin), User I/O: IN18/OUT12
Installed pneumatic tube for customer use		ø4 mm x 1, ø6 mm x 2 (Allowable pressure: 0.59 MPa [6 kgf/cm ² : 86 psi])
Compatible controller		Built in controller
Power supply		AC100-240 V Single phase
Maximum rated capacity *4		1.2 kVA
Cable length		5 m
Safety standard*5		CE, KCs

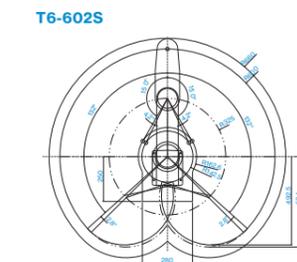
*1: Do not apply the load exceeding the maximum payload. *2: Cycle time based on round-trip arch motion (300mm horizontal, 25mm vertical) with 2 kg payload (path coordinates optimized for maximum speed).
 *3: If the center of gravity is at the center of each arm. If the center of gravity is not at the center of each arm, set the eccentric quantity using INERTIA command.
 *4: Varies according to operating environment and program.
 *5: The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

Outer Dimensions

[Unit: mm]



Motion Range



RS4

NEW
PRODUCT



Large working area in limited space

- Ceiling mounting rotating arm structure realizes cylindrical working area
- Large pallets can be placed efficiently, making equipment more compact
- Vibration control by GYROPLUS Technology
- Battery-less encoder for reduced maintenance



Model Number **RS4 - C 35 1**

Payload	Installation environment
4 : 4kg	S : Standard
	C : Cleanroom & ESD (Anti-static)
Arm length	Joint #3 stroke
35 : 350mm	1 : 130 mm (Standard)
	1 : 100 mm (Cleanroom & ESD)



These labels are affixed to the RC800-A, RC700-E, and their compatible manipulators that comply with applicable safety standards (ISO/NRTL certified).

Specifications

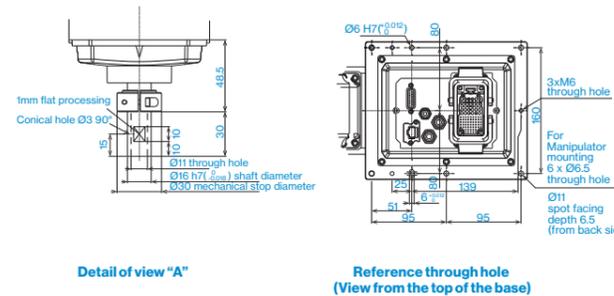
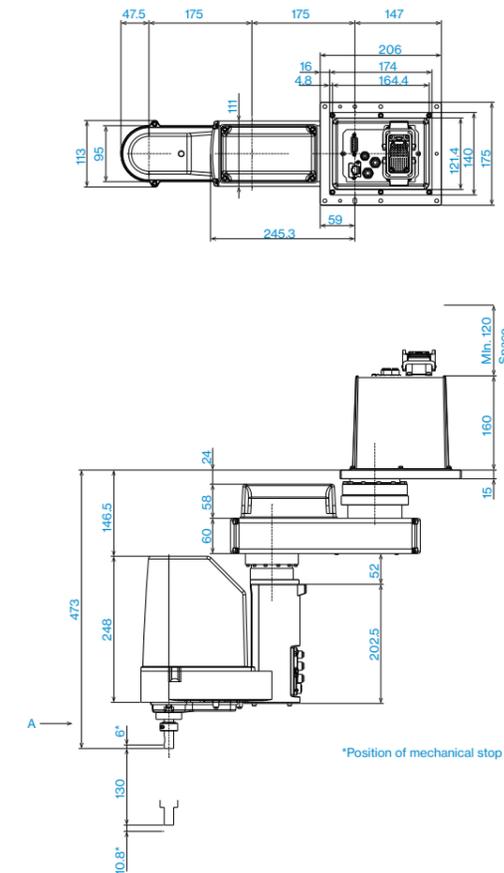
Model number		RS4-C351S	RS4-C351C
Arm length	Arm #1+#2	350 mm	
	Arm #3	130 mm	100 mm
	Rated	1.0 kg	
Payload *1	Max.	4.0 kg	
	Repeatability	Joints #1+#2	±0.010 mm
Joint #3		±0.01 mm	
Joint #4		±0.01 deg	
Standard cycle time *2		0.322 sec	
Maximum operating speed	Joints #1+#2	6237 mm/sec	
	Joint #3	1100 mm/sec	
	Joint #4	2600 deg/sec	
Joint #4 allowable moment of inertia *3	Rated	0.005 kg·m ²	
	Max.	0.050 kg·m ²	
Joint #3 press force		150 N	
Installation environment		Standard	Cleanroom*4 & ESD*5
Mounting method		Ceiling mounting	
Weight (not include the weight of cables)		16 kg	
Installed wire for customer use		D-sub (15 pin x 1, Current capacity 1A(Rated)), RJ45 (8 pin x 1)	
Installed pneumatic tube for customer use		ø4 mm x 1, ø6 mm x 2 (Allowable pressure: 0.59 MPa [6 kgf/cm ² : 86 psi])	
Compatible controller		RC800-A	
Power supply		AC200-240 V Single phase	
Maximum rated capacity *6		1.2 kVA	
Cable length		3 / 5 / 10 / 15 / 20 m	
Safety standard		CE, KCs, NRTL	

*1 : Do not apply the load exceeding the maximum payload. *2 : Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical) at payload setting 1kg, path coordinates optimized for maximum speed. *3 : Set the parameters by the Inertia command according to the load and end effector status (refer to the manual for the parameter calculation method). *4 : Complies with ISO Class 3 (ISO14644-1) and Fed-std209D Class 1 cleanroom standards. *5 : Main resin parts of the ESD model use conductive materials or apply plate processing. For the tip of the Manipulator (tool mounting part), we have confirmed that it is +/- 5V or less even immediately after operating the measurement under our standard. *6 : Varies according to operating environment and program. The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

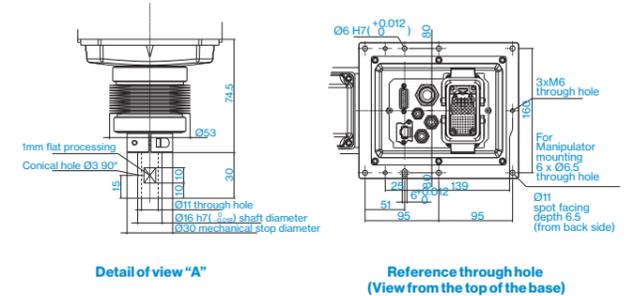
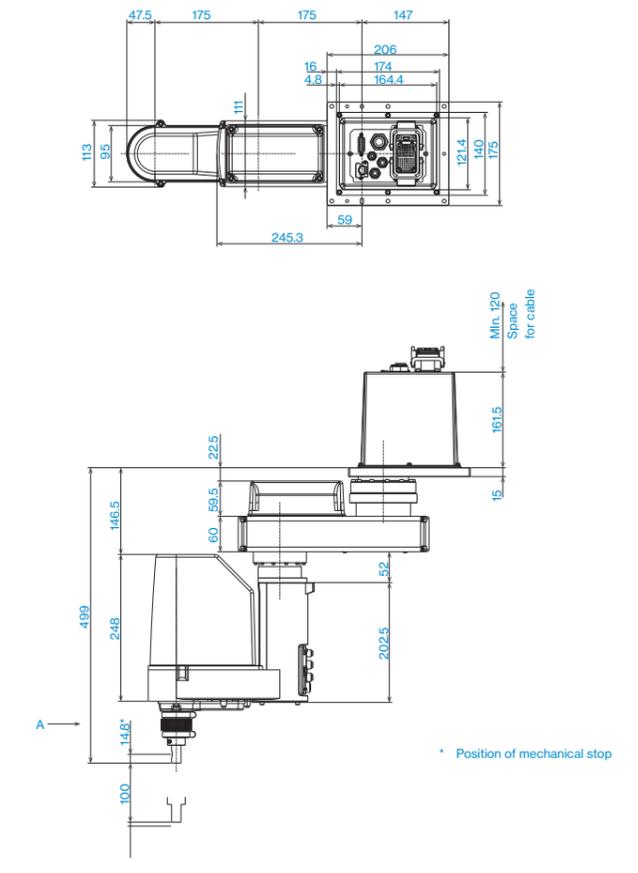
Outer Dimensions

[Unit: mm]

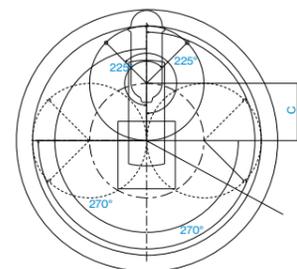
Standard-model



Cleanroom-model



Motion Range



Model	RS4-C351□
C Length of Arm #1 (mm)	175
Length of Arm #2 (mm)	175
Joint #1 motion angle (deg)	± 270
Joint #2 motion angle (deg)	± 225



Exclusive Epson technology ensures high speed and low vibration with heavy payloads

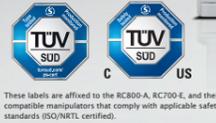
- Ideal for multi-effector pick-and-place with multiple workpieces, and for handling and assembly tasks with heavy payloads
- Battery-less encoder for reduced maintenance

1400mm

Long, slim, 1400mm arm for machine tending operation

- Long, slim arm minimizes interference with nearby machinery and can reach into narrow spaces
- Low weight and compact design greatly increase configuration flexibility

Model Number	C8- □ □ 14 0 1 S □ □
Payload	□ 8 : 8kg
Controller	□ A : RC700-A □ C : RC800-A
Arm length	□ 7 : 710mm *Only C-A series □ 9 : 900mm □ 14 : 1400mm
Brake equipment	□ 1 : Brakes on all joints
Mounting method	□ □ : Tabletop mounting □ R : Ceiling mounting □ W : Wall mounting
M/C cable exit direction	□ □ : Rearward □ B : Downward
Installation environment	□ S : Standard □ C : Cleanroom & ESD (electrostatic discharge) □ P : Protection(IP67)



These labels are affixed to the RC800-A, RC700-E, and their compatible manipulators that comply with applicable safety standards (ISO/NRTL certified).

*Product image is C-C series.

Specifications

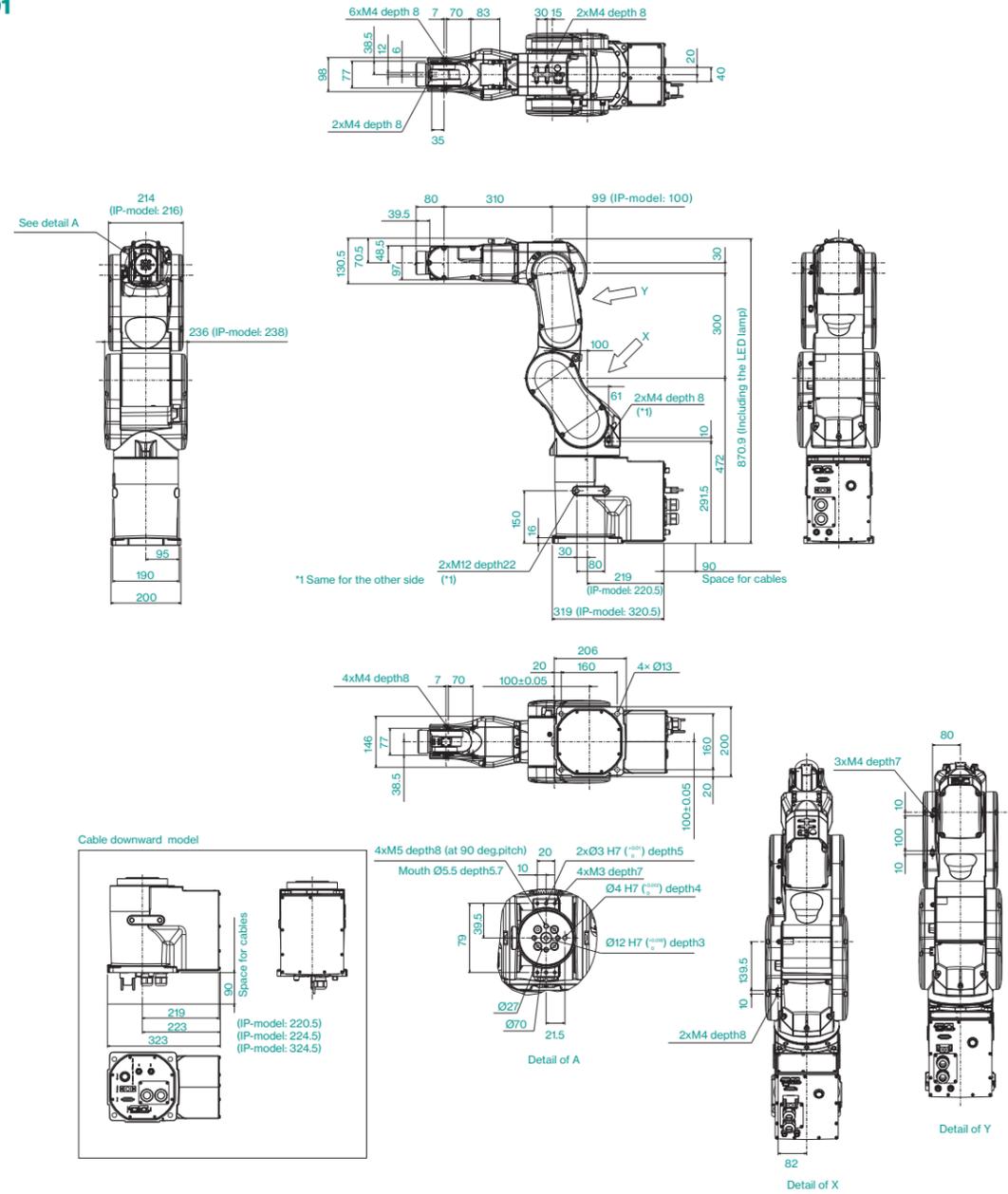
Model number		C8-A701 □□□	C8-C901□□□	C8-C1401□□□
Arm length	Point P: J1-J5 center	711.4 mm	901.1 mm	1400.6 mm
	J1-J6 Flange surface	791.4 mm	981.1 mm	1480.6 mm
Payload *1	Rated		3 kg	
	Maximum		8 kg	
Repeatability	Joints #1-#6	±0.02 mm	±0.03 mm	±0.05 mm
Maximum operating speed	Joint#1	331 deg/sec	294 deg/sec	200 deg/sec
	Joint#2	332 deg/sec	300 deg/sec	167 deg/sec
	Joint#3	480 deg/sec	360 deg/sec	200 deg/sec
	Joint#4		480 deg/sec	
	Joint#5		450 deg/sec	
	Joint#6		720 deg/sec	
Allowable moment of inertia *2	Joint #4		0.47 kg·m ²	
	Joint #5		0.47 kg·m ²	
	Joint #6		0.15 kg·m ²	
Installation environment	Standard / Cleanroom*3 & ESD*4 / Protection (IP67)			
Mounting method	Tabletop mounting / Ceiling mounting / Wall mounting			
Weight (not include the weight of cables)	49 kg (IP:53 kg)	53 kg (IP:57 kg)	63 kg (IP:66 kg)	
Installed wire for customer use	D-sub (15 pin x 1), RJ45 (8 pin x 1, CAT5e, Force Sensor 6 pin)			
Installed wire for customer use	ø6 mm x 2 (Allowable pressure: 0.59 MPa [6 kgf/cm ²])			
Compatible controller	C8-A: RC700-A C8-C: RC800-A			
Power supply	AC200-240 V Single phase			
Maximum rated capacity *5	2.5 kVA			
Cable length	Standard / Flexible: 3 / 5 / 10 / 15 / 20 m			
Safety standard	CE, KCs, NRTL			

*1: Do not apply the load exceeding the maximum payload. *2: If the center of gravity is at the center of each arm. If the center of gravity is not at the center of each arm, set the eccentricity using INERTIA command.
*3: Cleanliness level C8-C901: ISO Class 3 (ISO14644-1), C8-C1401: ISO Class 4 (ISO14644-1) *4: ESD specification uses resin materials with anti-static treatment. This model controls adhesion of dust due to electrification.
*5: Varies according to operating environment and program.
*These information is based on the C-C series; for information on the C-A series, Please contact sales representative. The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

Outer Dimensions

[Unit: mm]

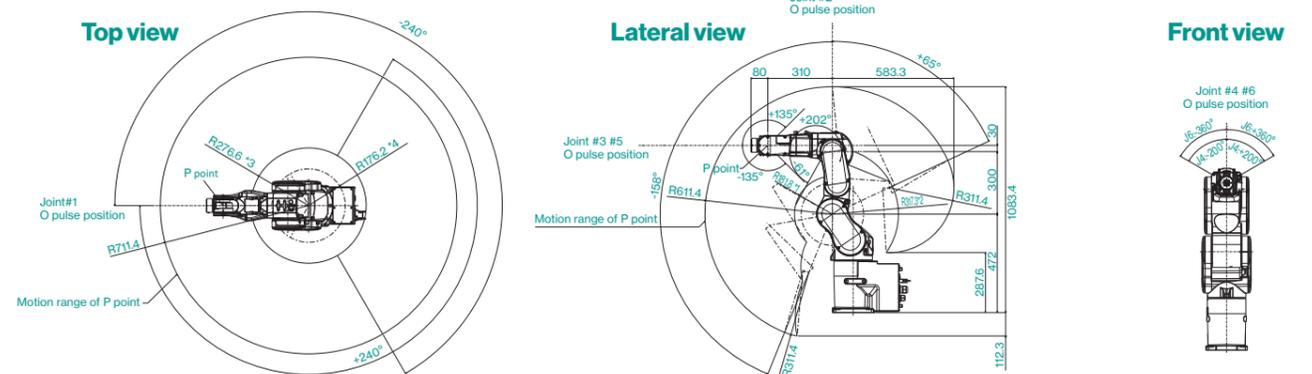
A701



Motion Range

[Unit: mm]

A701



*3 P point from top with Joint #3 declining -61 deg. (Joint #1 center-P point center)
*4 P point from top with Joint #3 tilting up +202 deg. (Joint #1 center-P point center)

*1 P point from lateral with Joint #3 declining -61 deg. (Joint #2 center-P point center)
*2 P point from lateral with Joint #3 tilting up +202 deg. (Joint #2 center-P point center)



Space saving, slim but highly payload

- Lightweight slim arm of 1400mm suitable for machine tending and transfer between processes
- The payload capacity has been increased to 12kg and can be used for a wide range of applications
- Battery-less encoder for reduced maintenance

Model Number C12-C1401S□□

Payload	Mounting method
□12: 12kg	□: Tabletop mounting
Controller	M/C cable installation direction
□C: RC800-A	□: Cable backward
Arm length	□B: Cable downward
□14: 1400mm	Installation environment
Blake equipment	□S: Standard
□1: Brakes on all joints	□C: Cleanroom & ESD (electrostatic discharge)
	□P: Protection (IP67)

These labels are affixed to the RC800-A, RC700-E, and their compatible manipulators that comply with applicable safety standards (ISO/NRTL certified).

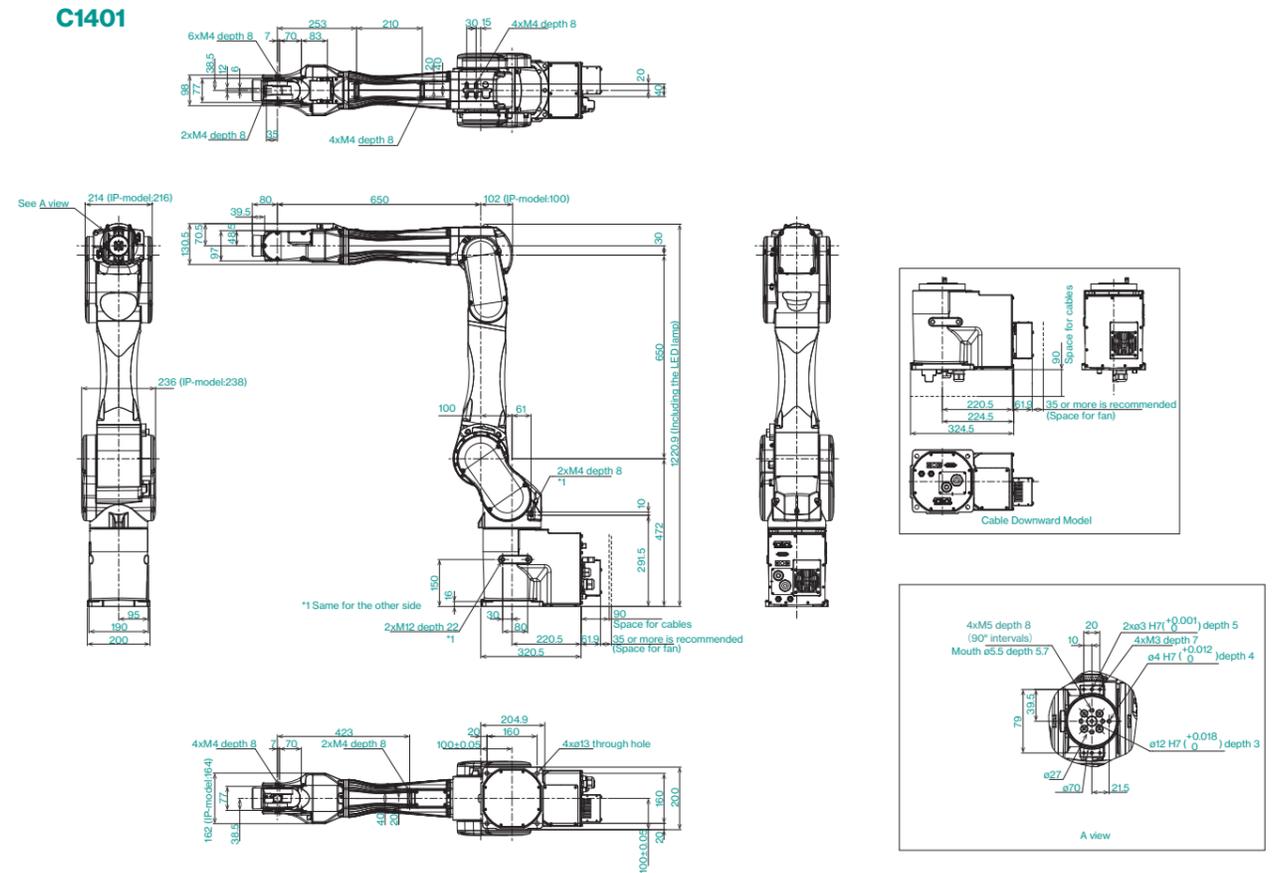
Specifications

Model number		C12-C1401□□□
Arm length	Point P: J1-J5 center	1400.6 mm
	J1-J6 Flange surface	1480.6 mm
Payload *1	Rated	3 kg
	Maximum	12 kg
Repeatability	Joints #1-#6	± 0.05 mm
Maximum operating speed	Joint#1	200 deg/sec
	Joint#2	167 deg/sec
	Joint#3	200 deg/sec
	Joint#4	300 deg/sec
	Joint#5	360 deg/sec
	Joint#6	720 deg/sec
Allowable moment of inertia *2	Joint #4	0.70 kg-m ²
	Joint #5	0.70 kg-m ²
	Joint #6	0.20 kg-m ²
Installation environment	Standard / Cleanroom ³ & ESD ⁴ / Protection(IP67)	
Mounting method	Tabletop mounting	
Weight (not include the weight of cables)	63 kg (IP: 67 kg)	
Installed wire for customer use	D-sub (15 pin x 1), RJ45 (8 pin x 1, CAT5e, Force Sensor 6 pin)	
Installed wire for customer use	ø6 mm x 2 (Allowable pressure: 0.59 MPa [6 kgf/cm ²])	
Compatible controller	RC800-A	
Power supply	AC200-240 V Single phase	
Maximum rated capacity *5	2.5 kVA	
Cable length	Standard / Flexible: 3 / 5 / 10 / 15 / 20 m	
Safety standard	CE, KCs, NRTL	

*1: Do not apply the load exceeding the maximum payload. *2: If the center of gravity is at the center of each arm. If the center of gravity is not at the center of each arm, set the eccentricity using INERTIA command. *3: Cleanliness: ISO Class 4 (ISO 14644-1)
 *4: ESD specification uses resin materials with anti-static treatment. This model controls adhesion of dust due to electrification. *5: Varies according to operating environment and program.
 The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

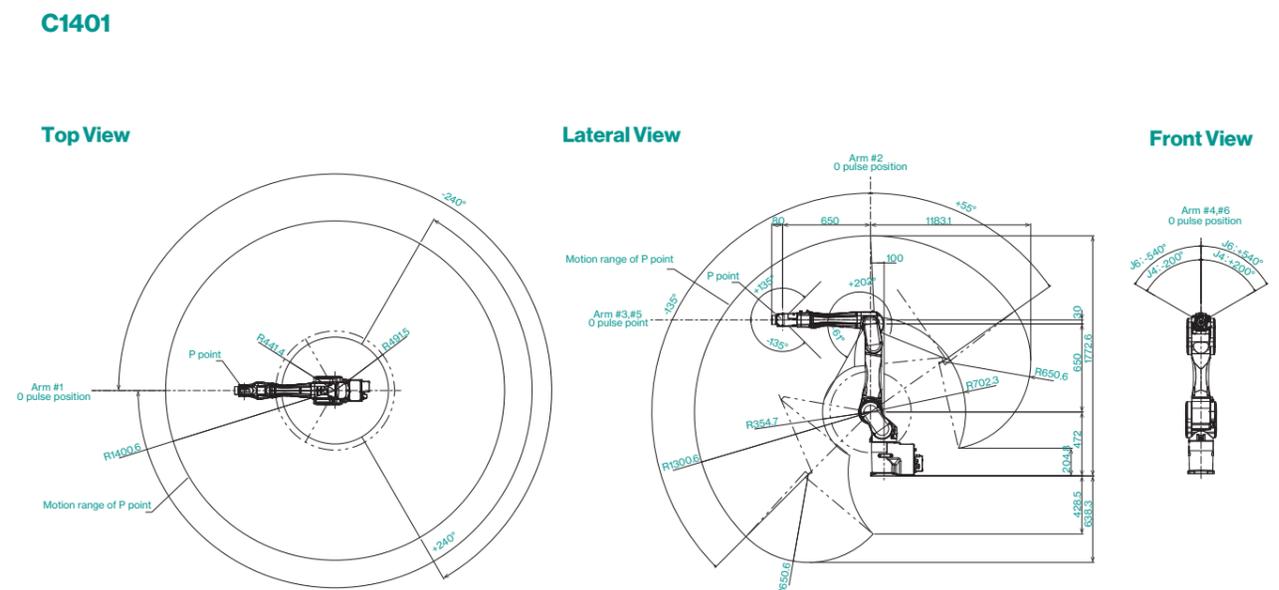
Outer Dimensions

[Unit: mm]



Motion Range

[Unit: mm]



CX4

NEW
PRODUCT



Ideal for precision product assembling and material handling in narrow space

- Achieve low vibration with GYROPLUS Technology
- Support IP67 and Cleanroom & ESD installation environment
- Battery-less encoder for reduced maintenance



Model Number	CX4 - A 6 0 1 S □ □	
Payload	4 : 4kg	Internal wiring
Controller	A : RC800-A	□ : Available
Arm length	6 : 600mm	-NIW : Not available
Brake equipment	1 : Brakes on all joints	Mounting method
		□ : Tabletop Mounting
		R : Ceiling Mounting
		W : Wall Mounting
		Installation environment
		S : Standard
		C : Cleanroom & ESD
		P : Protection(IP67)



These labels are affixed to the RC800-A, RC700-E, and their compatible manipulators that comply with applicable safety standards (ISO/NRTL certified).

Specifications

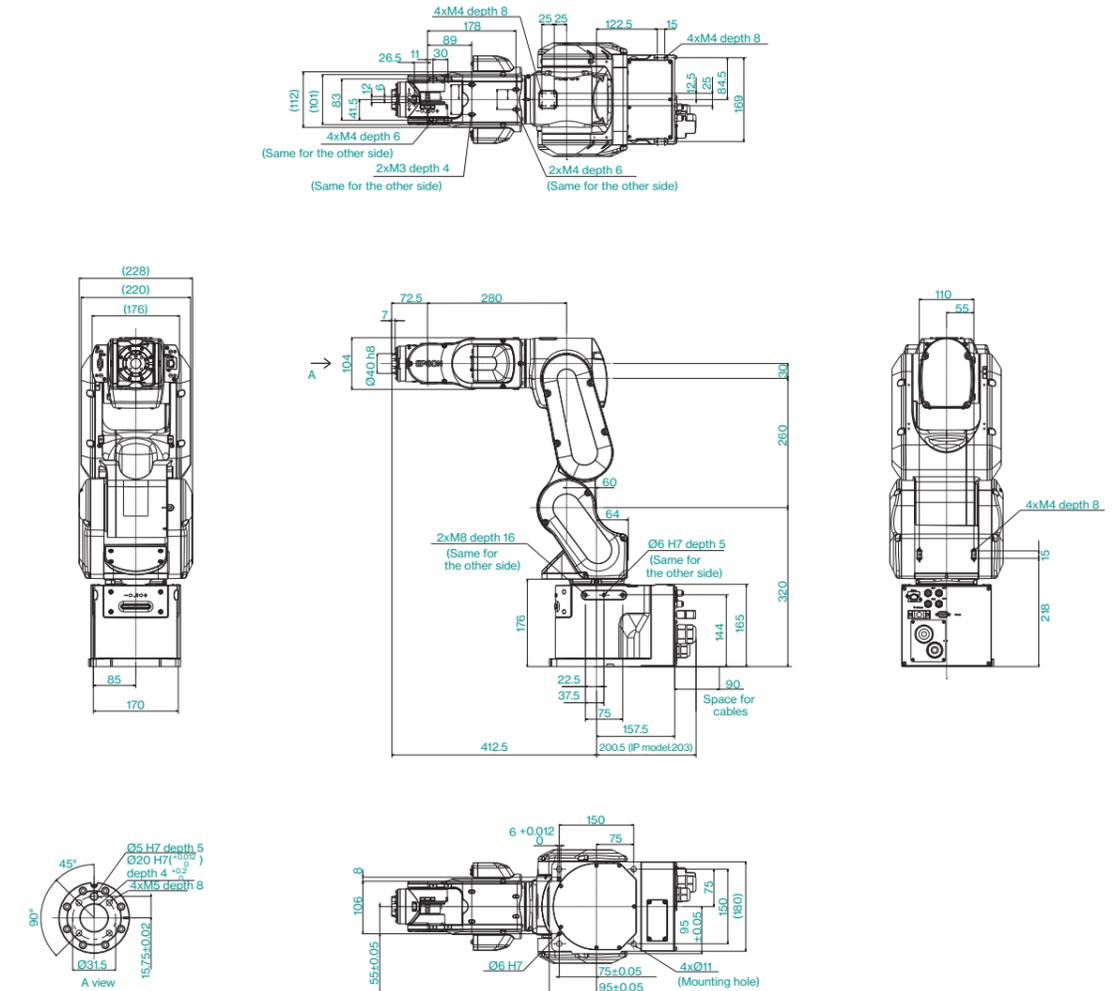
Model number		CX4-A601□	CX4-A601□ -NIW
Arm length	Point P:J1 - J5 center	601.6mm	
	J1 - J6 Flange surface	674.1mm	
Payload *1	Rated	1.0kg	
	Maximum	4.0kg (5.0 kg with arm downward positioning)	
Repeatability	Joints #1 - #6	±0.01mm	
Maximum operating speed	Joint#1	450 deg/sec	
	Joint#2	450 deg/sec	
	Joint#3	514 deg/sec	
	Joint#4	558 deg/sec	
	Joint#5	570 deg/sec	
	Joint#6	851 deg/sec	
Allowable moment of inertia *2	Joint #4	0.2 kg·m ²	
	Joint #5	0.2 kg·m ²	
	Joint #6	0.1 kg·m ²	
Installation environment	Standard / Cleanroom *3 & ESD *4 / IP (IP67)		
Mounting method	Tabletop mounting (Ceiling mounting*5) / Wall mounting		
Weight (not include the weight of cables)	31 kg (IP: 32 kg)		30 kg (IP: 31 kg)
Installed wire for customer use	D-sub (9 pin x 1), RJ45 (8 pin x 1)		-
Installed wire for customer use	ø4 mm x 4 (Allowable pressure: 0.59 MPa [6 kgf/cm ²])		-
Compatible controller	RC-800A		
Power supply	AC200-240 V Single phase		
Maximum rated capacity *6	1.8kVA		
Cable length	Standard / Flexible : 3 / 5 / 10 / 15 / 20 m		
Safety standard	CE, KCs, NRTL		

*1: If the payload exceeds the maximum payload, refer to the following section. *CX4 series Manual WEIGHT Setting - Restrictions on payload exceeding the maximum payload" *2: If the center of gravity is not at the center of each arm, set the eccentricity using INERTIA command *3: Cleanliness: Class ISO 3 (ISO 14644-1) *4: ESD specification uses resin materials with anti-static treatment. This model controls adhesion of dust due to electrification. *5: Manipulators are set to "Foil mount" or "Wall mount" at shipment. To use the Manipulators as "Ceiling mount", you need to change the model settings. For details on how to change the model settings, refer to "CX4 Manipulator 2.5.5 Changing the Robot", and "Epson RC+ User's Guide Robot Configuration". *6: Varies according to operating environment and program. The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

Outer Dimensions

[Unit: mm]

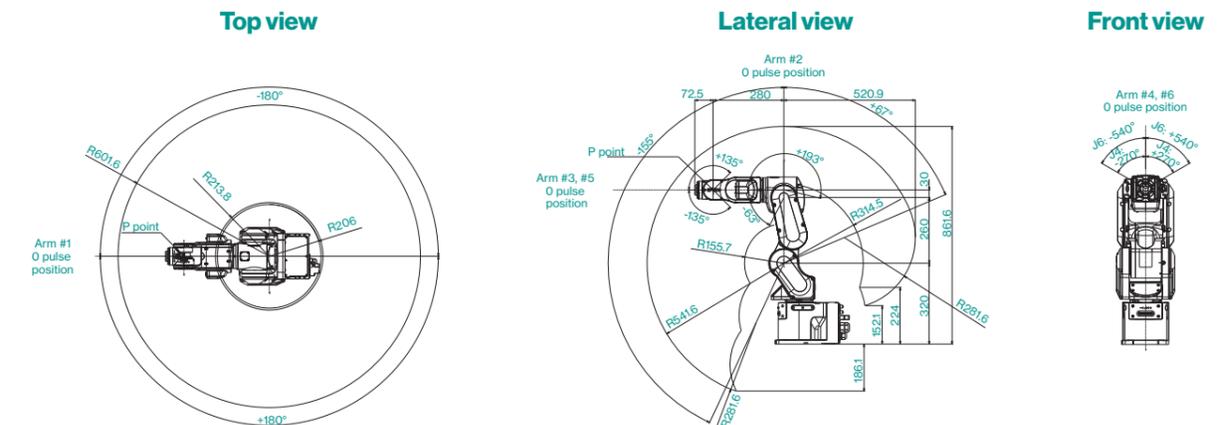
A601



Motion Range

[Unit: mm]

A601



A unique folding arm design enables high motion flexibility within a compact body

- Slim folding arm design
- Requires only 600mm x 600mm installation
- Arm rotation enables shortcut access to workpiece from any direction



Model Number	N2 - A 45 0 S R			
Payload	2	45	0	R
Arm length	45			
Brake equipment	0			
Mounting method				R
Installation environment				S

Payload: 2 : 2.5kg
 Arm length: 45 : 450mm
 Brake equipment: 0 : Brakes on the Joints #2 to #6
 Mounting method: R : Ceiling Mounting
 Installation environment: S : Standard

Specifications

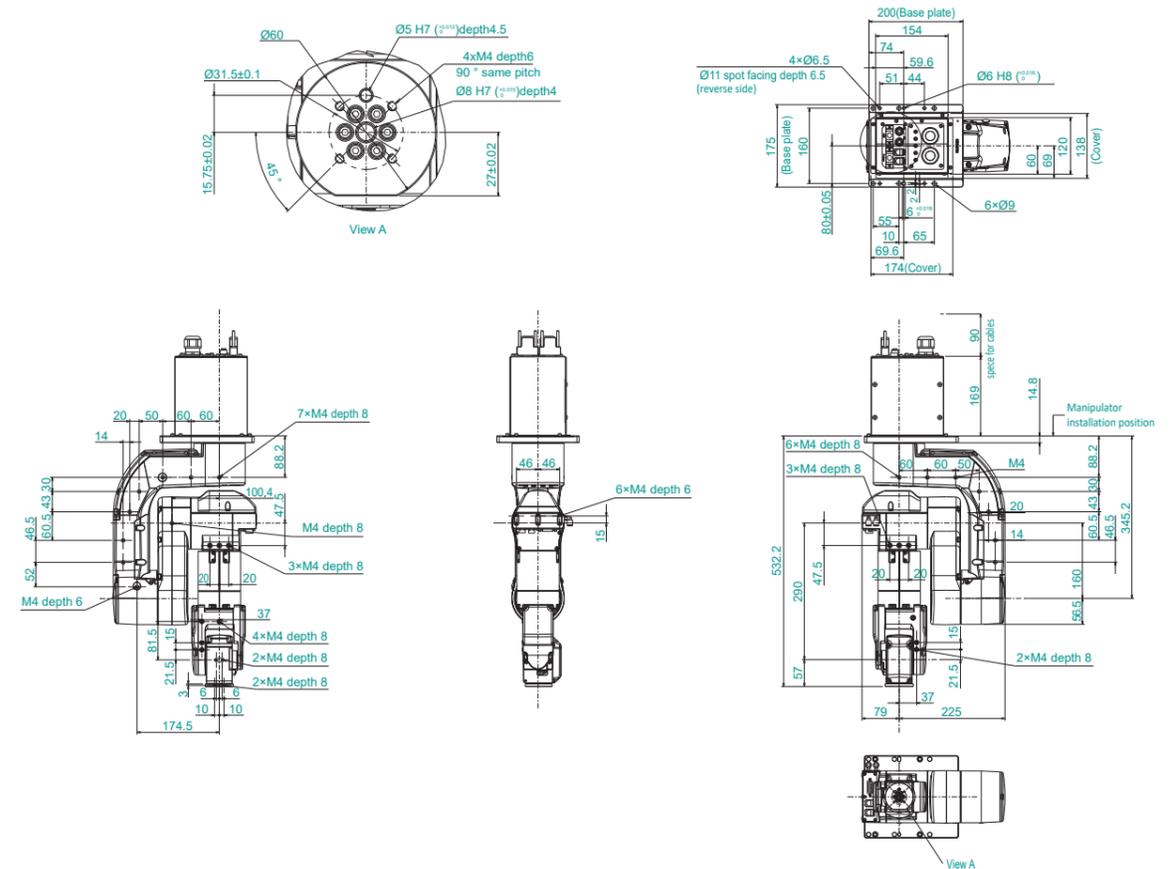
Model number		N2-A450SR / N2-A450S
Arm length	Point P:J1-J5 center	450mm
	J1-J6 Flange surface	532.2mm
Payload *1	Rated	1.0kg
	Maximum	2.5kg
Repeatability	Joints #1-#6	±0.02mm
Maximum operating speed*2	Joint#1	297 deg/sec
	Joint#2	297 deg/sec
	Joint#3	356 deg/sec
	Joint#4	356 deg/sec
	Joint#5	360 deg/sec
	Joint#6	360 deg/sec
Allowable moment of inertia *3	Joint #4	0.2kg·m ²
	Joint #5	0.2kg·m ²
	Joint #6	0.08kg·m ²
Installation environment		Standard
Mounting method		Ceiling mounting / Floor mounting *4
Weight (not include the weight of cables)		19kg
Installed wire for customer use		D-sub (15 pin x 1), RJ45 (8 pin x 2, CAT 5e, also used for Force Sensor)
Installed wire for customer use		ø6 mm x 2 (Allowable pressure: 0.59 MPa [6 kgf/cm ² : 86 psi])
Compatible controller		RC-700A
Power supply		AC200-240 V Single phase
Maximum rated capacity *5		0.6 kVA
Cable length		3 / 5 / 10 / 15 / 20 m
Safety standard		CE, KCs

*1: Do not apply the load exceeding the maximum payload. *2: In case of PTP control *3: If the center of gravity is at the center of each arm, set the eccentric quantity using INERTIA command. *4: Robots are set up for ceiling mount use at shipment. For tabletop use, robots should be programmed using the Epson RC+ software floor mount settings. *5: Varies according to operating environment and program.

The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

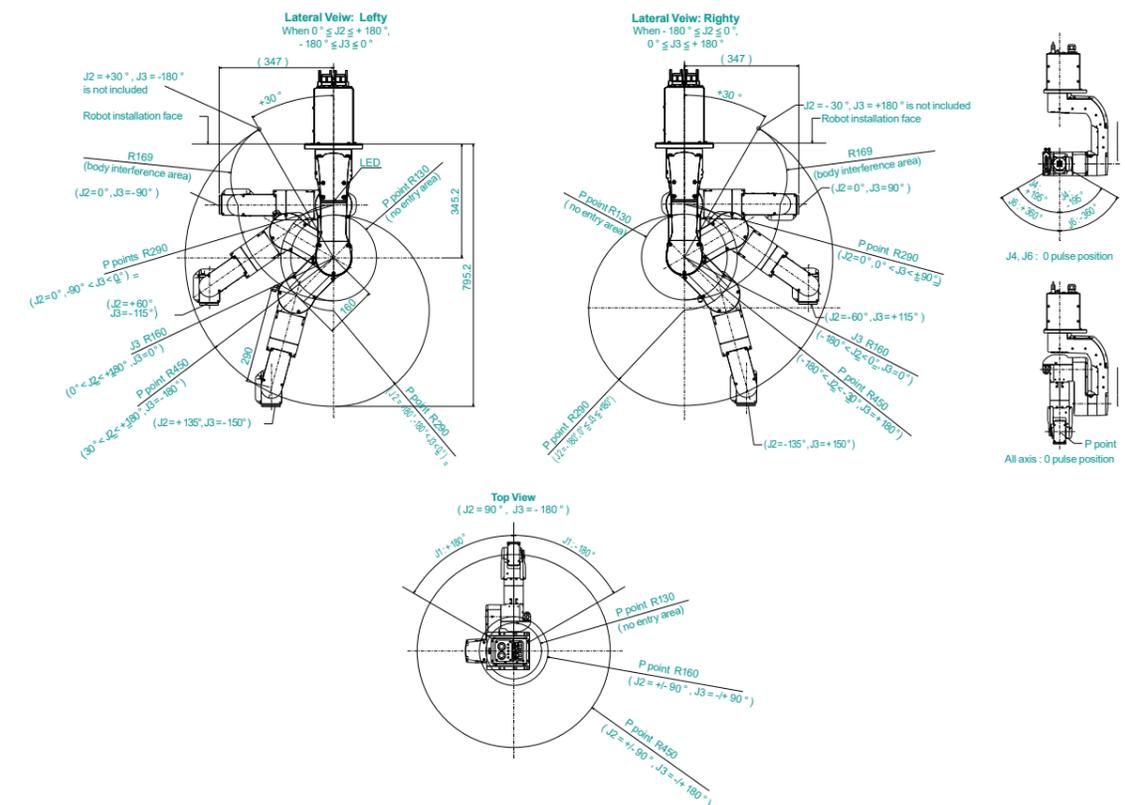
Outer Dimensions

[Unit: mm]



Motion Range

[Unit: mm]

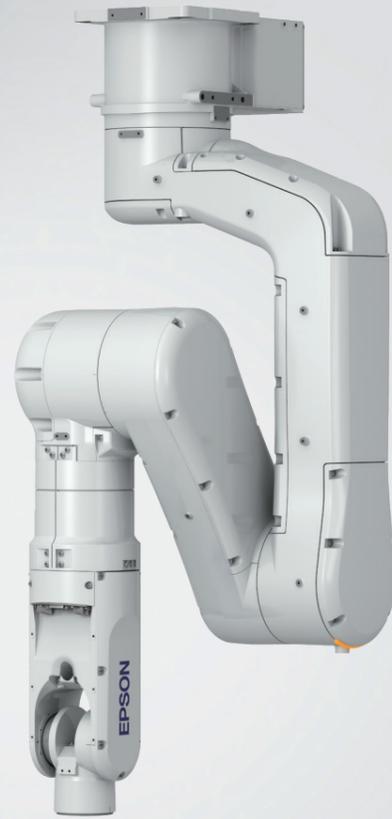


N6-A850



Ceiling mounted 6-axis robot with unique folding arm design

- 6-axis flexibility and SCARA-like arch motion enables shortcut access to work-piece from any direction in limited space
- 6kg payload ideal for automotive component handling
- Hollow arm construction for easy cabling setup and teaching



Model Number	N6 - A 85 0 S B R					
Payload	6	85	0	S	B	R
Arm length	85					
Brake equipment	0					
Mounting method						R
Cable exit direction						B
Installation environment						S

Payload: 6 : 6kg
 Arm length: 85 : 860mm
 Brake equipment: 0 : Brakes on the Joints #2 to #6
 Mounting method: R : Ceiling Mounting
 Cable exit direction: B : Upward
 Installation environment: S : Standard, C : Cleanroom & ESD (Anti-static)

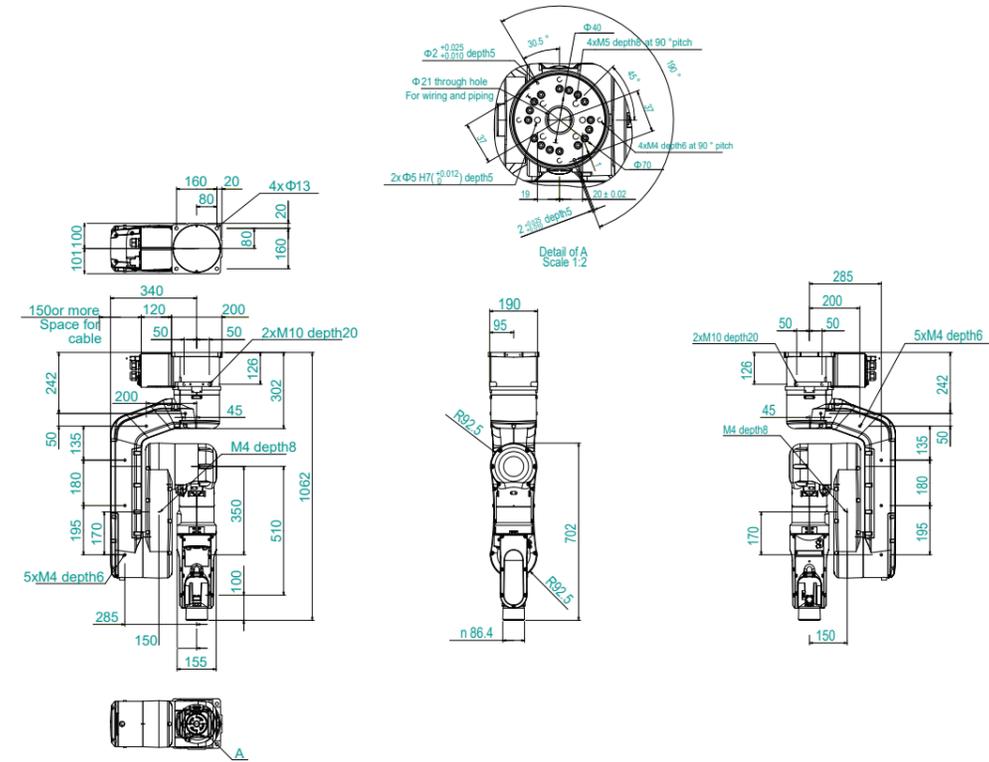
Specifications

Model number		N6-A850□□R
Arm length	Point P: J1-J5 center	860 mm
	J1-J6 Flange surface	960 mm
Payload *1	Rated	3.0 kg
	Maximum	6.0 kg
Repeatability	Joints #1-#6	±0.03 mm
Maximum operating speed*2	Joint#1	326 deg/sec
	Joint#2	326 deg/sec
	Joint#3	444 deg/sec
	Joint#4	444 deg/sec
	Joint#5	450 deg/sec
	Joint#6	537 deg/sec
Allowable moment of inertia *3	Joint #4	0.42 kg·m ²
	Joint #5	0.42 kg·m ²
	Joint #6	0.14 kg·m ²
Installation environment	Standard, Cleanroom & ESD*4	
Mounting method	Ceiling mount	
Weight (not include the weight of cables)	64 kg	
Installed wire for customer use	D-sub (15 pin x 1), RJ45 (8 pin x 2, CAT 5e, for Vision and Force Sensor)	
Installed pneumatic tube for customer use	ø6 mm x 2 (Allowable pressure: 0.59 MPa [6 kgf/cm ² : 86 psi])	
Compatible controller	RC700-A	
Power supply	AC200-240 V Single phase	
Maximum rated capacity *4	2.2 kVA	
Cable length	3 / 5 / 10 / 15 / 20 m	
Safety standard	CE, KCs*5	

*1 : Do not apply the load exceeding the maximum payload. *2 : If the center of gravity is at the center of each arm. If the center of gravity is not at the center of each arm, set the eccentric quantity using INERTIA command.
 *3 : Complies with ISO Class 5 (ISO14644-1) and older Class 1 cleanroom standards. *4 : Varies according to operating environment and program. *5 : Supported only by the RC700-A controller.
 The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

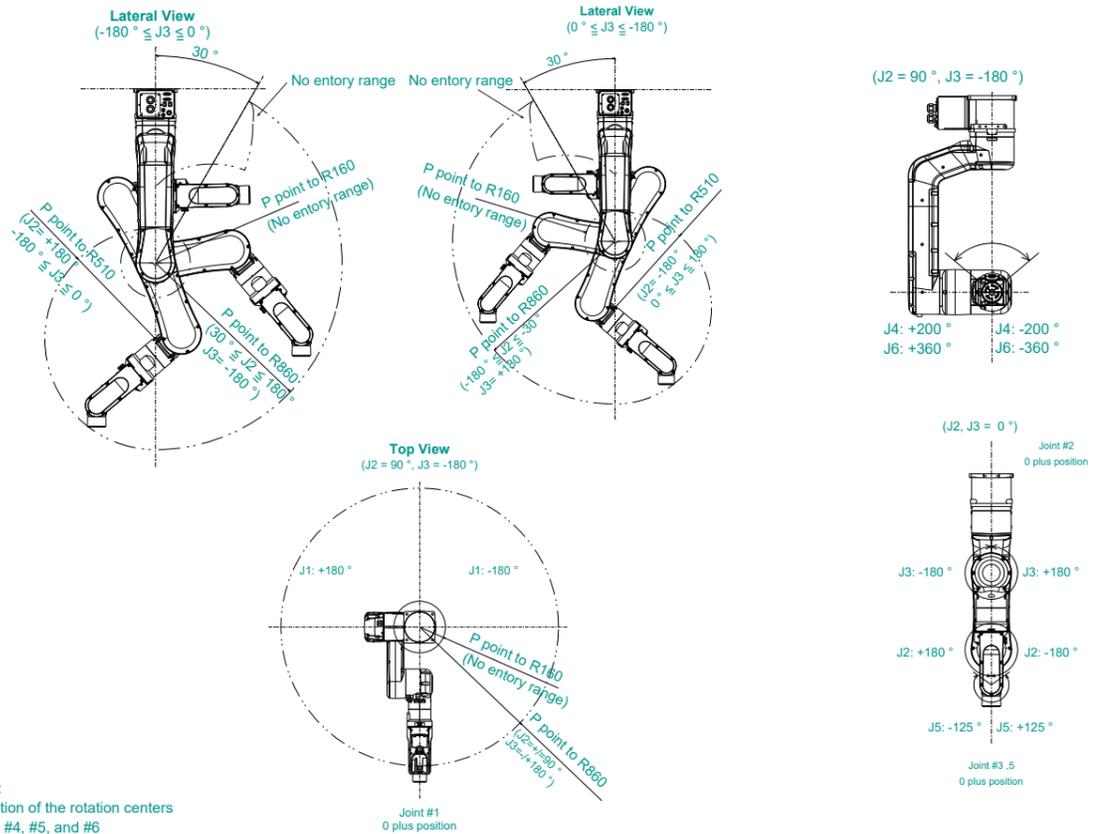
Outer Dimensions

[Unit : mm]



Motion Range

[Unit : mm]



P point : Intersection of the rotation centers for Joint #4, #5, and #6

N6-A1000

Original folding arm mechanism reduces 6-axis robot installation space requirements

- High space utilization efficiency
- Extended reach for tall workpieces and high shelving
- Folding arm design enables installation in limited space
- Hollow arm construction for easy cabling setup



Model Number	N6 - A 100 O S B R			
Payload	6	kg	Mounting method	O: Tabletop Mounting R: Ceiling Mounting
Arm length	100	1010mm	Cable exit direction	S: Standard (side) B: Upward/downward
Brake equipment	0	Brakes on the Joints #2 to #6	Installation environment	S: Standard C: Cleanroom & ESD (Anti-static)

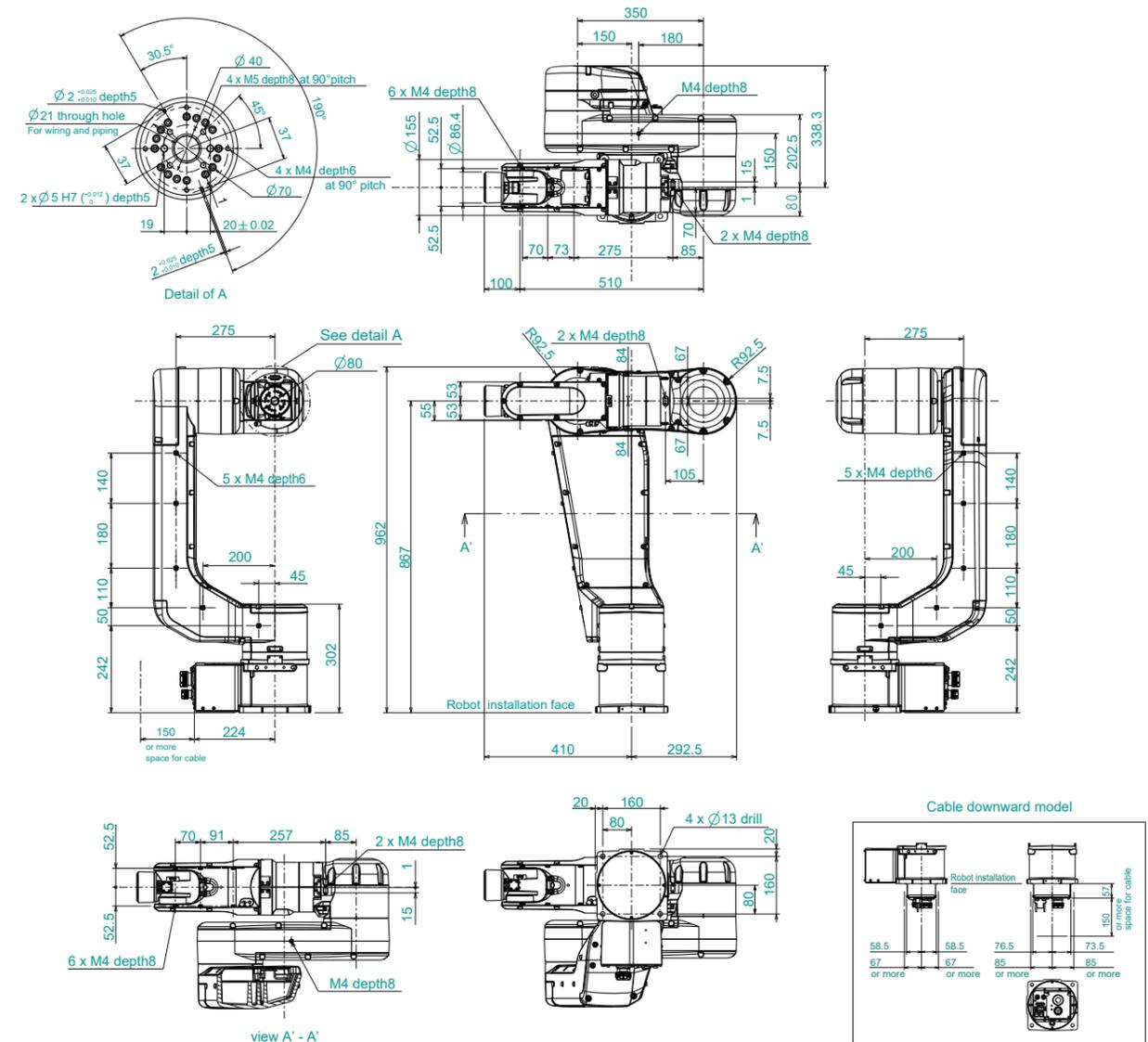
Specifications

Model number		N6-A1000□□□
Arm length	Point P: J1-J5 center	1010 mm
	J1-J6 Flange surface	1110 mm
Payload *1	Rated	3.0kg
	Maximum	6.0kg
Repeatability	Joints #1-#6	±0.04mm
Maximum operating speed*2	Joint#1	326 deg/sec
	Joint#2	326 deg/sec
	Joint#3	444 deg/sec
	Joint#4	444 deg/sec
	Joint#5	450 deg/sec
	Joint#6	537 deg/sec
Allowable moment of inertia *3	Joint #4	0.42kg·m ²
	Joint #5	0.42kg·m ²
	Joint #6	0.14kg·m ²
Installation environment	Standard, Cleanroom* & ESD	
Mounting method	Tabletop mounting / Ceiling mounting**	
Weight (not include the weight of cables)	69 kg	
Installed wire for customer use	D-sub (15 pin x 1), RJ45 (8 pin x 2, CAT 5e, for Vision and Force Sensor)	
Installed pneumatic tube for customer use	ø6 mm x 2 (Allowable pressure: 0.59 MPa [6 kgf/cm ² : 86 psi])	
Compatible controller	RC-700A	
Power supply	AC200-240 V Single phase	
Maximum rated capacity *4	2.2 kVA	
Cable length	3 / 5 / 10 / 15 / 20 m	
Safety standard	CE, KCs**	

*1: Do not apply the load exceeding the maximum payload. *2: If the center of gravity is at the center of each arm. If the center of gravity is not at the center of each arm, set the eccentric quantity using INERTIA command.
*3: Complies with ISO Class 5 (ISO14644-1) and older Class 1 cleanroom standards. *4: Ceiling-mounted robots should be programmed using the Epson RC+ software ceiling-mount settings. *5: Varies according to operating environment and program. *6: Supported only by the RC700-A controller.
The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

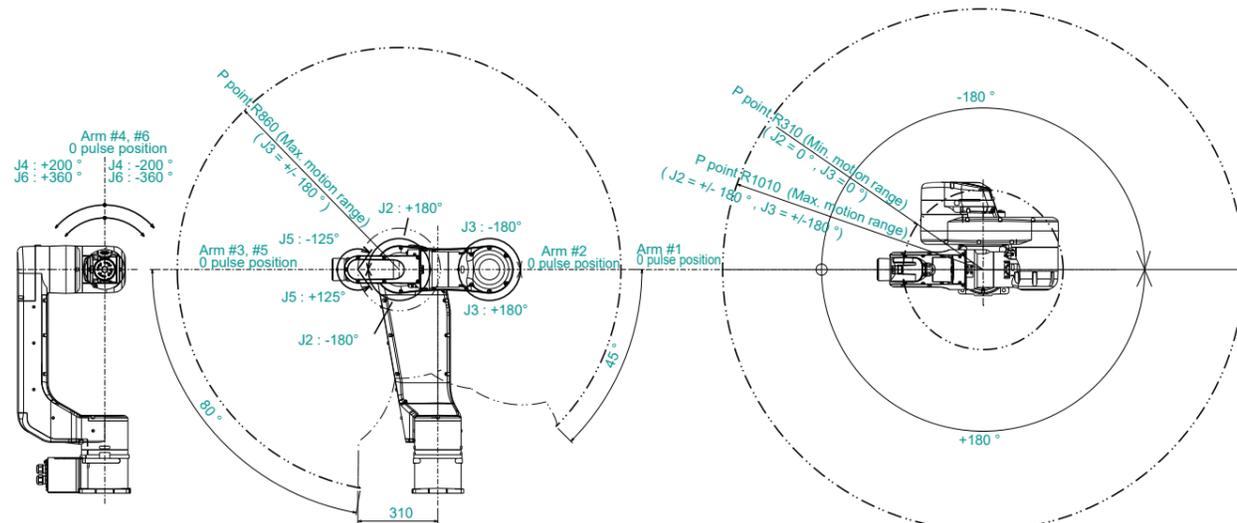
Outer Dimensions

[Unit: mm]



Motion Range

[Unit: mm]



VT6

Simple setup and high cost-performance for easy and affordable automation

- Space-saving design with built-in controller
- 6-axis versatility without complicated setup
- 100V-240V power source compatibility
- Hollow wrist construction for internal cabling
- Battery-less encoder for reduced maintenance



Model Number VT6 - A90 1 □ □ - □ □

Payload
 □ 6 : 6kg

Arm length
 □ 90 : 920mm

Brake equipment
 □ 1 : Brakes on all joints

Power Supply
 □ : AC specification Manipulator
 □ : DC specification Manipulator

Mounting method
 □ : Tabletop Mounting
 □ : Ceiling Mounting
 □ : Wall Mounting

Installation environment
 □ : Standard model
 □ : Cleanroom model
 □ : Protection model (IP67)

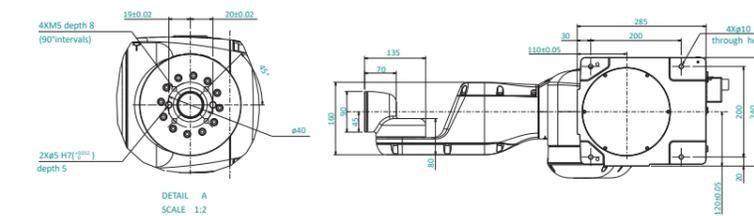
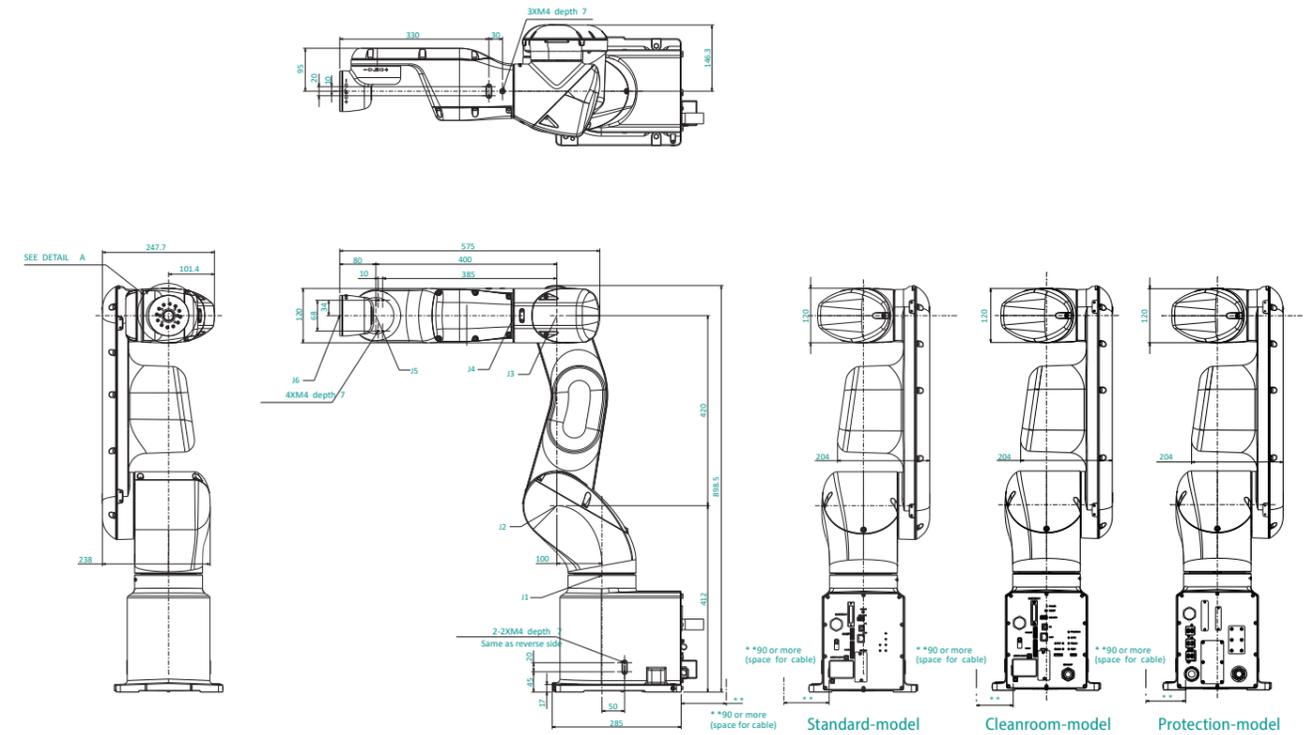
Specifications

Model number		VT6-A901□□-□□
Arm length	Point P: J1-J5 center	920 mm
	J1-J6 Flange surface	1000 mm
Payload *1	Rated	3 kg
	Maximum	6 kg
Repeatability	Joints #1-#6	± 0.1 mm
Maximum operating speed	Joint#1	166.2 deg/sec
	Joint#2	122.5 deg/sec
	Joint#3	141.2 deg/sec
	Joint#4	Standard, Cleanroom: 268.7 deg/sec / Protection, DC: 188.1 deg/sec
	Joint#5	296.8 deg/sec
	Joint#6	Standard, Cleanroom: 293.2 deg/sec / Protection, DC: 234.5 deg/sec
Allowable moment of inertia *2	Joint #4	0.3 kg·m ²
	Joint #5	0.3 kg·m ²
	Joint #6	0.1 kg·m ²
Installation environment	Standard, Cleanroom*3 / Protection (IP67)	
Mounting method	Tabletop mounting / Ceiling mounting / Wall mounting	
Weight (not include the weight of cables)	40 kg (IP: 42 kg)	
Installed wire for customer use	None (External wiring option available)	
Compatible controller	Built-in controller	
Power supply	AC model: 100-240 V, single phase / DC model: 43-60V**	
Maximum rated capacity *5	AC model: 1.2 kVA / DC model: 1.2kW	
Cable length	AC model: 5 m / DC model: 2m	
I/O	Standard I/O	In 24, Out 16 (Non polarity)
	Remote I/O	In 8, Out 8 (Remote function assigned to standard I/O)
Safety standard	CE, KCs	

*1 : Do not apply the load exceeding the maximum payload. *2 : If the center of gravity is at the center of each arm. If the center of gravity is not at the center of each arm, set the eccentric quantity using INERTIA command.
 *3 : Clean level: ISO class 4 (ISO14644-1) *4 : Default setting is "Floor Mount". To change the installation coordination, please change the model setting on Epson RC+. (Cleanroom and IP: Only Floor Mount available)
 *5 : When sharing the battery power source with AGV etc., a voltage higher than the stated value may be applied to the robot, depending on the operation of AGV etc. Take measures such as overcurrent protection. *5 : It depends on operating environment and operation program.
 The values of the products listed in this sheet are measured under various conditions of in-house evaluation. They may vary depending on the environment and conditions of use.

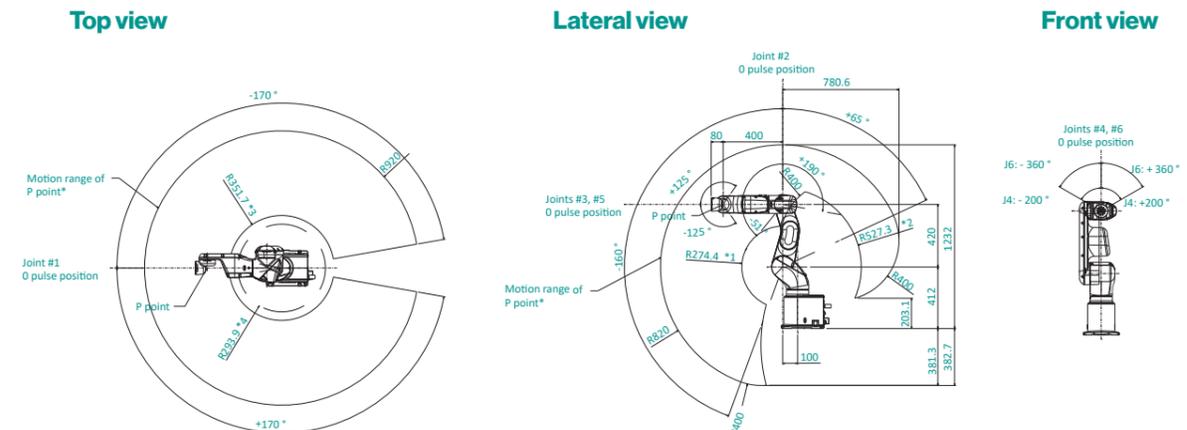
Outer Dimensions (Tabletop Mounting)

[Unit: mm]



Motion Range (Tabletop Mounting)

[Unit: mm]



RC800-A

Safety board for flexible machine design

Software / Manipulator support		
Software	Epson RC+ 8.0	
Size	180.4 x 380.4 x 350.4 (HxWxD)	
SCARA robots	GX series <small>*GX-B series is not supported</small>	●
	LS series <small>*LS-B series is not supported</small>	●
	LA series	—
	RS series	●
	T series	—
6-axis robots	C series <small>*C-A series is not supported</small>	●
	CX series	●
	N series	—
	VT series	—

- Improved accuracy for conveyor tracking
- Standard-equipped with interface ports for a force sensor and conveyor tracking
- Improved battery longevity
- Conform to the ISO10218-1 and NRTL



These labels are affixed to the RC800-A, RC700-E, and their compatible manipulators that comply with applicable safety standards (ISO/NRTL certified).



RC800L

LA Series-exclusive controller (streamlined functions)

Software / Manipulator support		
Software	Epson RC+ 8.0	
Size	180.4 x 380.4 x 350.4 (HxWxD)	
SCARA robots	GX series	—
	LS series	—
	LA series	●
	RS series	—
	T series	—
6-axis robots	C series	—
	CX series	—
	N series	—
	VT series	—



RC700-E

Safety board for flexible machine design

Software / Manipulator support		
Software	Epson RC+7.0 / 8.0	
Size	180.4 x 380.4 x 350.4 (HxWxD)	
SCARA robots	GX series <small>*GX-C series is not supported</small>	●
	LS series	—
	LA series	—
	RS series	—
	T series	—
6-axis robots	C series <small>*C-A,C series is not supported</small>	●
	CX series	●
	N series	—
	VT series	—



These labels are affixed to the RC800-A, RC700-E, and their compatible manipulators that comply with applicable safety standards (ISO/NRTL certified).

RC700-A

Drive units can be added for multi-robot control

Software / Manipulator support		
Software	Epson RC+7.0 / 8.0	
Size	181.9 x 380 x 350 (HxWxD)	
SCARA robots	GX series	—
	LS series	—
	LA series	—
	RS series	—
	T series	—
6-axis robots	C series <small>*C series is not supported</small>	●
	CX series	—
	N series	●
	VT series	—



RC700DU-A

Controller for multi-manipulator control

Software / Manipulator support		
Software	Epson RC+7.0 / 8.0	
Size	181.9 x 380 x 350 (HxWxD)	
SCARA robots	GX series	—
	LS series	—
	LA series	—
	RS series	—
	T series	—
6-axis robots	C series <small>*C series is not supported</small>	●
	CX series	—
	N series <small>*N2 is not supported</small>	●
	VT series	—



RC90-B

Controller dedicated to the previous LS Series models

Software / Manipulator support		
Software	Epson RC+7.0 / 8.0	
Size	181.9 x 380 x 350 (HxWxD)	
SCARA robots	GX series	—
	LS series <small>*LS-C series is not supported</small>	●
	LA series	—
	RS series	—
	T series	—
6-axis robots	C series	—
	CX series	—
	N series	—
	VT series	—



Specifications

	RC800-A	RC800L	RC700-E	RC700-A	RC90-B
Controllable axes					
Servo motors	Max. 6 AC	Max. 4 AC	Max. 6 AC		Max. 4 AC
Robot manipulator control					
Programming language and Robot control software	Epson RC+ 8.0		Epson RC+ 7.0 / RC+ 8.0		
Joint control	Max. 4 axes simultaneous	Max. 4 axes simultaneous	Max. 6 axes simultaneous		Max. 4 axes simultaneous
	Software AC servo control				
Speed control	PTP control: 1-100% / CP control: real speed setting				
	PTP control: 1-100% / CP control: real speed setting				
Positioning control					
PTP (Point-To-Point control) / CP (Continuous Path control)					
Storage capacity					
	Max. object size: 4 MB Point data area: 1,000 points/file Backup variable area: Max. 768 KB (Include management table area) Approx. 4,000 variables are available. However, this varies depending on the size of array variables and other factors.		Max. object size: 4 MB Point data area: 1,000 points/file Backup variable area: Max. 100 KB (Include management table area) Approx. 1,000 variables are available. However, this varies depending on the size of array variables and other factors.		
External input/output signals (standard)					
Standard I/O	Input : 24 / Output : 16				
Real time - I/O	Input : 4	—	Input : 2	<small>*Up to two additional units can be installed per drive unit</small>	
Communication interface (standard)					
Ethernet	1 port				
RS-232C	(Option)	—	1 port		
Safety function					
STO*1			●		
SS1*2			●	—	
Safety I/O			●	—	
	Emergency Stop / Safeguard(SG)/Safety Door(Protective Stop) / Enable / "Speed monitoring in low-speed program verification function (T1 test mode) (250mm/sec or less)" / Soft Axis Limiting / Safety Outputs / SLS / SLP		Emergency Stop / Safeguard(SG)/Safety Door(Protective Stop) / Enable / "Speed monitoring in low-speed program verification function (T1 test mode) (250mm/sec or less)"		
<small>SLS & SLP: RC800-A / option, RC800L / not support</small>					
Protective function					
Low power mode, dynamic braking, overload detection, torque error detection, speed error detection, position deviation, speed deviation overflow detection, overheat detection, fan trouble detection(excluding Controllers that do not have a fan), relay melting detection, overvoltage detection, low AC power voltage detection, temperature abnormality detection, CPU error detection, Memory error detection					
Power source					
AC200-240 V Single phase 50/60 Hz					
Weight (max.)*3					
	11 kg	10 kg	12 kg	11 kg	7.5 kg or 10 kg (Depending on effector in use)
Mounting method					
Flat, Vertical, Rack (option: RC800 series), Wall (option)					Flat, Vertical, Rack

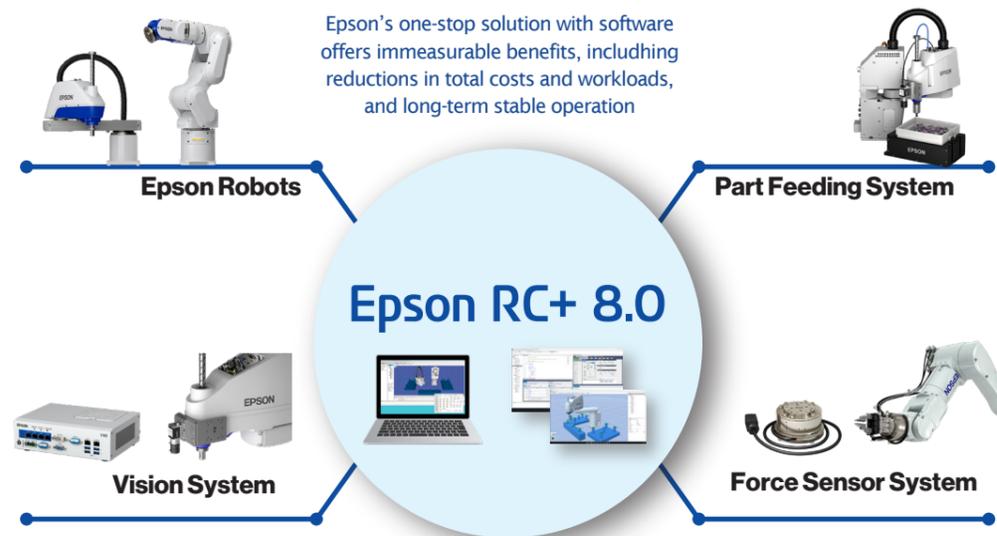
*1: Safe Torque Off: Shuts off power to the motor. *2: Safe Stop 1: Shifts to STO state after control stops. *3: The Controller body is labeled with the weight. When transporting or relocating the Controller, check the weight and be careful not to hurt your back when lifting it. Also, be careful not to pinch or injure your hands, feet, or other body part due to dropping it.

Epson RC+ software makes it easy to develop control programs for setup, operation, and regular maintenance. With an easy-to-understand graphic user interface, it helps you achieve maximum productivity with minimum programming overhead.

Software

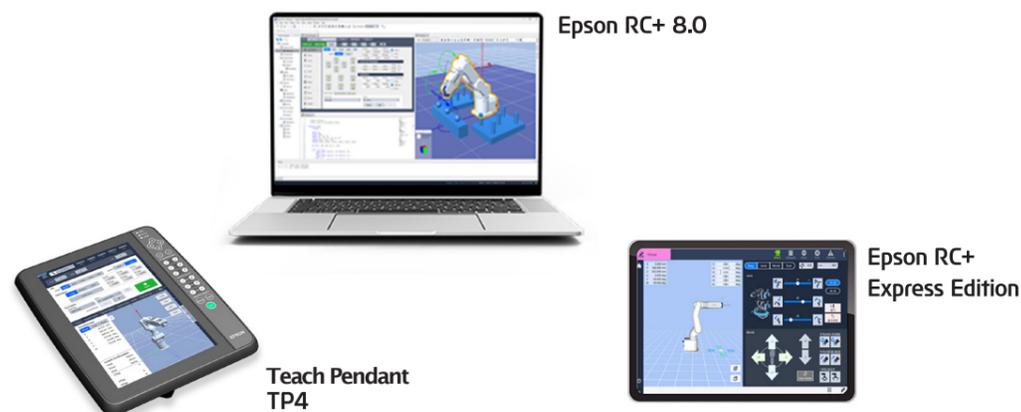
The Source of Epson Robot Ease of Use

Epson's software lineup has powerful, easy-to-use features for each of its user's demand. Minimize the time required to develop, debug, and operate and maintain robotic automation applications. In addition, unified usability allows users to move seamlessly back and forth between each software.



Unified and Sophisticated Usability

- Epson RC+ integrates a variety of options including Vision Guidance, Force Guidance, Conveyor Tracking, and Part Feeding.
- Epson RC+ Express Edition features an easy-to-learn, block-style robot teaching environment that is ideal for new users with limited coding experience.
- TP4, a highly functional Teach Pendant with built-in Epson RC+, is equipped with tools for intuitive teaching, program editing, debugging and creating GUI operate the workcell.

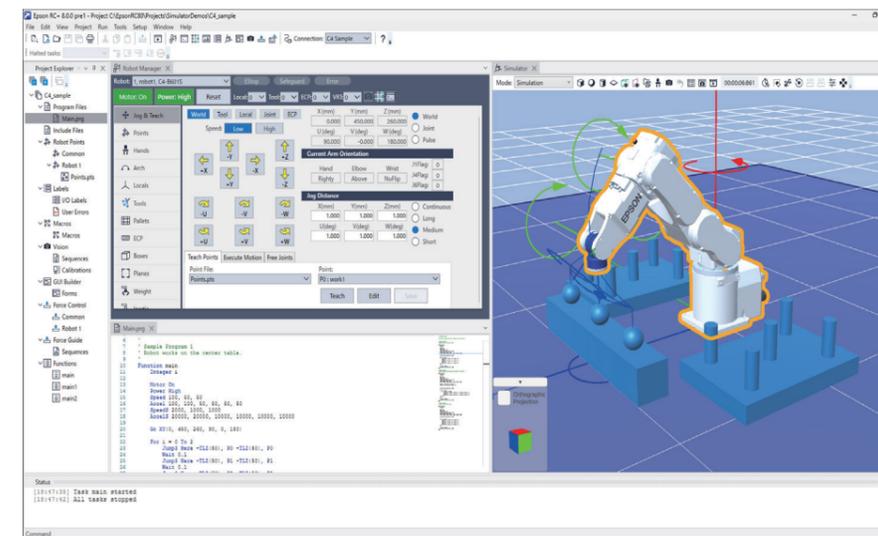


*Users are required provide their own PCs and tablets. For recommended specifications, please check the manual.

Epson RC+ 8.0 NEW

About Epson RC+ 8.0

Epson RC+ is a software tool that supports various tasks from application conception and layout studies to operational design, debugging, and routine maintenance. An easy-to-understand GUI and a wealth of integrated options allow for maximum productivity with minimal programming workload.



The Integrated Development Environment (IDE) Pursuing Efficiency

Epson RC+ software includes the following selected features to assist users efficiently develop automation solutions. it is the Integrated Development Environment (IDE) for beginners and experts alike.

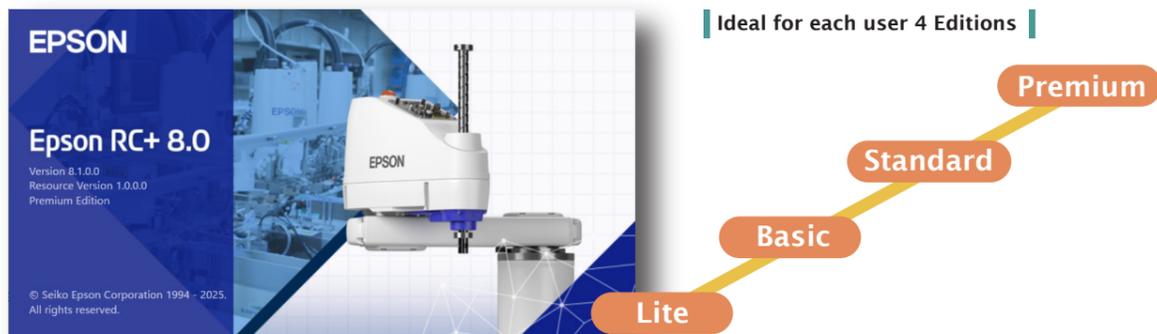
Epson RC+ functions		
Robot programming functions SPEL+ language Approach check area / Approach check plane Pallet handling Payload and effector eccentricity High-speed, high-precision 3D path accuracy Multitasking Positioning completion timing Arch motion Parallel processing Singularity point avoidance Remote control expansion I/O Operating speed and acceleration settings	Project Data & Explorer Robot Manager Task Manager Jog & Teach Run Window Operator Window Coordinate Conversion Wizard Program Editor & Syntax Assist 3D Simulator I/O Monitor Variable Monitor	Simple teaching functions Jog & teach / Tool settings Local coordinate settings
		Maintenance and management functions Consumables management Controller settings backup
		Simulator functions Layout review / Interference checking programming / Debugging functions, etc.
Options		
Software options Epson RC+ API GUI Builder ECP VRT	Force-sensing systems / GUI Force Guide	Image processing systems / GUI Vision Guide Catch-On-Fly OCR

Epson RC+ software makes it easy to develop control programs for setup, operation, and regular maintenance. With an easy-to-understand graphic user interface, it helps you achieve maximum productivity with minimum programming overhead.

Edition

Epson RC+ Evolves to Empower Simpler, Smarter, and More Advanced Application Development

Epson has long supported customers in developing diverse and complex automation applications through its integrated development environment, Epson RC+. Today, we are proud to announce a major evolution of Epson RC+, designed to meet growing demands for simplicity, efficiency, and advanced capabilities.



► Premium Edition

Ideal for advanced solution development and deployment for accelerating co-creation. This edition supports scalable team development by enabling the packaging and distribution of libraries and user interfaces. It enhances program quality and streamlines the delivery and use of solutions, making it perfect for professional-grade development environments.

Recommended for Solution Developer, Automation devices vendor, IT / software vendor

► Standard Edition

Designed for more efficient development, commissioning, and support for almost users including non-experts. It offers advanced and convenient tools for streamlined development and debugging, along with enhanced simulation capabilities in virtual environments. These features help accelerate development with confidence and improve overall workflow efficiency.

Recommended for Engineers (concept design, detail design, setup, and maintenance) seeking efficiency and improvement

► Basic Edition

Covers equipment development, design, and maintenance with essential features. This edition includes a virtual environment that enables seamless development from concept to deployment. It's well-suited for users who need a comprehensive toolset without relying on physical robot during the development process.

► Lite Edition

A simple and ready-to-use environment for basic machine operation and maintenance. It provides the core functions required for running, starting up, and maintaining actual equipment, along with basic programming and teaching capabilities. Ideal for initial setup and maintenance use.

Edition Comparison Chart

Features / Edition	Lite	Basic	Standard	Premium
Offline programming	●	●	●	●
3D Simulator	—	●	●	●
Virtual Controller	—	●	●	●
Teaching	○ ^{*3}	●	●	●
I/O control	○ ^{*3}	●	●	●
Dignostics	—	—	●	●
Sharing simulator layout data	—	—	●	●
Restore Contorller Parameter / improved usability	—	—	●	●
Weight / Inertia wizard	—	—	●	●
Connectivity for external simulator by OPC-UA protocol for virtual environment	—	—	●	●
Simulator / Improved usability	—	—	●	●
Conveyor Tracking / Improved usability	—	—	●	●
GUI Builder / Improved new controls	—	—	●	●
Safety function for virtual controller	—	—	●	●
Conveyor tracking for virtual controller	—	—	●	●
Library Builder (Library development using the SPEL language)	—	—	—	●
RC+ Extension	—	—	—	●
Use of solutions created through co-creation function	●	●	●	●
Contorller Options	○ ^{*2}	● ^{*1}	● ^{*1}	● ^{*1}
Vision Guide	○ ^{*2}	● ^{*1}	● ^{*1}	● ^{*1}
GUI Builder	○ ^{*2}	● ^{*1}	● ^{*1}	● ^{*1}

For higher efficiency

For co-creation

*1 A separate license is required when using with real controller. *2 Virtual controllers cannot be used. A separate license is required when using with real controller. *3 Requires connection to a real controller.

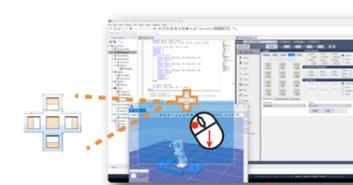
Epson RC+ 8.0 Features

Lite Basic Standard Premium

Window Layout In the office, on site, anywhere

- Various information needed for debugging is displayed in any window layout.
- For better listing, variable displays and task status windows can be docked, and floating simulator screens can be displayed on multiple displays.
- You can register and recall your preferred layout.

- 1, Drag the window of the invoked function. (e.g. Simulator)
- 2, Move the window to the location where you want to place it, a cross icon will appear indicating a docking candidate. (Up, down, left, right, tab)
- 3, It is very easy to layout to your liking without the need to adjust window size individually. You can save and apply your favorite layout setting.

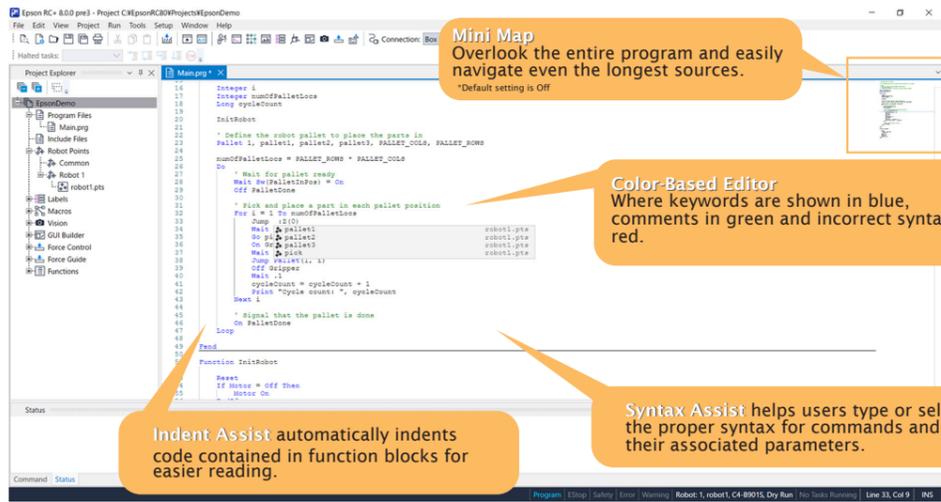


Epson RC+ software makes it easy to develop control programs for setup, operation, and regular maintenance. With an easy-to-understand graphic user interface, it helps you achieve maximum productivity with minimum programming overhead.

Editor Auto-assist makes editing easier than ever

Lite Basic Standard Premium

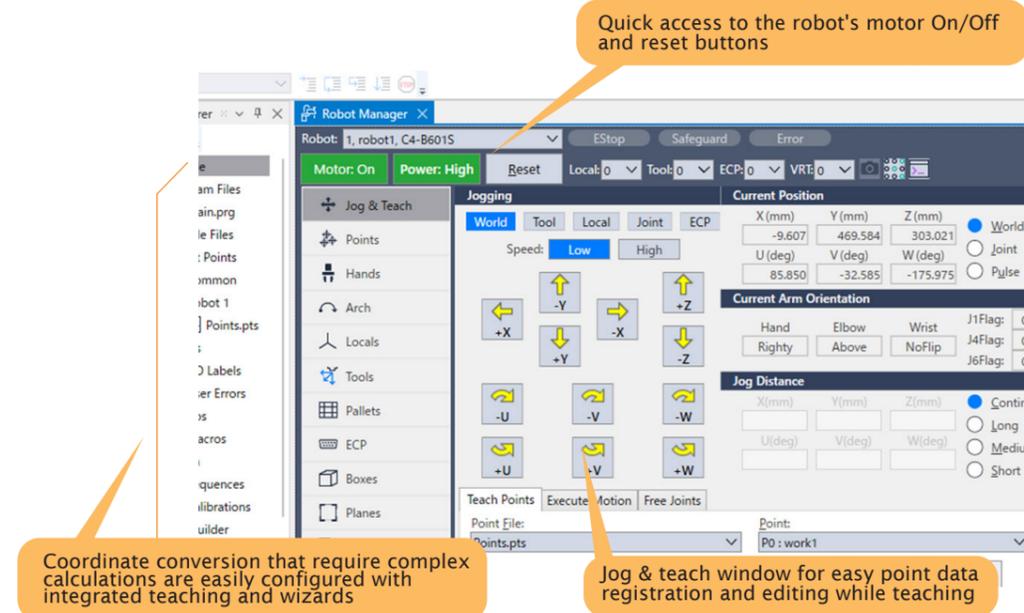
Epson RC+ includes powerful editing capabilities to minimize mistakes and streamline program development. In addition to basics such as cut, copy and paste, it also includes indent assist, syntax assist, syntax highlighting, comment blocks, indent/outdent, find/replace and more.



Robot Manager Simple and high functionality

Lite Basic Standard Premium

Robot Manager, integrates a variety of functions related to robot operation into a single system, is an intuitive graphical interface that enables users to manage functions and wizards to simplify automation tasks.

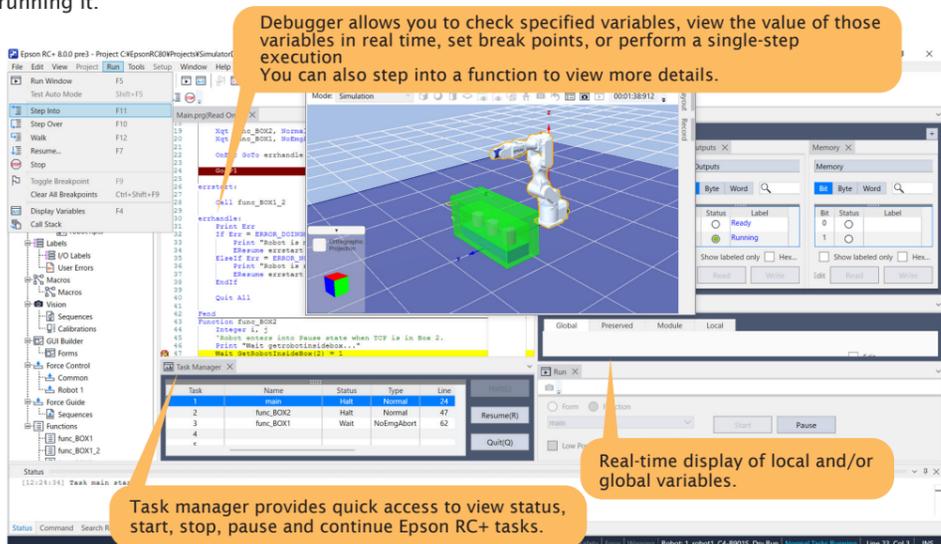


Palettes and entry area definitions can be easily configured with integrated teaching and wizards

Integrated Debugger Easily test programs and identify problems

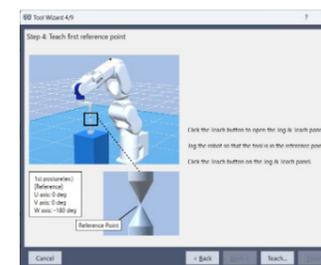
Lite Basic Standard Premium

The integrated debugger offers many clever ways to check the status of your program or identify issues you may find while running it.



Tool Wizard

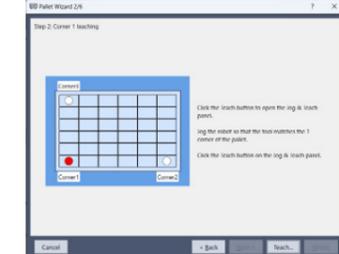
Enables you to define a tool - oriented coordinate, complicated end effector setting can be quickly.



Teach first reference point

Pallet Wizard

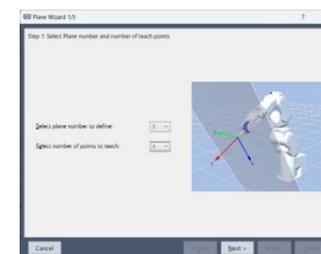
If parts are arranged in a square layout, spaced at regular intervals, the PALLET command can be used to quickly and precisely position the end effector.



Teach each corner

Plane Wizard

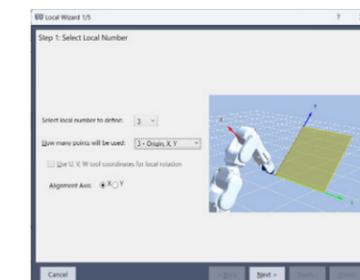
Enables you to check effector approach within an arbitrarily defined area or plane to prevent interference with other robots or peripheral equipment, and to restore effector position after an error occurs.



Teach plane origin point

Local Wizard

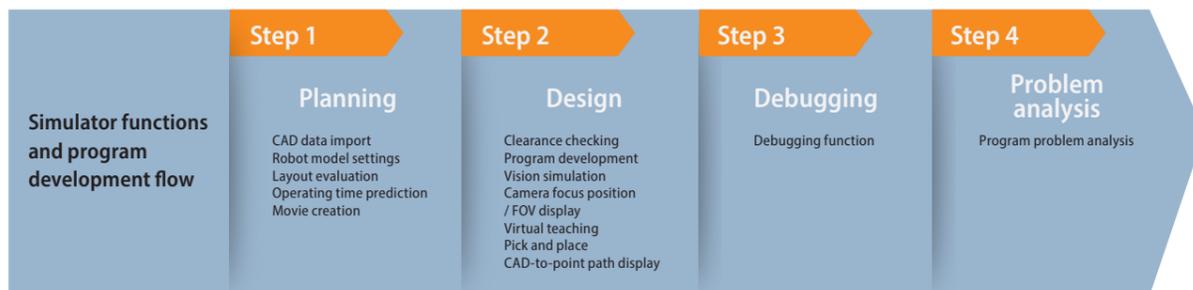
A local coordinate system can be defined relative to the base coordinate system, enabling you to define workspaces based on angled coordinate systems or CAD point data.



Epson RC+ software makes it easy to develop control programs for setup, operation, and regular maintenance. With an easy-to-understand graphic user interface, it helps you achieve maximum productivity with minimum programming overhead.

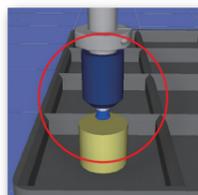
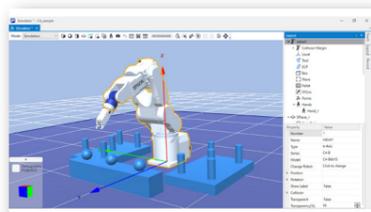
Simulator

The simulator displays a 3D view of the robot that enables you to thoroughly test programs and confirm robot motion and operating clearances in a virtual environment before putting them into use on the factory floor.



Layout evaluation

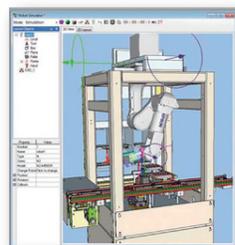
3D simulation of robot operation enables you to determine workcell space requirements and necessary clearances.



Enlarged view of effector

CAD data import

CAD data points for peripheral equipment and the effector can be imported directly to the simulator.

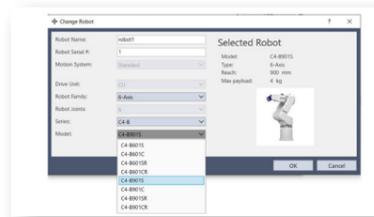


Supported CAD data formats for 3D display

- VRML 2.0
Limitations: VRML 2.0 prototypes are not supported.
- STEP (AP203/AP214)
Limitations: Only ASCII code files are supported. Face colors can be displayed only when specified in the imported data.
- IGES
- DXF
AutoCAD® DXF formats (DXF R13, DXF R14, DXF 2000/2000i, DXF 2002)

Robot model settings

Workcell layout are easy because 3D data is built into the software.



Robot operating time prediction

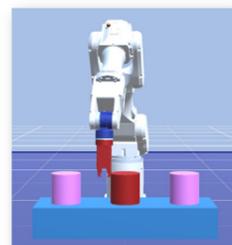
Robot operating time can be predicted based on motion speed and acceleration settings.

Still image / movie creation

Simulation results can be displayed as movies or still images that can be used as tools for evaluation, debugging, and information sharing.

Clearance checking

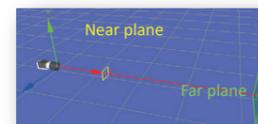
Clearances can be checked to ensure that the effector and arm do not interfere with the robot body or nearby equipment.



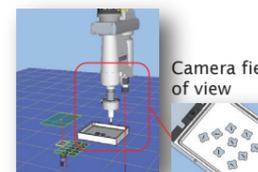
Program development

Programs can be written in SPEL+ and executed within the simulator.

Camera and field of view positioning



The simulator displays the position and angle of view for the selected camera and lens, making it easy to check camera positioning.

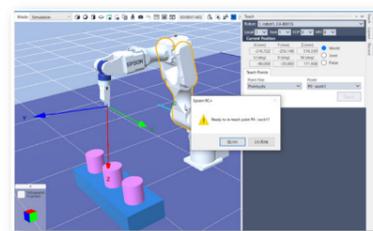


An image of the camera's field of view can also be displayed to facilitate positioning of workpieces and nearby equipment.

*Please note that live camera image display and Vision Guide connectivity are not supported, and displayed images cannot be image processed.

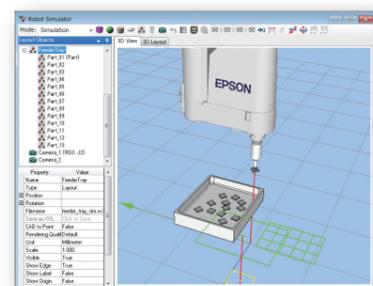
Virtual teaching

Teaching can be carried out within the simulator by positioning the robot with CAD data.



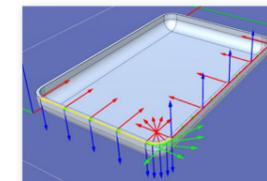
Pick and place

Pick and place program CAD data can be evaluated in the simulator to ensure nearby equipment does not interfere with arm movement.



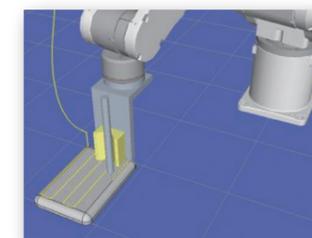
CAD-to-Point teaching

Teaching points can be set using imported CAD data.



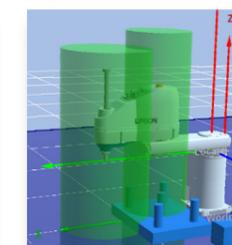
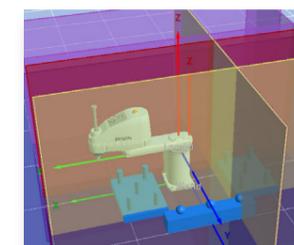
Path display

Robot motion paths can be displayed to confirm teaching points and programs.



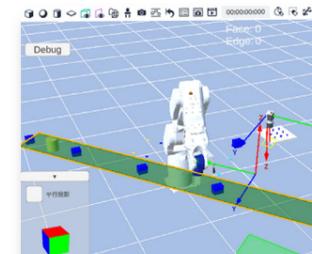
Safety function

3D view for safety function allows you to check and modify safety function parameters (operating range and angle).



Conveyor tracking

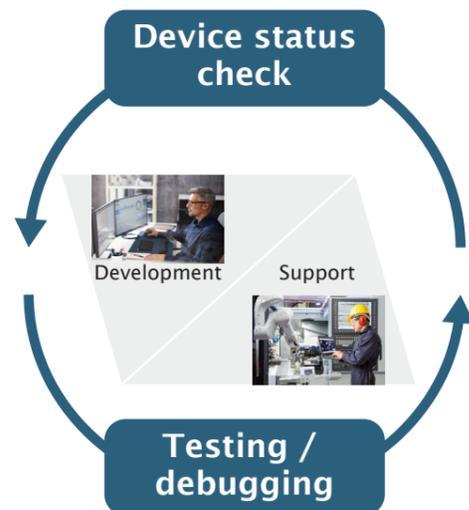
Conveyor tracking simulation allows you to build and execute it virtually and quickly validate productivity.



Epson RC+ software makes it easy to develop control programs for setup, operation, and regular maintenance. With an easy-to-understand graphic user interface, it helps you achieve maximum productivity with minimum programming overhead.

Diagnostics Function

Lite Basic Standard Premium



For more detailed information, please see the YouTube channel "Epson Robot Video Manuals."

What is Diagnostics function?

The toolset for efficient debugging, troubleshooting, and identifying optimization points in equipment development. These visualizes system configuration, program and I/O status.

- Quickly analyzes and resolves issues to minimize
- Downtime from unexpected failures or performance drops.

System



Easily grasp and compare system configurations

Displays a list of software and hardware components in the current robot system. Difference detection function streamlines development and troubleshooting by highlighting changes.

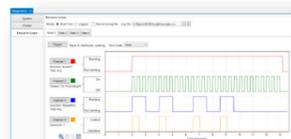
Profiler

Function	Profiling Enabled	Execution Count	Percent Total Time	Average Time (sec)	Minimum Time (sec)	Maximum Time (sec)
main	ON	1	100%	11.07	11.07	11.07
main	ON	2	50%	5.535	5.535	5.535
main	ON	4	25%	2.7675	2.7675	2.7675

Grasp and compare the execution time of each function

Detailed statistics on the execution time of each function can be recorded and displayed. It makes it easier to identify bottlenecks and optimization points. In addition, the average execution time can be compared, and the improvement effect can be quantitatively evaluated.

Resource Scope



Real-time monitoring of state changes

Monitors I/O and function execution in real time along a timeline.

- Up to four resources viewed simultaneously
- Per-task function tracking

Supports timing verification and detection of unexpected events boosting efficiency in development, debugging, and troubleshooting.

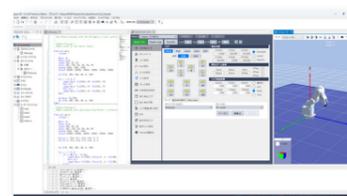
Connectivity for External Environment

Lite Basic Standard Premium

Seamless device integration and precise simulation in virtual environments

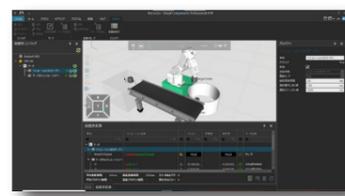
Virtual Commissioning with Epson RC+ and OPC UA Connectivity

Accurate reproduction and validation of robot behavior with Epson RC+ Integrated development and validation using external factory simulators



(1) Developed on Epson RC+

Layout, teach, and program including I/O interaction with peripheral devices, etc.



(2) OPC UA protocol makes it possible

to simulate an entire process with reproducing I/O interactions with peripheral devices, also precise robot cycle-time on an external simulator such as Visual Components.

Case Studies of Connecting with Visual Components* (* Visual Components is produced by Visual Components Oy.)

Library Builder Function

Library Creation, Distribution : Lite Basic Standard Premium
Library Use : Lite Basic Standard Premium

For more detailed information, please see the YouTube channel "Epson Robot Video Manuals."

What is Library Builder function?

supports scalable team development by enabling the packaging and distribution of libraries and user interfaces. It enhances program quality and streamlines the delivery and use of solutions. Also, it allows you to focus on your strength for application building.

Issues

- Tightly coupled with the user program
- Cannot customize to suit the project
- Lack of documentation and related files
- Depends on the settings on IDE, Dynamic processing is not possible
- Malfunctions due to resource contention

Features and value by Library Builder

- Separation of user programs and libraries
- Customizable callback functions and error handling
- Integration of documentation and related files into the package
- Dynamically accessible commands
- Conflict avoidance through reservation/ use of dedicated resources

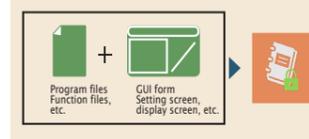
Library Builder helps you standardize and optimize at the same time on application development

How Library Builder function works

Package the library & UI



Creator



Distribute it securely



Library Distribution License

Encrypt the library, safe and appropriate distribution

Reuse easily



User

- You can package your custom programs for reuse, reducing development effort.
- By reducing support workload, you can focus on tasks that create new value.
- To promote your own products, you can also develop and distribute utilities for Epson robots.

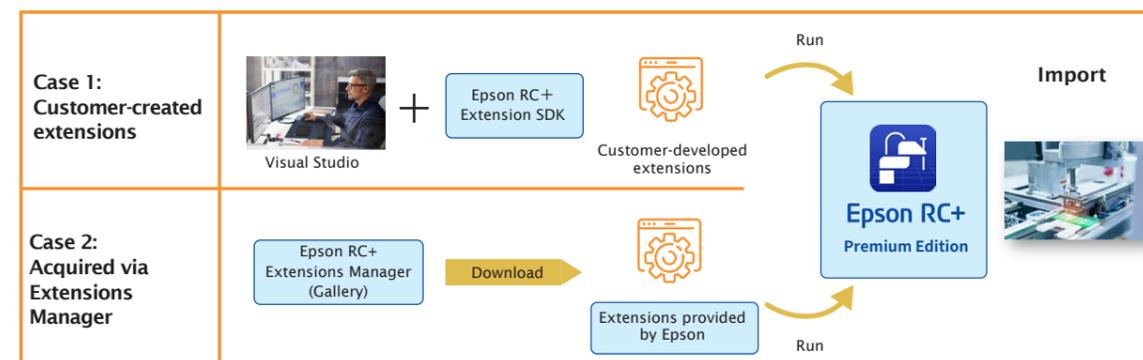
- Frequently used in-house hardware control tools and tools from past projects can be easily reused without compromising quality.
- Startup, adjustment, and debug time can be shortened, making it easier to improve overall quality.

RC+ Expansions

Lite Basic Standard Premium

Scalable platform to customize Epson RC+ for your specific applications and workflows

- Seamless integration with external equipment and systems by utilizing RC+ Extensions
- Compatible with standard development environments like Visual Studio and C#



: Provided by Epson

Epson RC+ software makes it easy to develop control programs for setup, operation, and regular maintenance. With an easy-to-understand graphic user interface, it helps you achieve maximum productivity with minimum programming overhead.

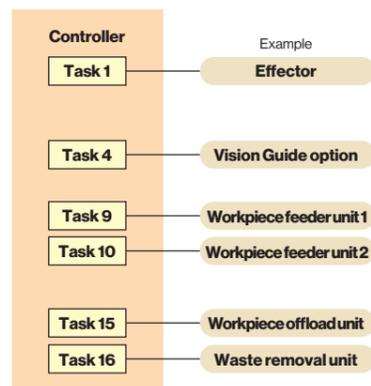
Lite Basic Standard Premium

SPEL+ language

Easy-to-learn SPEL+ programming is similar to BASIC, and provides full support for multitasking, motion control, I/O control, and a wide range of other functions.

Multitasking function

With Epson's programming language, even complex multitask processes can be automated with ease. Up to 32 individual tasks can be seamlessly executed and controlled by a single program. Vision Guide machine vision, and pulse generator control of peripheral equipment can all be utilized to achieve full process automation.



Operating speed and acceleration/deceleration settings

Operating speed and acceleration/deceleration of the arm can be set in 100 steps.

PTP motion The speed and acceleration can be set as a percentage of their respective maximum values.

CP motion For continuous path motion, the following parameters can be set individually:
 • Maximum speed (mm/sec)
 • Maximum acceleration/deceleration (mm/sec²)
*Some models support configuration with more than 100 steps

Positioning completion time control for maximum efficiency

A time limit can be set for the completion of effector positioning to enable the next instruction to be executed even if the target point has not been reached. This allows you to maximize your yield by prioritizing takt (cycle) time over precision, or vice versa, according to the nature of the work to be done.

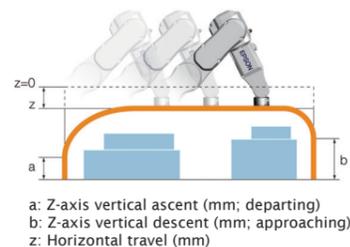
High repeatability with varying payloads and effector orientation

Once the operator has set workpiece and effector weight, weight range, and effector orientation, acceleration is automatically adjusted to reduce residual vibration and ensure high repeatability.

3D jump with variable arch for ultra-precise short-distance movement

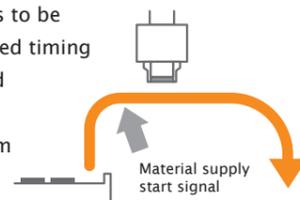
Epson's SCARA robots and ProSix robots all support JUMP command movements in three-dimensional space, and the arch described by the approaching and departing effector can be set to suit the work environment.

Deceleration/acceleration of the approaching or departing head can be regulated without interrupting operation, ensuring smooth, precise, short-distance motion that helps improve takt time and product quality stability.



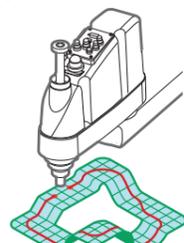
Parallel processing for higher speed and efficiency

Parallel processing enables you to control peripheral devices while the robot arm is in motion. It allows I/O operations to be performed at any desired timing to ensure synchronized control of multi-device processes for maximum throughput efficiency.



High-speed, high-precision, 3D continuous path control

All Epson robot systems offer the fast, precise, three-dimensional continuous path (CP) control needed for high-productivity coating and sealant application processes. Advanced linear interpolation, arch interpolation, and free curve motion enable precise effector control, and simple PASS commands can be used to evade obstacles within the workcell space. Programmed paths can reference either a tool-centered control point or an external control point.



Continuous path (CP) control

Configuration singularity avoidance function

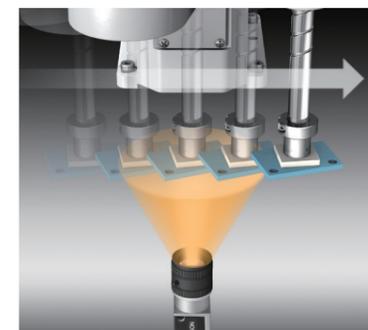
Continuous path operations that contain robot arm configuration singularities can cause joint-speed overrun. If the arm approaches such a configuration, the singularity avoidance function prevents overrun errors by maintaining joint speed until the arm has moved past the point of singularity.



On-the-fly pickup

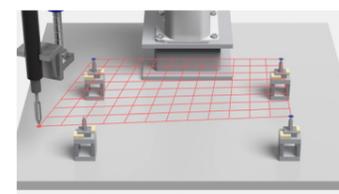
Workpiece pickup, alignment, and kitting can be carried out on-the-fly without pausing robot movement. Combined with an imaging system, it makes an ideal solution for high-speed alignment and handling of randomly arranged workpieces.

* RC700 series and RC800 series only.



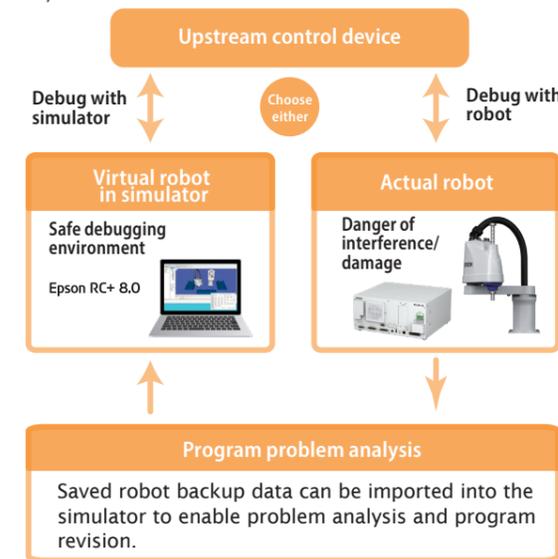
Area distortion correction

By using relationship between reference points on a drawing and actual teaching coordinate of these points, correct the target points bounded by the reference points. Re-teaching can be omitted even if absolute coordinates of target points are shifted due to change over and the like.



Debugging function

Programs can be run within the simulator, allowing full debugging without a robot. Virtual I/O control can be effected by entering values from a PC via RS-232C or TCP/IP.



Remote control expansion I/O

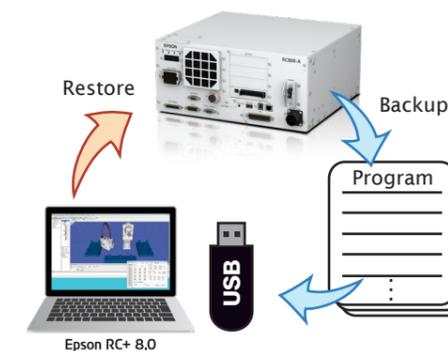
Using the remote control expansion I/O, the robot can be controlled simply by entering I/O commands — there's no need for complex program development.

Consumables management

Enables you to set recommended maintenance alarms based on operating time or distance for batteries, grease, timing belts motors, brakes, and ball screw splines.

Controller settings backup

Controller settings and programs can be backed up to a PC or USB memory to facilitate offline analysis and enable quick restoration when needed.

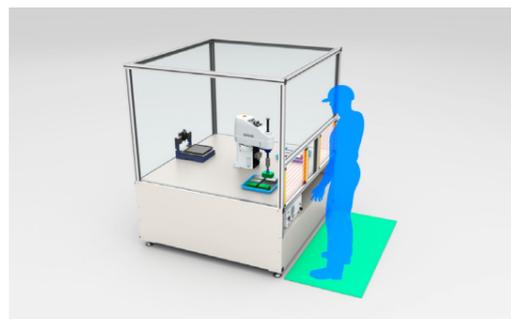


Epson's RC800-A and RC700-E controllers enhance the safety for Epson robots.⁽¹⁾
By activating the Safety Function 7.0 / 8.0 license (SLS/SLP), optional safety functions can be utilized to help create a more flexible layout that allows robots and humans to work together in a shared space.⁽²⁾

Optional Safety Functions

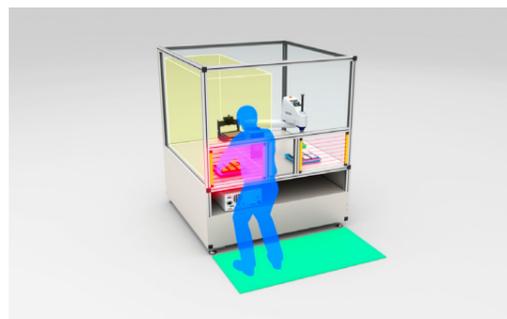
Safety Limited Speed (SLS)

Safety Limited Speed (SLS) is a function that monitors the robot's speed to ensure that it does not exceed the preset speed limit. When used together with external safety devices such as safety mats, the robot can automatically slow down and continue operating safely when a person approaches, without exceeding the preset speed limitation.



Safety Limited Position (SLP)

Safety Limited Position (SLP) is a function that monitors the robot's position and joint angles to prevent it from entering predefined restricted areas. When used together with external devices such as light curtains, SLP defines the operator's working area as a restricted zone for the robot.



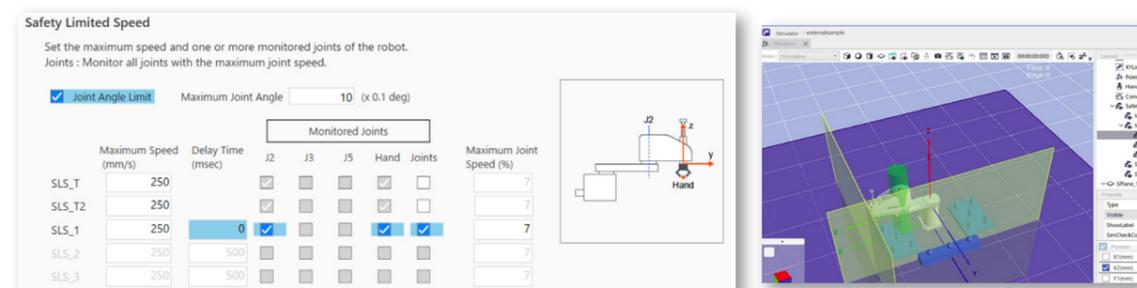
Example of Productivity Improvement and Cost Reduction by Utilizing SLS and SLP

In applications where a robot assembles parts in a robot cell and operators occasionally enter the cell to load or unload parts, productivity becomes low if SLS and SLP are not used. This is because the robot must stop its operation to ensure the operator's safety whenever he or she enters the cell. Productivity can be improved by adding a dedicated load/unload station, but doing so increases both system cost and footprint.

By utilizing SLS and SLP, it is possible to maintain productivity and safety at the same time without using a special load/unload station. When a person approaches the cell, SLS slows down the robot. When the person enters the cell to perform load/unload work, SLP designates the operator's working area as a restricted zone for the robot.

Software Tool for Safety Functions

The safety-function configuration tool, Safety Function Manager, is provided as a standard feature of Epson RC+. With this tool, you can assign safety I/O ports and configure SLS/SLP parameters.



Solutions to balance Safety, Productivity, and Cost

- Productivity -

Impact of safety considerations on productivity

- Without Safety Function -

In systems equipped with a safety door, an operator must open the door to load or unload the workpiece. To ensure safety, the system must stop every time the operator works inside the equipment. As a result, overall productivity is reduced.

- Before -



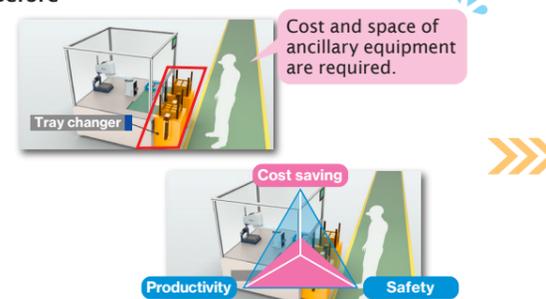
- Cost -

Impact of safety considerations on cost

- Without Safety Function -

To maintain productivity, one option is to use a tray changer. However, this increases both system cost and installation cost. In addition, the required installation space becomes larger.

- Before -



Benefits of adopting Safety Function from a productivity perspective

- With Safety Function (SLS/SLP) -

When safety functions such as SLS and SLP are applied, it is no longer necessary to stop the system each time the operator loads or removes a workpiece. These functions allow user safety to be ensured without sacrificing productivity.

- After -

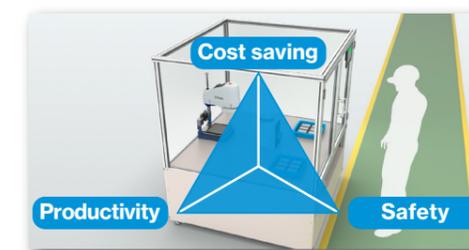


Benefits of implementing Safety Function from the cost saving perspective

- With Safety Function (SLS/SLP) -

With safety functions such as SLS and SLP, the system can be simplified. As a result, installation space is reduced and overall system cost can be lowered.

- After -



Certification Provided by 3rd-Party Testing Organizations

Epson's robot systems^{(1), (3)} are certified by the international certification body TÜV SÜD for compliance with global safety standards such as ISO 10218-1 and ISO 13849-1 (PL d, Cat. 3). They also hold NRTL certification, which is required for safety compliance in North America.



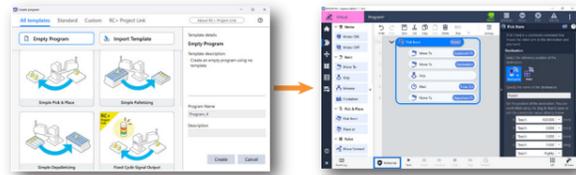
¹ The supported model: SCARA robot "CX-B series" "CX-C series" "LS-C series" "RS-C series", 6-axis robot "C-C series" and "CX series".
² Epson's safety function is not "collaborative" function.
When building the system, please implement the risk assessment for your system, and consider the necessary safety measures
³ The supported controller: "RC800-A" and "RC700-E"

Easy to Use Software Epson RC+ Express Edition

By linking Epson robots with image-processing equipment, the system can instantly capture object features and positions, enabling various operations. This not only improves work efficiency but also reduces costs by eliminating the need for specialized jigs or additional line extensions.

Program Template

- Premade templates allow you to create simple programs quickly, such as pick-and-place, palletizing, depalletizing, etc.
- Complete the program simply by adding the position information required for each command.



Visual Programming

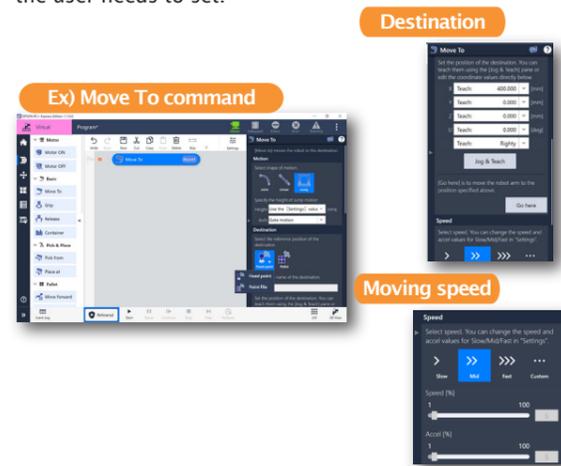
- Block-style, low-code programming environment. User-friendly GUI operable on a tablet PC with drag-and-drop.
- Epson RC+ Express Edition can automatically convert visual program blocks into SPEL+ commands (Epson's standard robot programming language). Programs created in Epson RC+ can be imported into Epson RC+ Express Edition as command sequences.



*To use this function, the Epson RC+ 7.0 Express Edition Advanced License (paid option) is required.

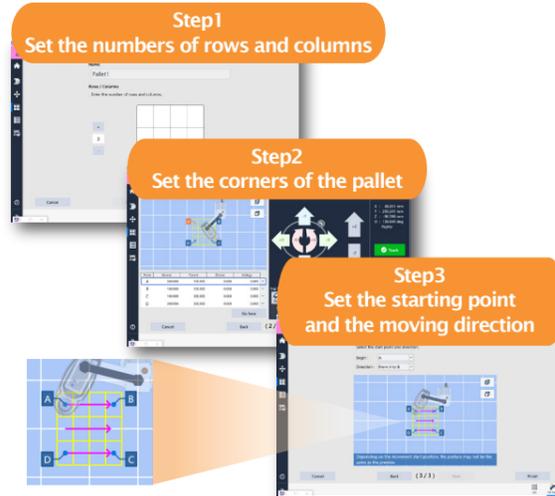
User Guidance

- Required settings are displayed automatically when a command is selected.
- Optimal preset parameters minimize the number of items the user needs to set.



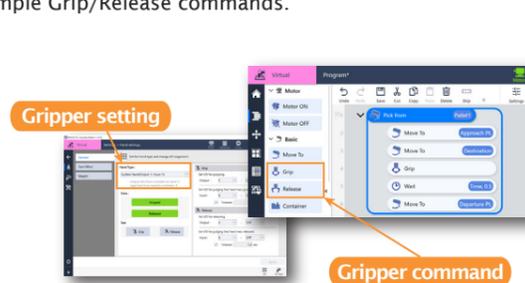
Pallet Wizard

- Create a pallet in just 3 steps.
- Easy-to-understand setup with clear start point and direction.



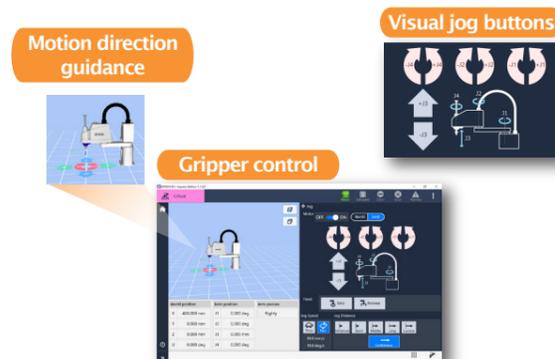
Gripper Setting

- Templates and guidance help you set up gripper motion quickly, whether using a suction pad or mechanical chuck.
- Gripper operation can be controlled directly from the program without needing to manage I/O details, using simple Grip/Release commands.



Visualized Jog & Teach

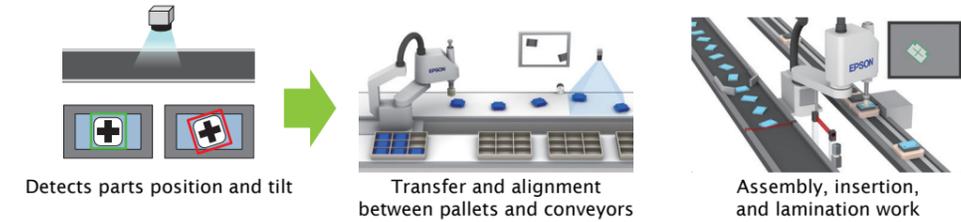
- Intuitive GUI reduces teaching time and difficulty.
- Visual jog buttons
- Gripper control
- Motion-direction guidance



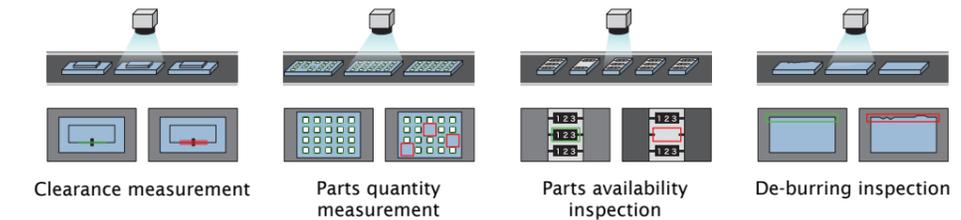
Vision Guide

Examples of Image Processing System Applications

Positioning application examples



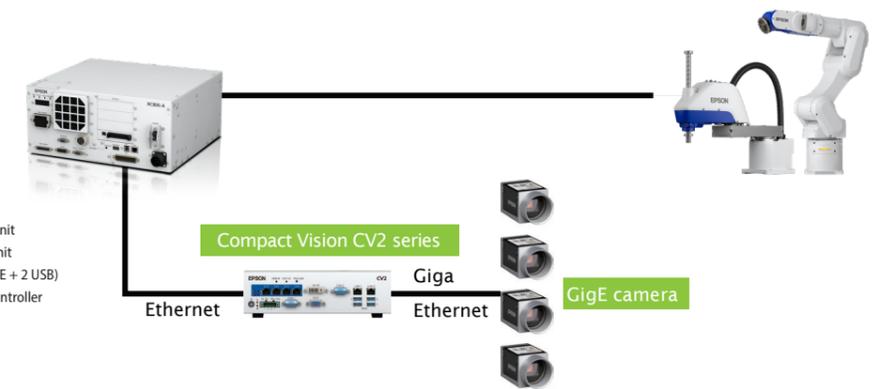
Other application examples



System configuration examples

Compact Vision

- *GigE cameras: up to 4 cameras per CV2 unit
- *USB cameras: up to 2 cameras per CV2 unit
- *Up to 6 cameras total per CV2 unit (4 GigE + 2 USB)
- *With this configuration, a single robot controller can support up to eight cameras (multiple CV2 units required)



PC Vision

- *Epson RC+ must be running on PC
- *Not all Ethernet adapters are supported (contact authorized dealer for supported adapter specifications)
- *With this configuration, a single robot controller can support up to eight cameras

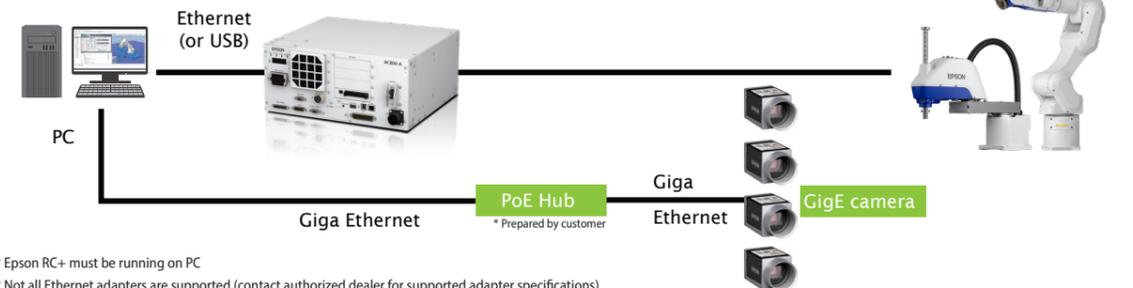


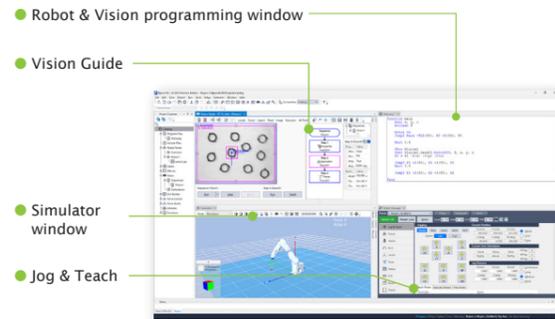
Image Processing Software “Vision Guide”

Epson's Vision Guide is a simple and easy-to-use image-processing system integrated with Epson robots. It enables fast system start-up and offers intuitive tools for creating vision programs.

- Robot and camera coordinates can be aligned easily using a wizard-based teaching process.
- Image-processing sequences can be created quickly by placing detection tools and setting parameters with the mouse.
- Image-processing commands can be executed directly from robot programs, without the need for separate communication routines.

Convenient programming environment

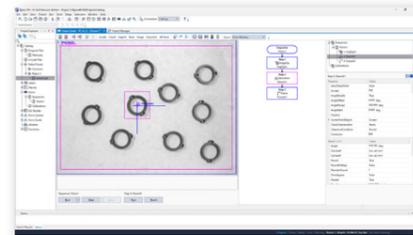
Robot and vision programs can be developed within the same software.



Easy-to-use GUI

Registering and configuring vision objects - tools for inspection, detection, measurement, and counting - is easy and helps streamline equipment startup.

- Vision objects can be registered simply by drag-and-drop.

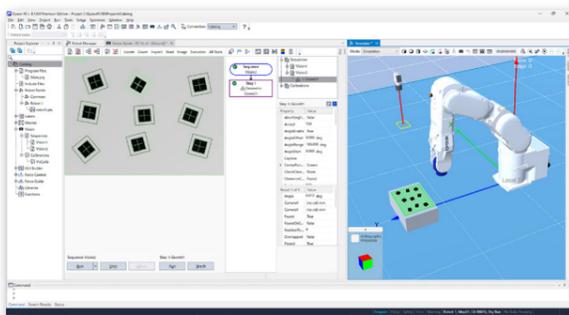


Vision simulation

Epson Vision software includes a simulator that lets you visualize robot operations and workflow before equipment is installed.

This makes it easy to plan and configure the system for maximum productivity, and allows program development to proceed while the system is being built.

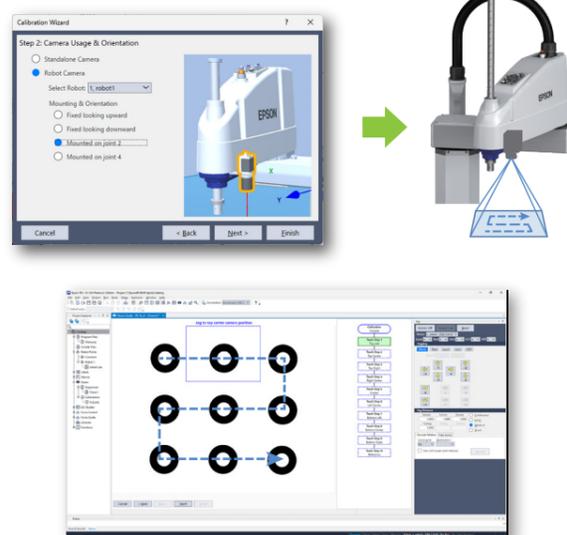
- Vision and process sequences can be prepared in advance, before the system is installed.
- Images of objects can be captured within the simulator and processed directly, enabling integrated robot-vision simulation without requiring physical hardware and streamlining both design and verification.



Easy calibration

A built-in image-processing engine makes it easy to align the camera's coordinate system with the robot's coordinate system, eliminating the need for complex programming during vision-to-robot calibration.

Camera Calibration Wizard



The robot automatically^{*1} follows the steps in the Calibration Wizard to complete the calibration.^{*2}

^{*1} The automated procedures may vary depending on the camera installation method and the selected options.

^{*2} Manual teaching may be required depending on the equipment configuration.

CV2 series			
Item	CV2-LB	CV2-SB	CV2-HB
Image processing speed	Entry	Standard	High speed
Connected cameras	up to 4 GigE cameras and 2 USB cameras (6 cameras total per CV2 unit) (all cameras must be compatible with Vision Guide)		
Interface	Ethernet (for robot controller: 2 RJ45 selectable ports [10 / 100 / 1000 Mbps]) (for GigE cameras: 4 RJ45 selectable ports [1000 Mbps])		
Dimensions (mm)	232 (W) x 175 (D) x 70 (H) (excluding rubber feet)		
Operating environment	5~40°C, 20~80%RH (no condensation)		
Installation direction	horizontal or vertical		
Voltage	DC 19~24 V		
Current	8 A (at DC 19 V) ~ 6.3 A (at DC 24 V)		
Weight	2.1 kg		

GigE cameras				
Camera resolution	1.3 megapixels	2 megapixels	5 megapixels	20 megapixels
Vision Guide resolution	1280 x 1080	1600 x 1200	2560 x 1920	5472 x 3648
Black & White / Color	B&W	B&W / Color	B&W / Color	B&W / Color
Dimensions (mm)	housing dimensions: 29 x 29 x 42 (total dimensions: 29 x 29 x 60.3)			
Weight	90 g (excluding lens)			
Ambient temperature	0~40°C (external surface temperature below 50°C)			
Ambient humidity	20~80% (no condensation)			
Lens mount	C mount			
Interface	PoE (Power Over Ethernet)			
Camera cable length	5 m / 10 m			

Megapixel lenses																
Item	Megapixel lenses					Megapixel lenses (HF)					1-inch lenses					
Focal length (mm)	8	12	16	25	50	8	12	16	25	35	8	12	16	25	35	50
Minimum focus distance (mm)	0.1	0.15	0.3	0.5		0.1		0.2	0.2		0.3			0.5		
Mass (g)	62.6	61.9	60	71.2	85	95	85	90	85		164.8	102.8	94.4	78.6	103.0	107.0
Filter diameter (mm)	M30.5 x P0.5					M30.5 x P0.5					—	M40.5 x P0.5		M34.0 x P0.5		
External dimensions ^{*3} (mm)	ø 33.5 x 28.2		ø 33.5 x 36.0	ø 33.5 x 38.2	ø 33.0 x 48.5	ø 33.0 x 52.5		ø 33.0 x 53.1		ø 57.5 x 53.2	ø 42.0 x 36.1	ø 39.5 x 35.2	ø 39.5 x 34.0	ø 39.5 x 45.2		

^{*3} : As lenses are larger than camera bodies, protrusions on camera attachment surface may interfere with lens operation. In such case, use the optional camera bracket to ensure that protrusions do not affect lens operation.
Note : Lens support varies according to camera type.

Other Options	
Extension tube set	Can be inserted between the camera and lens to adjust focusing distance and field of view. This set includes 0.5, 1, 5, 10, 20, and 40 mm tubes (1 each). Tubes can be used singly or in combination to obtain the desired focusing distance.
High-flex GigE camera cable (5 m / 10m)	Cable for connecting GigE cameras to CV2, GigE camera PoE injector, or switching hub.
High-flex GigE camera trigger cable (5 m / 10 m)	Camera triggering cable for connecting GigE cameras to robot controller.
CAT5e Ethernet cable (5 m / 10 m)	Cable for connecting robot controller to CV2, GigE camera PoE injector, or switching hub.
GigE camera tripod adapter	1/4-inch threaded adapter for attaching a GigE camera to a tripod.



One-stop service

Whether you need support for initial setup or for active production lines, Epson provides one-stop service for both robot and machine-vision systems.

With a single service contact - rather than coordinating two separate teams - your production line can be back up and running in no time.

Part Feeding System

Epson part-feeding system provides a powerful solution that accommodates a wide variety of parts. It offers simple setup and improved flexibility.

System configuration examples

A part-feeding system integrating an Epson robot, vision system, and flexible feeder can be constructed. All settings and programming for this system are unified in Epson RC+, enabling seamless equipment integration.



Automated parameter tuning integrated with the vision system

Automatic feeder calibration

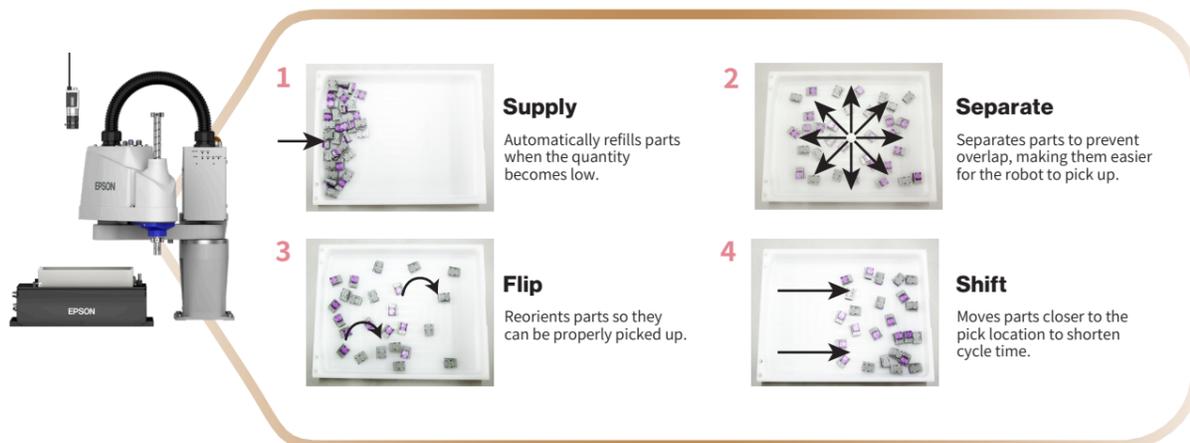
Easily adjust feeder parameters by simply following the wizard.



Epson's part-feeding system is equipped with an automatic calibration function that works together with the vision system to automatically adjust feeder parameters for each part. This significantly reduces the man-hours required for adjustment work. Up to 32 parameter sets can be registered, allowing easy switching via program even when parts are changed.

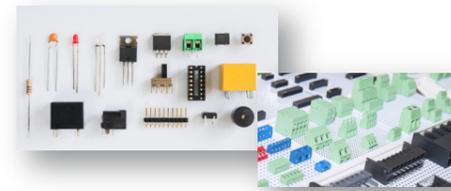
Enables part replenishment, distribution, flipping, and transfer

Automatically determines and performs four actions based on the positions of the parts.



Supports a wide variety of parts

Epson part feeding can precisely control the amplitude, duration, and timing of vibration, allowing it to handle parts made from a wide range of materials and shapes without requiring hardware changes. This makes it possible to build a line capable of product changeovers without stopping the production line.



*The image is for reference only and may differ from the actual compatible part.

Two-color backlight as standard

The IF-A Series backlight offers the following features and benefits:

- Two backlight colors – white and red – are provided as standard. Colors can be changed dynamically in a user program without modifying the hardware.
- Backlight colors can be easily evaluated to make parts easier to identify, helping reduce tooling time.
- Improved brightness uniformity across the entire picking area, including the periphery, increases the recognition rate of peripheral parts and improves overall productivity.



[White]



[Red]

Specifications

IF series	IF-80	IF-240	IF-380	IF-530
Appearance				
Recommended part size	3 ~ 15 mm	5 ~ 40 mm	15 ~ 60 mm	30 ~ 150 mm
Plate	Selectable according to part requirements: Surface (Flat / Anti-rolling / Anti-stick), Material (Standard / ESD / Medical), Color (White / Black)			
Backlight	None, white, red, blue, green, infrared (selected when ordering and built into the main unit)			
Picking area (L x W)	65 x 52 mm	195 x 150 mm	304 x 233 mm	403 x 347 mm
Purge mechanism	Selectable option			
Hopper option	Built-in option	1, 2, 3, 7* litter	1, 2, 3, 7, 14* litter	
Main power supply	DC24V, 5A		DC24V, 4A	DC24V, 6A
Backlight power supply	DC24V, 1A	DC24V, 3A	DC24V, 16A	DC24V, 14A
Product size	320 x 65 x 140 mm	300 x 171 x 132 mm	499 x 257 x 308 mm	600 x 374 x 328 mm
Applicable manipulator	Epson Robots			
Applicable vision system	PV1, CV2-SA, CV2-HA, CV2-LB, CV2-SB, CV2-HB			

*The 7-liter and 14-liter hopper containers may have restrictions on installation positions. For details, please refer to the manual.

IF-A series	IF-A1520	IF-A2330
Appearance		
Recommended part size	5 ~ 40 mm	15 ~ 60 mm
Plate	Selectable according to part requirements: Surface (Flat / Anti-rolling), Material (Standard), Color (White)	
Backlight	Both white and red equipped, switchable by programming	
Picking area (L x W)	195 x 150 mm	300 x 230 mm
Purge mechanism	Selectable option	
Hopper option	1, 2, 3, 7 litter	1, 2, 3, 7, 14 litter
Main power supply	DC24V, 6A	
Backlight power supply	DC24V, 2A	DC24V, 3A
Product size	330 x 172 x 129 mm	480 x 292 x 249 mm
Applicable manipulator	Epson Robots	
Applicable vision system	PV1, CV2-SA, CV2-HA, CV2-LB, CV2-SB, CV2-HB	

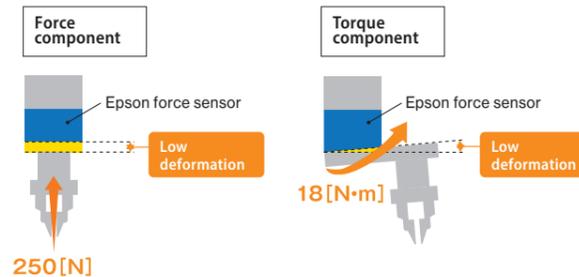
High-rigidity, high-sensitivity S250 Series force sensors are specifically designed for use with Epson robots, enabling extremely precise force control for high-precision assembly tasks.

Force Sensors

S250 Series force sensors incorporate Epson's exclusive crystal piezoelectric technology, providing higher rigidity and sensitivity compared to conventional force sensors.

Advantage 1 High rigidity

S250 Series sensors offer exceptionally high rigidity and resist deformation even under heavy loads. They support a rated load of 250 N on the X, Y, and Z axes, and a moment load of 18 Nm, ensuring stable performance during high-precision operations.



Advantage 2 High sensitivity

S250 Series sensors also provide excellent sensitivity and fast response, with a high resolution of 0.1 N and a low noise level of 0.035 N on the X, Y, and Z axes.

Force-sensing system applications

Robots equipped with the Epson S250 Series force-sensing system can perform delicate tasks that cannot be automated safely using only teaching or machine-vision systems. As a result, production processes that once required skilled operators to handle fragile or easily damaged workpieces can now be fully automated.

Precision component assembly

The system enables the assembly of precision components, such as inserting small gears or parts that deform easily even under very small forces.



Precision fitting

Taking advantage of the sensor's minimal deformation and fast response, the system supports precise fitting operations with tight clearances - for example, smoothly inserting cylindrical components into mating holes.



Precision screw tightening

Micro-screw tightening can be performed using coarse teaching, with the operator adjusting by feeling the applied force. By monitoring the force during tightening, the system can also verify whether the operation was completed successfully.



Connector insertion

Various types of connectors can be inserted using coarse teaching. Even if the connector is slightly misaligned or tilted, the system detects the applied force and compensates automatically.



Fine polishing

Polishing operations that previously relied on an operator's touch can now be automated by reproducing the required force. This reduces variations caused by manual work and ensures consistent quality.



Force Guide - Easy Force-Sensing Program Development

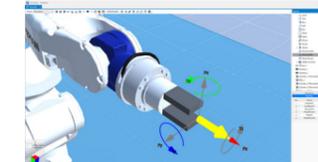
The Force Guide interface allows force-sensing programs to be created easily by simply dragging Force Guide objects into a flowchart. In addition, the simulator's motion display and force-waveform monitoring features make debugging faster and more intuitive than ever.

Force Guide GUI



The Force Guide interface clearly shows the role of each programming object and provides a flowchart view for intuitive confirmation of program sequence order.

Simulator



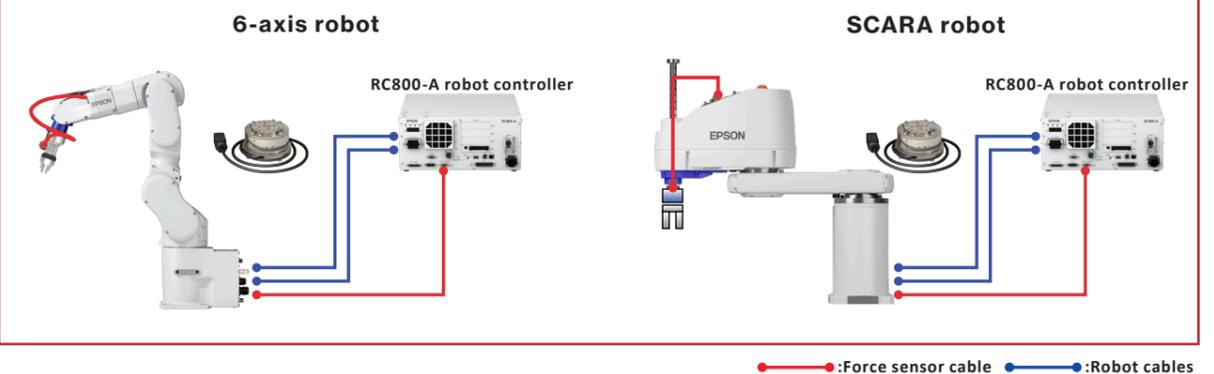
The simulator enables quick visualization and confirmation of robot-arm motion and axis-coordinate changes in a virtual environment.

Force waveform display & recording



The force-waveform display allows real-time waveforms to be compared with previously recorded data, making it easy to detect anomalies and understand how various conditions affect system performance.

System configuration examples



Force sensor specifications

Sensor model	S250L	S250P	S250H	S2503/S2506/S25010	SH250LH ^{*3}	S250A-ISO2-S	S250A-ISO2-P	
Applicable robot	C8 / C12 series ^{*1}		N2	GX Series ^{*2} RS Series	N6	CX series		
	Standard/Cleanroom ^{*4}	Protection				Standard/Cleanroom ^{*4}	Protection	
Dimensions	Ø88 x H49mm	Ø88 x H66mm	Ø80 x H49mm	Ø80 x H52mm	Ø84.5 x H48mm	Ø80 x H59mm	Ø88 x H76mm	
Weight ^{*5}	520g	680g	460g	640g	460g	490g	710g	
Supported controller	RC800-A / RC700-A / RC700-E					RC800-A		
Measurement freedom	6-axis: Force Fx, Fy, Fz; Moment Tx, Ty, Tz							
Rated load	Fx, Fy, Fz: 250N, Tx, Ty, Tz: 18 N·m							
Static load capacity	Fx, Fy, Fz: 1000N, Tx, Ty, Tz: 36N·m							
Measurement resolution	Fx, Fy, Fz: ±0.1N less, Tx, Ty, Tz: ±0.003N·m							
Measurement precision	less than ±5% R.O.							
Operating environment	Temperature	-10 ~ 40 °C						
	Humidity	10 ~ 80%Rh (no condensation)						
Cable length (between robot and cable box)	3m/5m/10m/20m			3m/5m/10m		3m/5m/10m/15m/20m		
Protection class	IP20	IP67	IP20			IP20	IP67(Standard)	
Included items	FS2 communication module ^{*6} , communication cable, mounting flange							

^{*1}: After Epson RC+ 7.0 Ver.7.5.2 ^{*2}: Excluding GX1-C ^{*3}: Supports pass-through cable connection ^{*4}: Particles generated from the cable section (user-installed cable) are not taken into account. ^{*5}: Including sensor and mounting flange, but excluding cable ^{*6}: RC700-A and RC700-E only

Epson's extensive expertise in industrial robotics and control technologies enables us to offer a wide range of software options.

RC+ API

Compatible controllers
 RC800-A RC800L RC700-E RC700-A RC90-B T series

Program and execute robot applications in a familiar Windows® OS environment

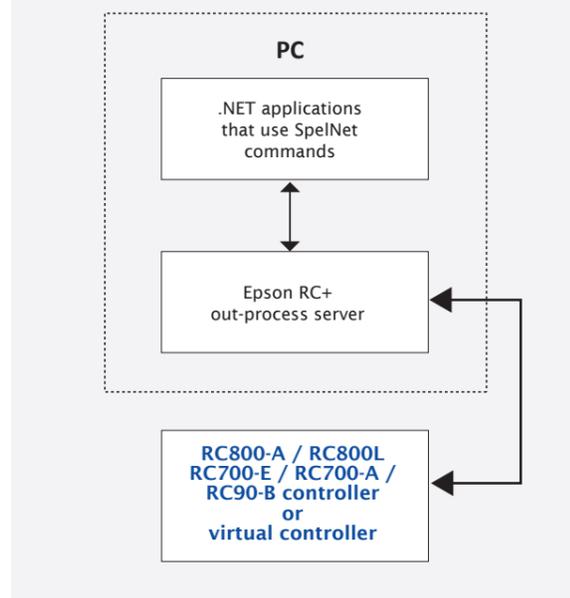
- Robots can be controlled using Visual Basic®, Visual C++®, LabVIEW™, and other third-party programming languages.
- Robot status and variable values can be accessed programmatically.
- Third-party Visual Basic interfaces and database tools can also be used for application development.

The following Epson RC+ windows and dialogs can be called directly from within a Visual Basic or Visual C++® application:

Basic application include :

- Robot Manager
- I/O Monitor
- Task Manager
- Maintenance Dialog
- Simulator
- Pressure Monitor

RC+API basic system

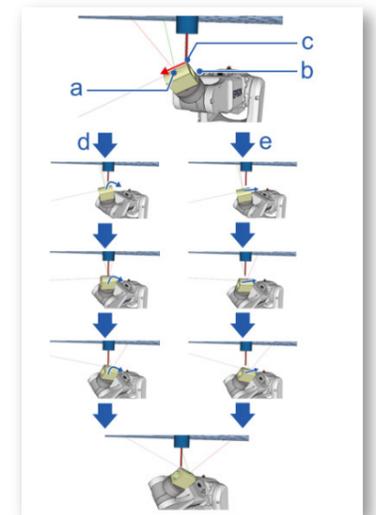
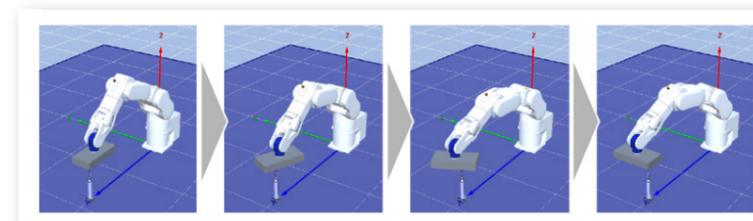


External Control Point

Compatible controllers
 RC800-A RC800L RC700-E RC700-A RC90-B T series VT series

Precise positioning without complex calculations

- For processes where a workpiece must be moved relative to a fixed tool, external control points enable precise positioning without requiring complex calculations.
- Up to 15 external control points can be configured.



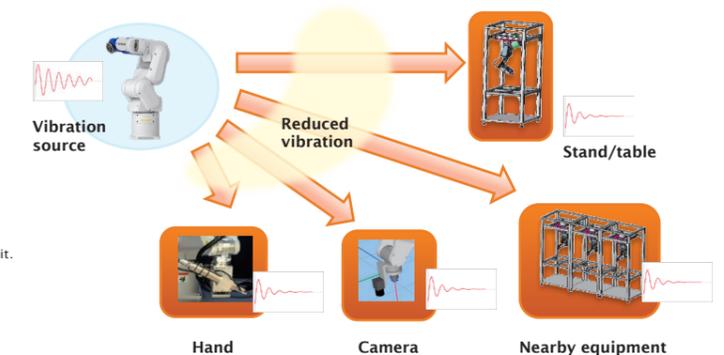
VRT

Compatible controllers
 RC800-A RC800L RC700-E RC700-A RC90-B T series VT series

Reduced residual vibration for higher productivity

- Advanced Vibration Reduction Technology (VRT) reduces residual vibration in the robot hand and mounting stand caused by robot motion.
- By suppressing vibration, the system enables faster acceleration, shorter cycle time, and higher yield.

* Residual vibration must be pre-measured using the optional VR unit.

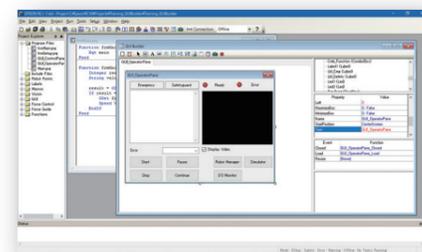


GUI Builder

Compatible controllers
 RC800-A RC800L RC700-E RC700-A RC90-B T series VT series

Easily create custom interfaces for your control programs

- Quickly create custom control interfaces without needing dedicated PLCs or display devices.
- A full-featured toolset provides an intuitive, easy-to-use design environment.
- Simple GUIs can be created without relying on Visual Studio® or other third-party software tools.
- Even users with no prior GUI-development experience can easily build graphical user interfaces using GUI Builder.



OPC UA

Compatible controllers
 RC800-A RC800L RC700-E RC700-A RC90-B T series

Easy configuration using the dedicated software "OPC UA Configurator" reduces the total cost of building a core system.

- Easily build a system for analyzing communication data.
- Defects that occur at remote sites can be accurately reproduced on the IT system, making troubleshooting more efficient.
- Traceability data can be obtained from the robot's serial number.



A wide range of controller options are offered to expand the range of tasks and processes that can be automated.

Teach Pendant (TP4)

Compatible controllers
RC800-A **RC700-E** **RC700-A** **T series** **VT series**

In addition to teaching, programming and robot settings are possible.
 Teach pendant that can be completed without a PC



- Teaching-mode that enables intuitive operation
 - 3D robot display function
 - Robot indicator display function
 - (allows you to check error status and error details)
 - Test mode function for program verification
 - Program editing and build functions
 - Force monitor function (when using optional Force Guide)
 - Direct teach function (when using optional Force Guide)
 - Equipped with integrated development environment Epson RC+ for TP4
 - In addition to the teaching-only mode, it also has a mode that runs the integrated development environment Epson RC+ for TP4.
 - Programming possible without a PC
 - Various robot settings are possible without a PC.
 - Original operation panel (HMI) can be constructed
 - GUI Builder* is included as standard. It is possible to construct an original operation panel
- *Please refer to P91
- Ergonomic design
 - Compatible with both right-handed and left-handed people
 - Clicky hardware jog keys
 - Easy-to-operate enable switch
 - 10.1inch capacitive multi-touch screen
 - Large screen with resolution 800X1280
 - IP65 protection structure that can be used in various environments



Items	Description	
Display	Type	TFT
	Size	10.1 inch
	Resolution	800 x 1280
	Touch screen	Capacitive multi-touch
Appearance	Backlight	LED
	Outer dimension	215 x 284 x 69 mm
	Weight	Approx. 1.2 kg (excluding cables)
	Cable length	5 m
SW	IP rating	IP65
	Emergency	Equipped
	Enable switch	Equipped
	Key switch	3 position, Ethernet communication
Power	Consumption power	Less than 15 W

Teach Pendant (TP3)

Compatible controllers
RC700-E **RC700-A** **T series** **VT series**

Tablet-type teach pendant with 10.1-inch color touchscreen

- 10.1-inch TFT (w / LED backlight).
- 1280 x 800 resolution.
- Color display.



Teach Pendant (TP2)

Compatible controllers
RC800-A **RC800L** **RC700-E** **RC700-A** **RC90-B** **T series** **VT series**

Easy-to-use pendant for teaching

- Universal design ensures ease of use for both right-handed and left-handed operators.
- Connects directly to operator unit or controller interface card.

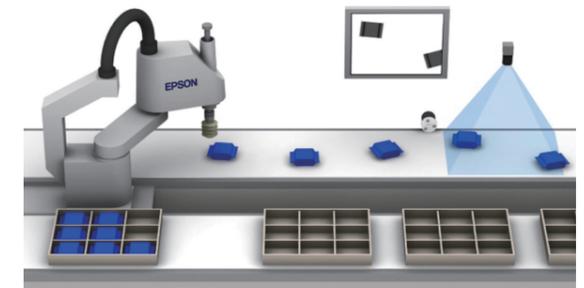


Conveyor Tracking

Compatible controllers
RC800-A **RC700-E** **RC700-A** **RC90-B** *Vision Guide software required.

Precision tracking for high-productivity pick-and-place operation

- Enables pick-and-place handling of items on a high-speed conveyor.
 - Uses machine vision/sensors to detect workpiece and effect robot handling.
 - Can automate manual kitting/packaging tasks and help maintain productivity regardless of continuous/intermittent conveyor operation. Can also be used for workpiece assembly.
 - Simple start/stop program execution.
 - Conveyor Tracking Option Kit B does not occupy an option slot because it operates without PG board.
- (Compatible with RC800-A)



PG motion System

Compatible controllers
RC800-A **RC700-E** **RC700-A** **RC90-B**

Control peripheral robots for fully integrated process automation

- Epson RC+ software and pulse generator (PG) board enable control of multiple third-party drives and motors.
- PG robots and standard Epson RC+ system robots can be operated simultaneously, and controlled using the same commands.
- PG board can be used to control X/Y tables, sliders,

turrets, and a wide range of other production/inspection line peripherals.
 ■ Each PG board has 4 channels, and can support from 1 to 4 robots. Up to 4 cards can be mounted.

*PG motion system requires optional Epson RC+ software and at least one optional PG output board. Drivers and motors for third-party devices are not included.

Emergency stop switch

Compatible controllers
RC800-A **RC800L** **RC700-E** **RC700-A**
RC90-B **T series** **VT series**

Helps prevent injuries and damage

- Immediately stops robot operation in emergency situations.



E-Stop Box-B
(for RC800-A, RC700-E)

RS-232C Board

Compatible controllers
RC800-A **RC700-E** **RC700-A**
RC90-B **T series** **VT series**

Expanded serial port connectivity

- 2-port RS-232C board to connect serial interface devices.



I/O Expansion Board

Compatible controllers
RC800-A RC700-E RC700-A RC90-B

Expanded input/output flexibility

- 24-input/16-output expansion board.



Fieldbus I/O (slave)

Compatible controllers
RC800-A RC800L RC700-E RC700-A
RC90-B T series VT series

High-speed peripheral connectivity

- 4096-point I/O support for PROFINET® networked peripherals, Ethernet/IP™, EtherCAT®, Modbus-TCP and DeviceNet™.
- 2944-point I/O support for CC-Link® networked peripherals.
- 1952-point I/O support for PROFIBUS®.

Fieldbus I/O (master)

Compatible controllers
RC800-A RC800L RC700-E RC700-A
RC90-B T series VT series

Bidirectional high-speed peripheral connectivity

- Support for DeviceNet™, PROFIBUS®, and Ethernet/IP™ networked peripherals (1024-point I/O).

Analog I/O Board

Compatible controllers
RC800-A RC700-E RC700-A RC90-B

For analog control of voltage and current I/O

- Analog control of input and output current and voltage allows regulation of secondary equipment such as paint sprayers to match the speed of robot arm motion. Available in 1 channel and 4 channel models.



EUROMAP 67 Board

Compatible controllers
RC700-A RC90-B

For use with thermoplastic injection molding machines

- EUROMAP 67 compliant electrical interface with 15-point input and 16-point output.



I/O Cable Kit

Compatible controllers
RC800-A RC800L RC700-E RC700-A
RC90-B

Cables and connectors for easy connectivity with no soldering required

- A wide range of I/O cables and connectors are available.



Hot Plug Kit

Compatible controllers
RC800-A RC700-E RC700-A
T series VT series

Easy teach pendant connection/disconnection

- Allows Teach Pendant to be connected or disconnected without an emergency stop.

*Conversion cable required for use with TP2.



Wall Mount Option

Compatible controllers
RC800-A RC800L RC700-E RC700-A

Optional wall mounting box

- Allows controller to be mounted on a wall.



Rack Mount Option

Compatible controllers
RC800-A RC800L

Optional wall mounting box

- Allows controller to be mounted on a wall.



Epson robot manipulator options provide the enhanced functionality and configuration flexibility you need for full-process automation.

External Wiring Unit

Compatible manipulators
GX8 GX10 GX20 R56 VT6 CX4 CX7

Simplifies wiring when mounting manipulator options

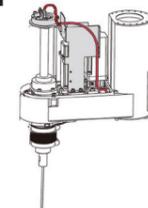
- Enables easy, on-site connection of external wiring by users.
- Ideal for connecting Vision Guide system camera cables or other wiring.



Internal Wiring Unit

Compatible manipulators
R54

Enables wiring and conduits for the hand to be enclosed within the robot arm assembly.



SCARA Tool Adapter

Compatible manipulators
GX4 GX8 GX10 GX20 LS3 LS6 LS10 LS20
LA3 LA6 T3 T6 R54 R56

Enhances handling/processing versatility and simplifies effector changes



ISO Flange

Compatible manipulators
C8 C12 N2 N6 VT6

For easy attachment of effectors to 6-axis robot arms



* Flange configuration varies according to robot model. Please specify model when ordering flanges.

Brake Release Unit

Compatible manipulators
C8 C12 CX4 CX7 N2 N6

Enables brake release so robot arm can be moved by hand when power is switched off at the leading edge of industrial robot design

Power and Signal Cable

Compatible manipulators
GX1 GX4 GX8 GX10 GX20 LS3 LS6 LS10 LS20 LS50 LA3 LA6 R54 R56
C8 C12 CX4 CX7 N2 N6

Standard 3m cables, or optional 5m and 10m cables for greater freedom in controller and robot placement

Power Cable Connector

Compatible manipulators
GX1 GX4 GX8 GX10 GX20 C4 C8 C12 N2 N6

Power cables are available with straight or L-shaped angle connectors*

* Controller-end connectors only



Camera Mounting Bracket

Compatible manipulators
GX1 GX4 GX8 GX10 GX20 LS3 LS6 LS10 LS20 LS50
LA3 LA6 T3 T6 R54 R56
C8 C12 CX4 CX7 N2 N6 VT6

Securely mount machine vision system camera to robot arm

*Bracket design varies according to robot. Please specify model when ordering.



Bellows Kit for Standard SCARA Specification

Compatible manipulators
GX4 GX8 R54 R56

Possible to cover the ball screw which is a part of the SCARA robot for the standard environment specification with a bellows



Software options	RC800-A	RC800L	RC700-E	RC700-A	RC90-B	T series	VT
Vision Guide	●	●	●	●	●	●	●
Part Feeding	●	●	●	●	●	●	●
Force Guide	●	—	●	●	—	—	—
RC+ API	●	●	●	●	●	●	—
GUI Builder	●	●	●	●	●	●	●
External Control Point	●	●	●	●	●	●	—
OCR	●	●	●	●	●	●	—
VRT	●	●	●	●	●	●	—
Safety Function	●	—	●	—	—	—	—
OPC UA	●	●	●	●	●	●	●
Real Time Motion Control *	●	—	—	—	—	—	—
Controller options	RC800-A	RC800L	RC700-E	RC700-A	RC90-B	T series	VT
Teach Pendant (TP4)	●	—	●	●	—	●	●
Teach Pendant (TP3)	—	—	●	●	—	●	●
Teach Pendant (TP2)	●	●	●	●	●	●	●
Conveyor Tracking	●	—	●	●	●	—	—
PG Motion System	●	—	●	●	●	—	—
Emergency Stop Switch	●	●	●	●	●	●	●
RS-232C Board	●	—	●	●	●	—	—
I/O Expansion Board	●	—	●	●	●	—	—
Fieldbus I/O (Slave)	●	●	●	●	●	●	●
Fieldbus I/O (Master)	●	●	●	●	●	●	●
Analog I/O Board	●	—	●	●	●	—	—
EUROMAP 67 Board	—	—	—	●	●	—	—
I/O Cable Kit	●	●	●	●	●	—	—
Hot Plug Kit	●	—	●	●	—	●	●
Wall Mount Option	●	●	●	●	—	—	—
Rack Mount Option	●	●	—	—	—	—	—

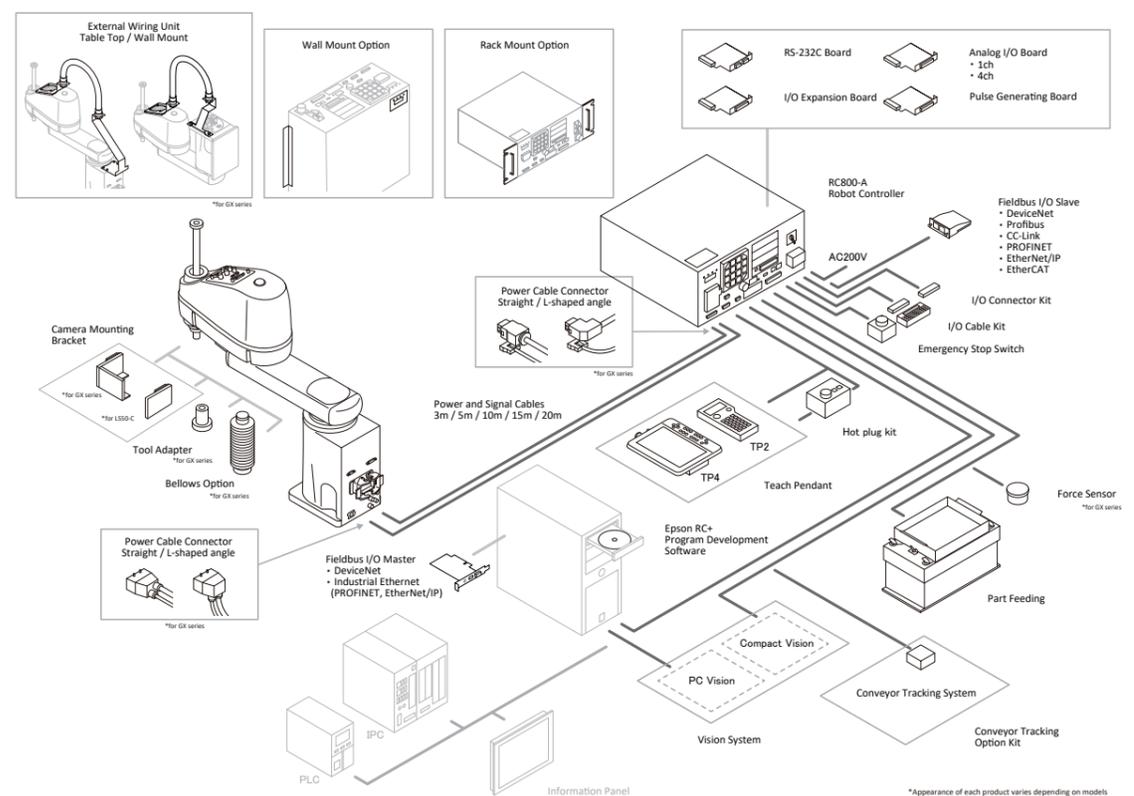
*Limited manipulators only
For more details, please contact your local Epson sales company or authorized distributor

Manipulator Options (SCARA)	GX1	GX4, GX8 GX10, GX20	LS3 / LS6 LS10	LS4, LS8 LS20	LS50	LA3, LA6	T3, T6	RS4, RS6
External Wiring Unit	—	● GX10, GX20	—	—	—	—	—	● RS6
Internal Wiring Unit	—	—	—	—	—	—	—	● RS4
Tool Adapter / ISO Flange	—	●	●	●	—	●	●	●
Power and Signal Cable	●	●	●	●	●	●	—	●
Cable Length (m)	3,5,10,15,20		3,5,10	3,5,10,15,20			(Built-in Controller)	3,5,10,15,20
Cable Type (Standard/Flexible)	Standard / Flexible							Standard / Flexible
Power Cable Connector (Manipulator side)	Straight / L-type		Straight					Straight / L-type
Power Cable Connector (Controller side)			Straight	L-type				
Camera Mounting Bracket	●	●	●	●	●	●	●	
Bellow Kit	●	● GX4, GX8	—	—	—	—	—	●

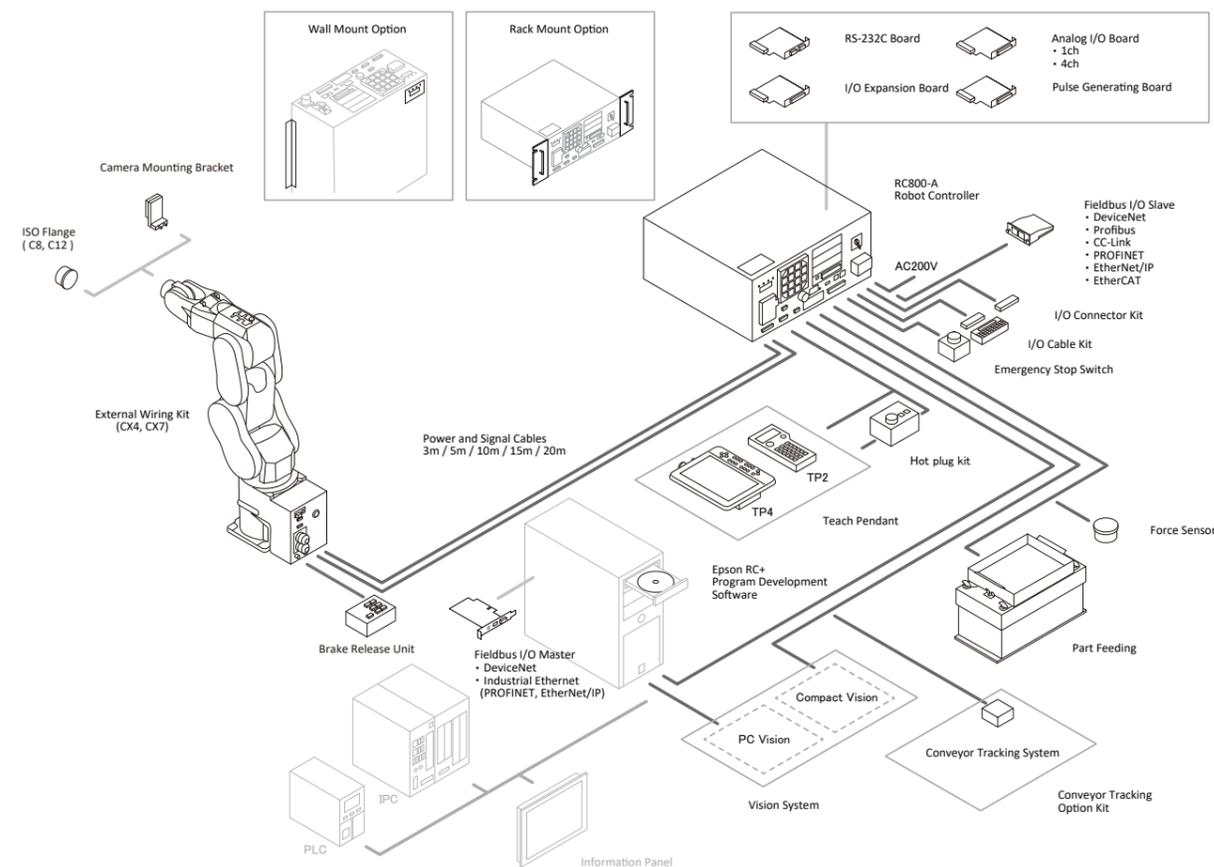
Manipulator Options (6-axis)	C8	C12	CX4	CX7	N2	N6	VT6
External Wiring Kit	—	—	●	●	—	—	●
Tool Adapter / ISO Flange	●	●	—	—	●	●	●
Brake Release Unit	●	●	●	●	●	●	—
Power and Signal Cable	●	●	●	●	●	●	—
Cable Length (m)	3,5,10,15,20						(Built-in Controller)
Cable Type (Standard/Flexible)	Standard / Flexible				Standard	Standard / Flexible	
Power Cable Connector (Manipulator side)	Straight						
Power Cable Connector (Controller side)	Straight / L-type*		L-type		Straight / L-type		
Camera Mounting Bracket	●	●	●	●	●	●	●

*C8-C, C12-C: L-type only

RC800-A controller for SCARA

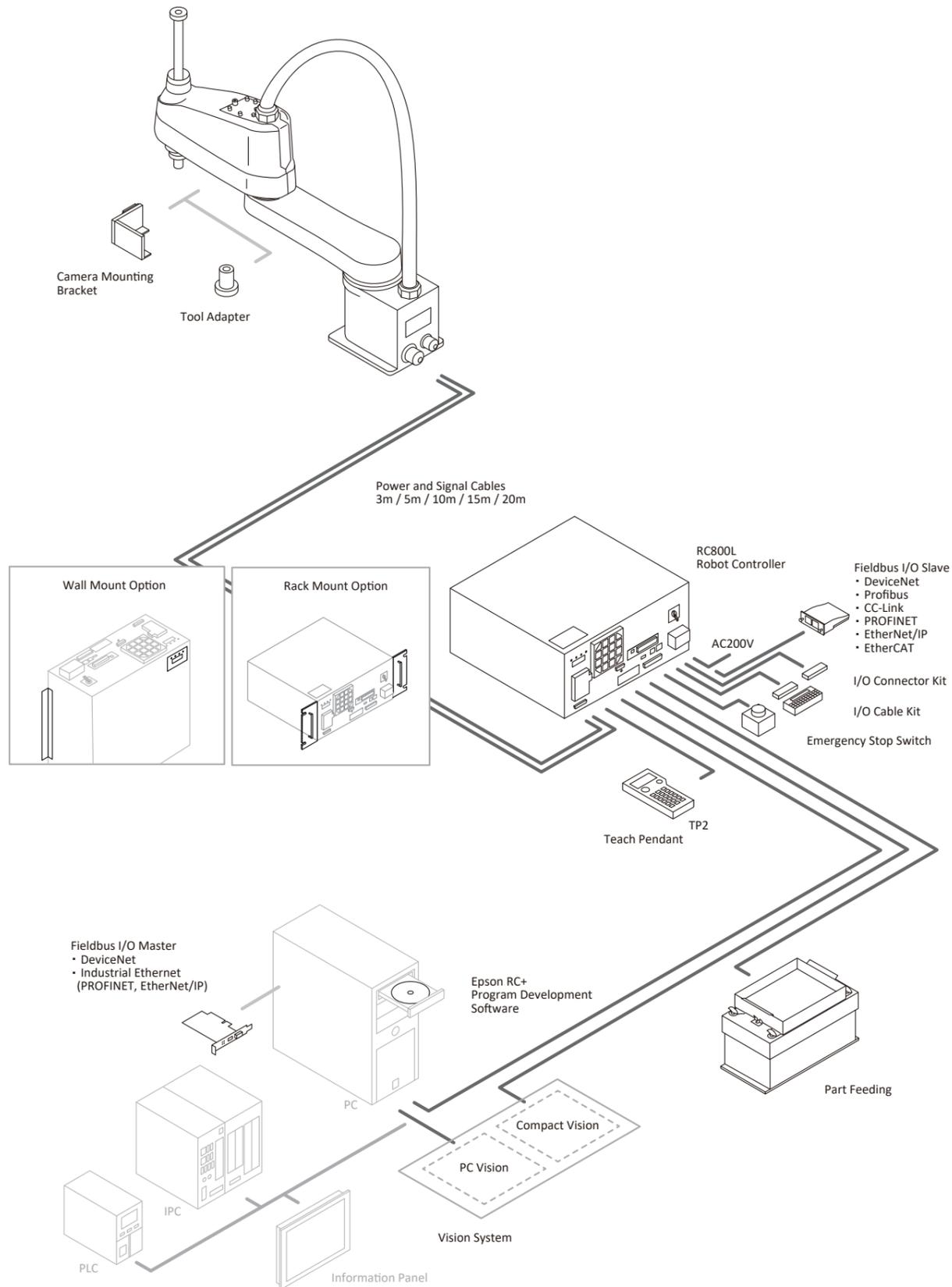


RC800-A controller for 6-axis



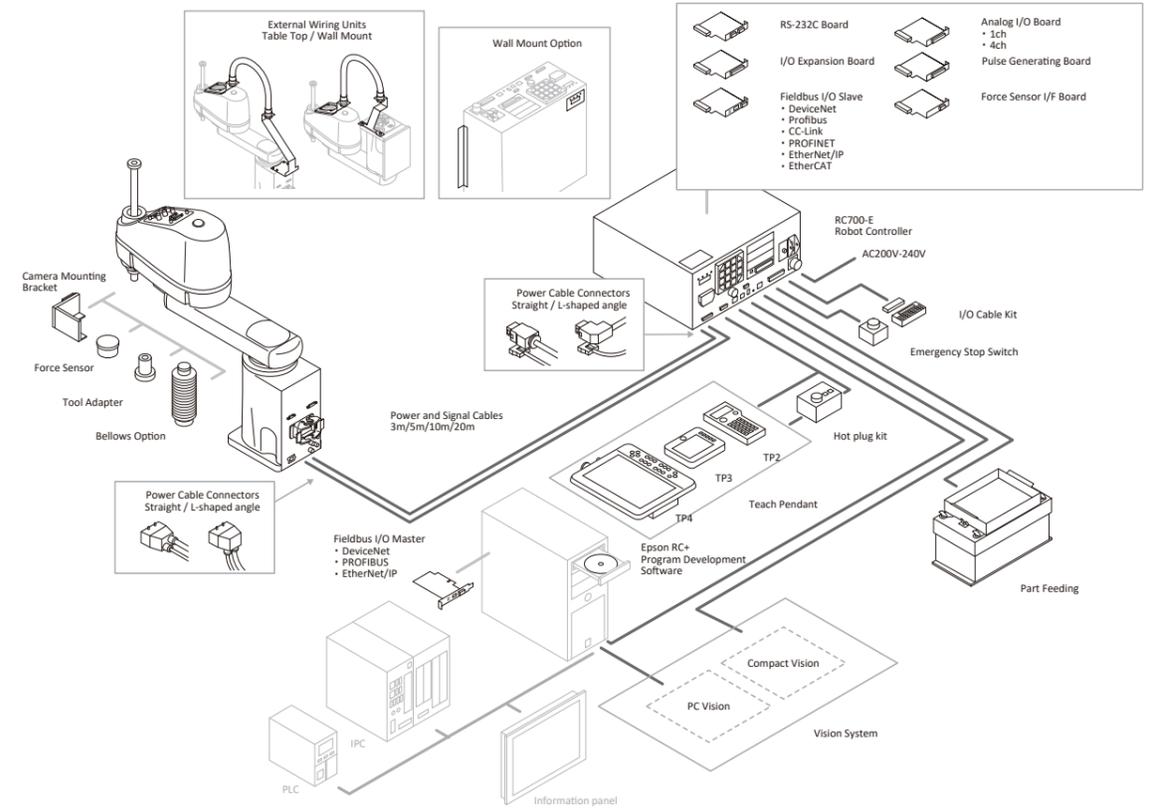
Option Setup Example

RC800L controller

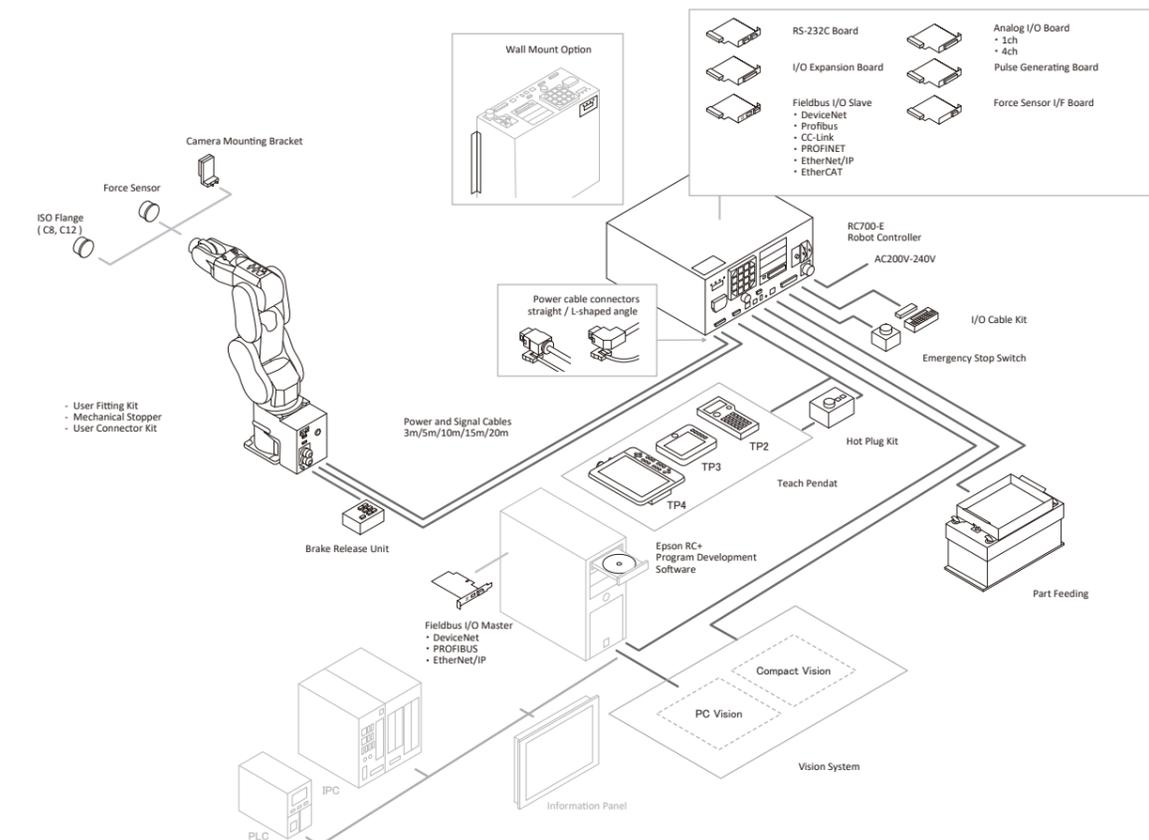


*Appearance of each product varies depending on models

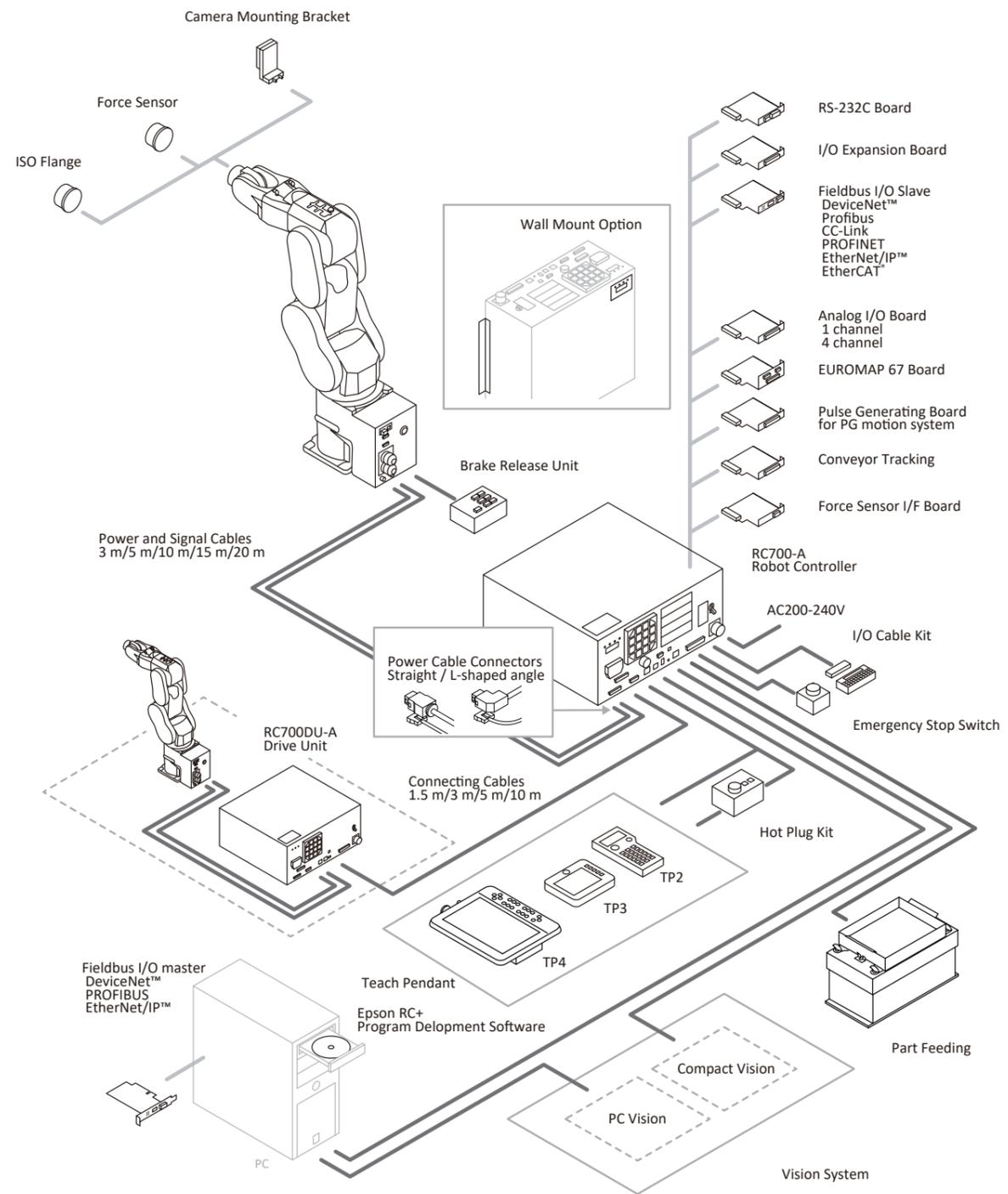
RC700-E controller for SCARA



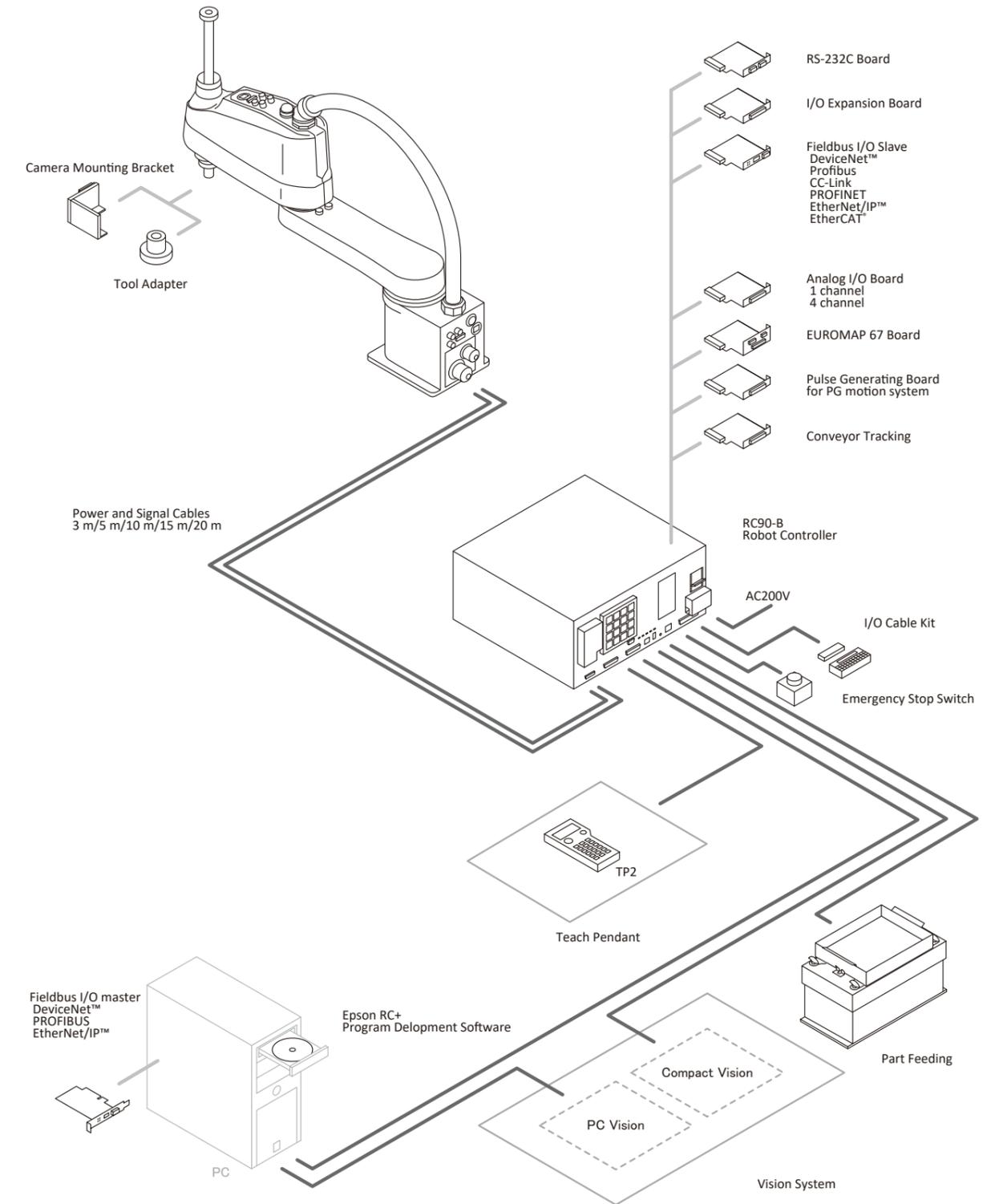
RC700-E controller for 6-axis



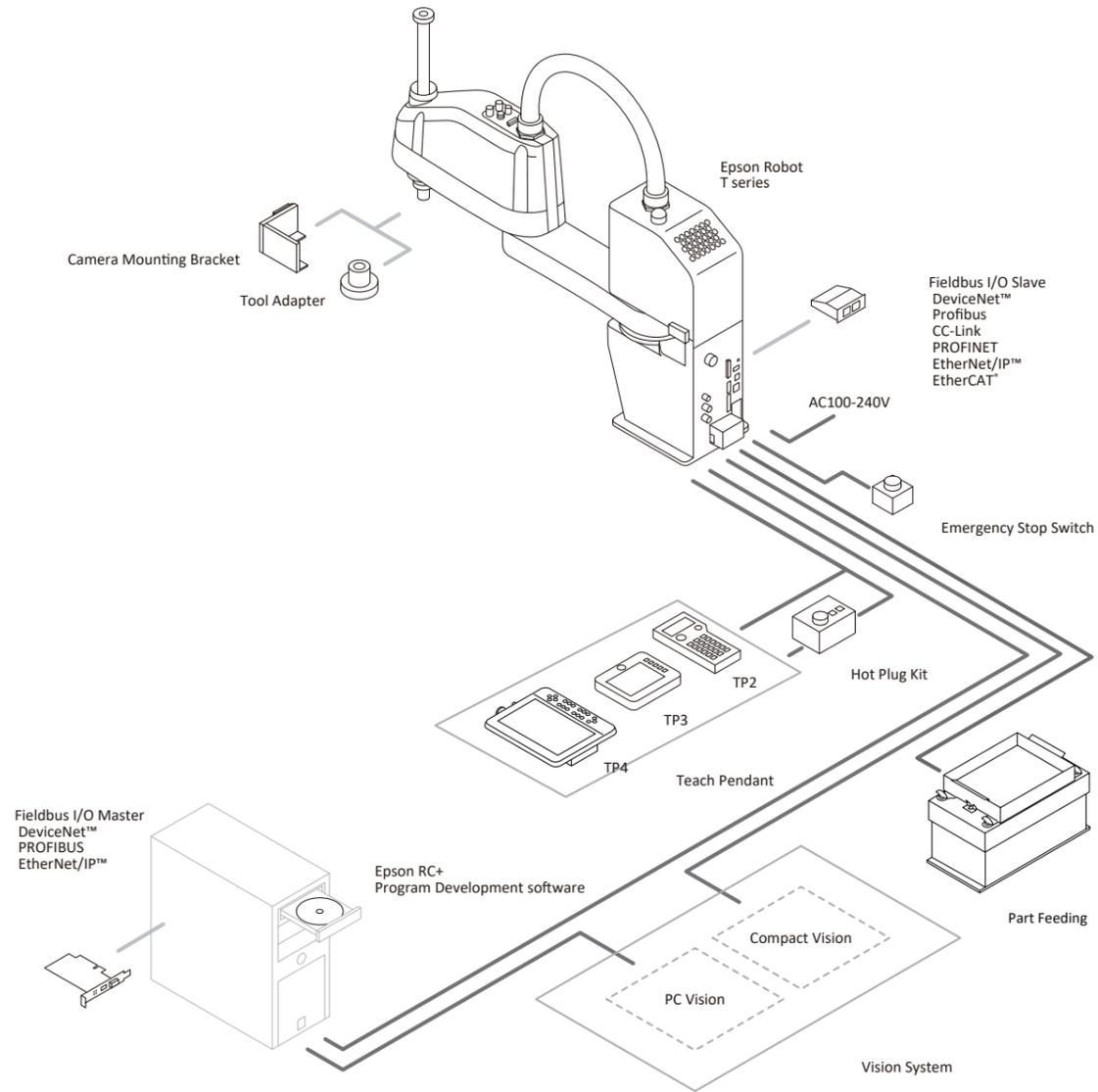
RC700-A controller for C-A series



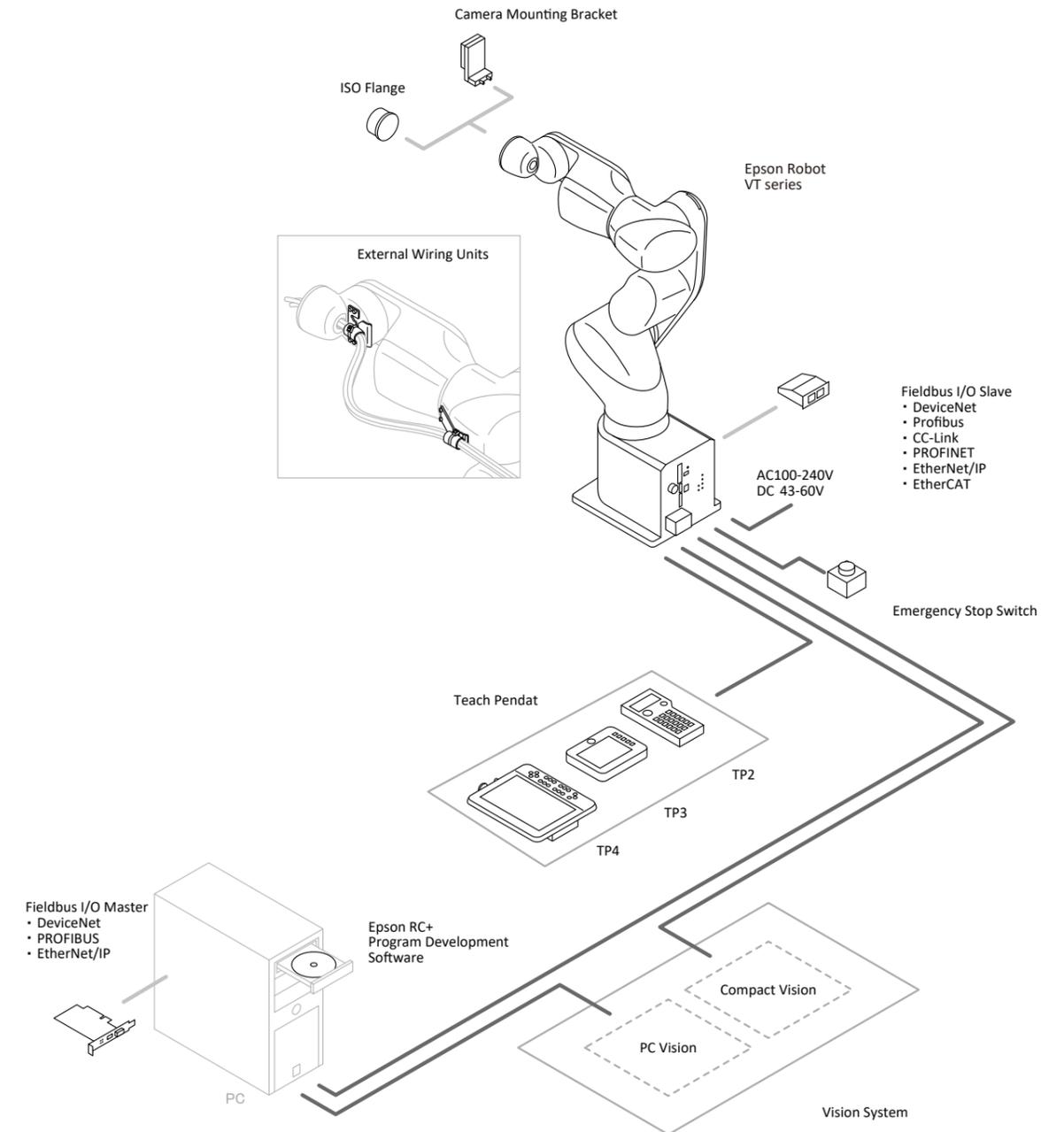
RC90-B controller



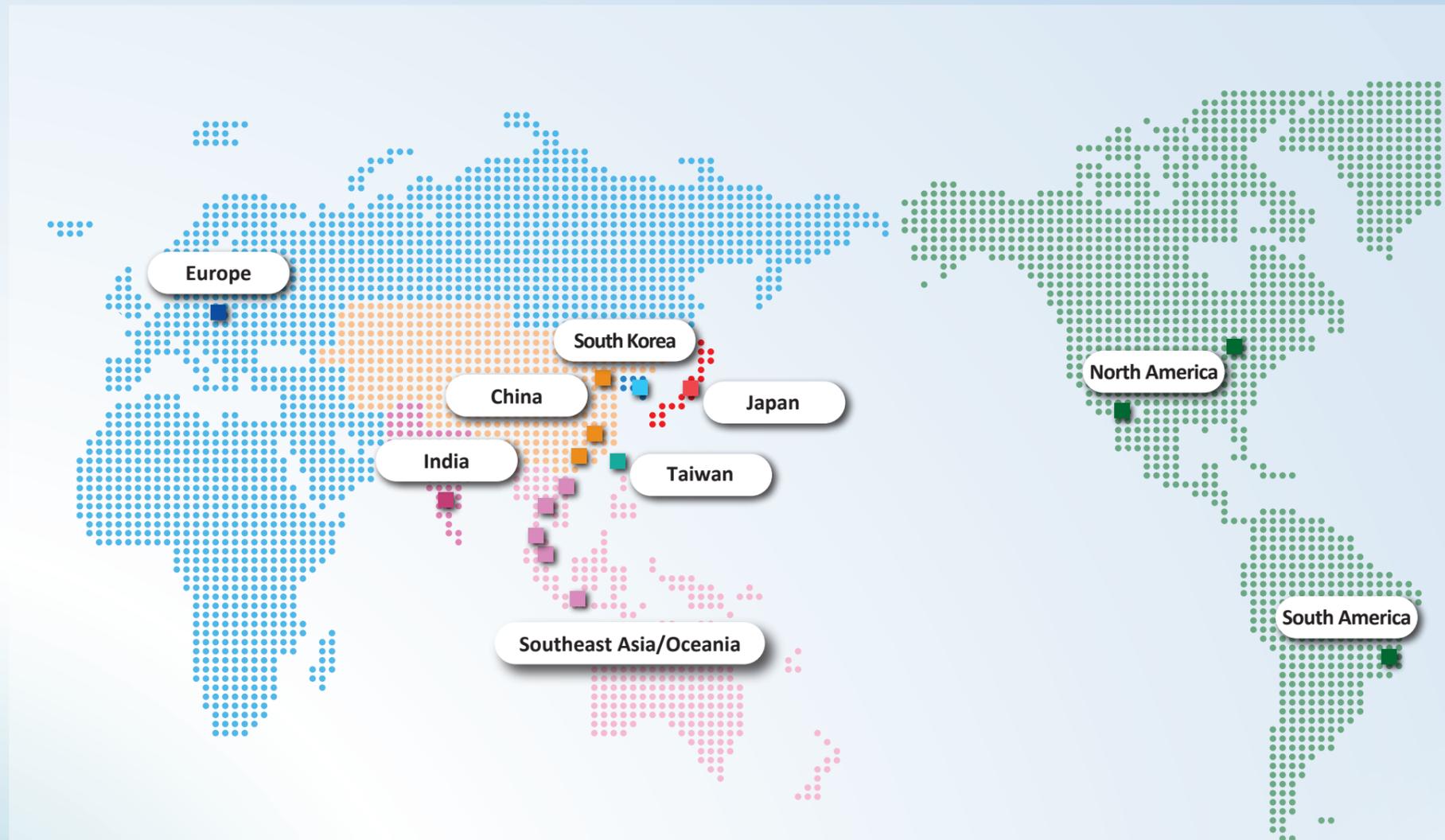
T series robot



VT series robot



With Epson industrial robots,
you get the highest standards of safety and reliability
and the support of a global sales and service network



At Epson, we leverage our global network to provide customers with the capabilities they need to automate manufacturing processes and boost productivity. By delivering some of the world's most trusted and reliable industrial robots, we remain committed to providing real customer value - the defining quality of every Epson product.

■ Epson Global Support Network

Japan	Epson Sales Japan Corporation
North / South America	Epson America, Inc.
Europe	Epson Deutschland GmbH
Mainland China	Epson (China) Co., Ltd
Taiwan region	Epson Taiwan Technology & Trading Ltd.
Southeast Asia	Epson Singapore Pte. Ltd.
Republic of Korea	Epson Korea Co., Ltd.
India	Epson India Pvt. Ltd.

Seiko Epson Official Site
Sales Network : <https://corporate.epson/en/products/robot-systems.html>



■ Top-quality service and support worldwide

Our global network of sales and service centers is committed to providing consistently high levels of product and service quality in every region. For products under warranty, we offer on-site support to resolve any issues*¹, and our authorized sales and service representatives can also provide warranty coverage when equipment is relocated to other sites*².

*1 Standard warranty limitations apply.
*2 Contact local sales or service representatives for details.

