6-Axis range brochure

Compact and high-performing

EPSON®

Precision automation specialists

Epson is the global leader in robotics technology, offering an impressive combination of high-performance and simplicity. Backed by a worldwide reputation for reliability and outstanding support, Epson robots are bringing highly productive, automated manufacturing to an ever-expanding range of industries across the globe.

*Market share based on unit sales of industrial SCARA robots, 2011-2023. (Source: Fuji Keizai “2012 - 2024 Reality and Future Outlook of Worldwide Robot Market”).

We have been the #1 SCARA robot manufacturer in the world for more than 10 years

We have over 40 years' experience in robotics

We have installed more than 200,000 robots

We speak your language, localized organization and partners

How we guarantee success

We have been building our robots for 40 years to be fast, precise and reliable. With current trends such as digitalisation, decentralisation of factories, and low-volume mixed production, automation today needs to be more than just high-performing – it also needs to be agile and adaptive. That's why Epson designs all new manufacturing solutions to keep up with automation trends and be simple, smart and scalable.

Simple

Easy to buy and use

Simple installation of the system

Easy to service

Smart

Enables smart integration in the factory eco system

Predictive maintenance

Condition monitoring

Innovative mechanical design

Energy and space saving

One product ecosystem

Scalable

Over 500 models with one software for all

Range of payloads and arm reach

Unique price performance

Installation environments

All-round customer service

Pre sales support

Clarify Needs

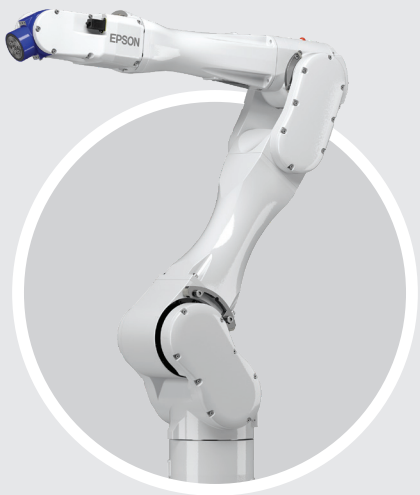
Targeting cycle time

After Sales Service

Maintenance

Service operation

Spare parts



Technical sales support

Validation of the Customer requirements

Feasibility study/cycle time analysis

Evaluation and choosing the right robot

Application support

Programming support

Solution finding

Ensure that the robot is up to date

Robotic academy

User Training

Software Training

Maintenance Training

The built-to-fit series

The C-B series are compact and flexible six-axis robots, with impressive payload capabilities, as well as safety functions and battery-free operation. The series is versatile, easy to use, and has small footprints. Choose your tailor made solution and start to increase your productivity with ease.

C-B series

The C-B series is designed to perform highly sophisticated tasks in an efficient way. With its built to fit concept, the robots are tailor made and used to fulfil even the most difficult tasks. Equipped with the safety function, it not only increases machine safety, but at the same time, the space required by the machine and downtimes are reduced.

	C4-B	C4L-B	C8L-B
Payload	4kg	4kg	8kg
Arm reach	600mm	900mm	900mm
Repeatability	± 0.02mm	± 0.03mm	± 0.03mm
Mounting type	Table top / Ceiling	Table top / Ceiling	Table top / Ceiling / Wall
Installation environment	Standard, Cleanroom (ISO Class 3) & ESD	Standard, Cleanroom (ISO Class 3) & ESD	Standard, Cleanroom (ISO Class 3) & ESD, Protected IP67
Available controllers	RC700-E	RC700-E	RC700-E

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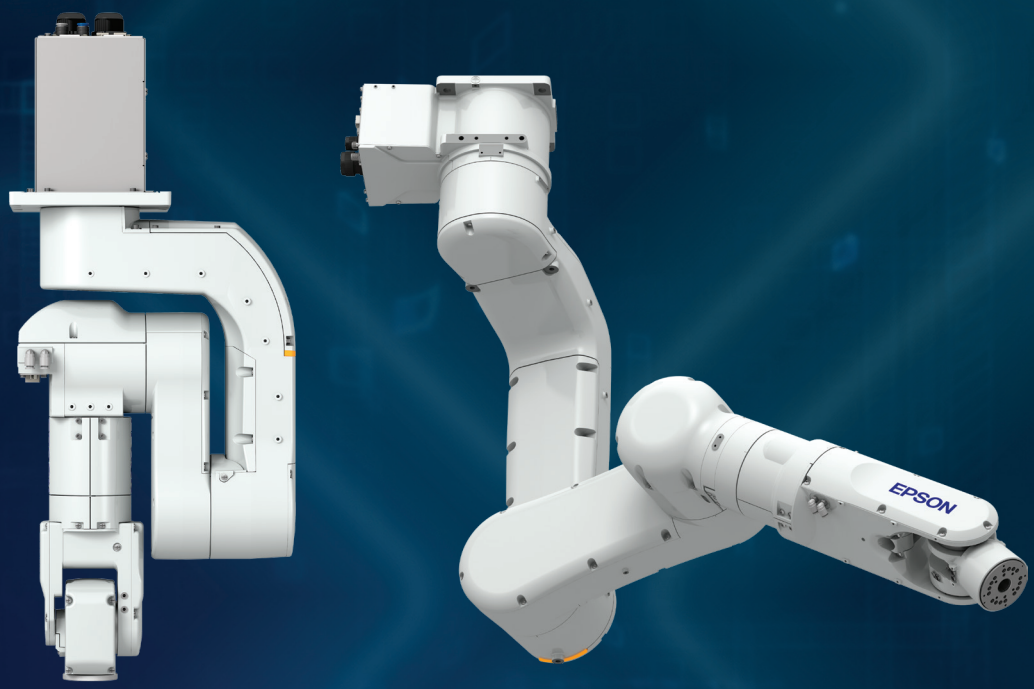
Choose your C-B robot from over 50 configuration options. Embedding it in your machine environment is easy, and comes with many different options like Epson Vision Systems, Part Feeding Systems, Force Sensing or even Conveyor Tracking to fulfill all expectations. Start to create safe and more efficient applications with our Epson safety functions like Safe Limited Speed (SLS) and Safe Limited Position (SLP). Define safe zones, safe speed and safety parameters by using the safety function manager with integrated 3D viewer.

	C8XL-B	C12XL-B
Payload	8kg	12kg
Arm reach	1400mm	1400mm
Repeatability	± 0.05mm	± 0.05mm
Mounting type	Table top / Ceiling / Wall	Table top
Installation environment	Standard, Cleanroom (ISO Class 4) & ESD, Protected IP67	Standard, Cleanroom (ISO Class 4) & ESD
Available controllers	RC700-E	RC700-E

Automation at your fingertips

The VT6 series robots can be purchased in our online store, along with peripherals, accessories and additional software options. Both series are versatile, simple to use, and have small footprints.



N series

Factory space costs money. The revolutionary N series robot from Epson is extremely agile and occupies less space than any other 6-axis robot ever built. The N series kinematics enable increased productivity in even smaller work cells. Able to reach every point within its working area without wasteful extra movements, it covers an action field that would normally require a 6-axis robot with a significantly longer arm.

	N2	N6
Payload	2.5kg	6kg
Arm reach	450mm	850 - 1000mm
Repeatability	± 0.02mm	Between ± 0.03mm and ± 0.04mm
Mounting type	Table top / Ceiling	Table top / Ceiling
Installation environment	Standard	Standard, Cleanroom (ISO Class 5) & ESD
Available controllers	RC700-A	RC700-A

*Market share based on unit sales of industrial SCARA robots, 2011-2023. (Source: Fuji Keizai “2012 - 2024 Reality and Future Outlook of Worldwide Robot Market”).

VT6-L

Whether loading and unloading, machine tending, picking and placing, packaging and palletizing, the VT6-L can be programmed to do all and offers a whole host of benefits in many different applications. It replaces inefficient manual tasks and its six axes offer greater flexibility than linear systems.

	VT6-L (Also available in DC version)
Payload	6kg
Arm reach	920mm
Repeatability	± 0.1mm
Mounting type	Table top / Ceiling / Wall
Installation environment	Standard, Cleanroom (ISO Class 4), Protected IP67
Available controllers	Built-in

Robot ecosystem

Following the principles of being simple, smart and scalable, our robot system supports all conventional fieldbus systems and offers a high integration level to every factory ecosystem to enable a high digitalized and efficient production.

Force Sensing System

Smooth action in force-guided operations

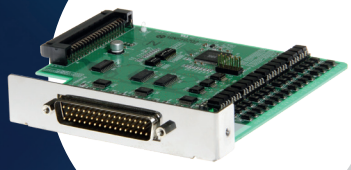
Teach Pendant

Easy and safe robot controlling

Robot

Communication and I/O Boards

Optional fieldbus, digital and analog I/O cards.



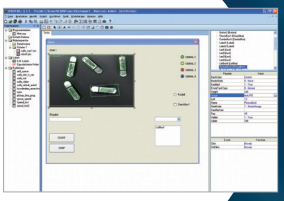
Euromap67 Option

To provide interchangeability between injection moulding machine and the handling robot.

ePLAN

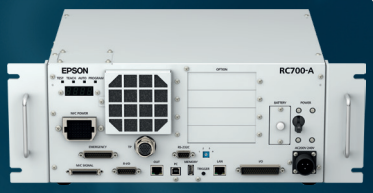
3Dfindit

EtherNet/IP EtherCAT PROFINET PROFIBUS DeviceNet CC-Link



Integrated software tools

Vision Guide
Force Guide
Part Feeding Control
GUI Builder
etc.



Controller

Integrated image processing with Epson Compact Vision System

Measurement
Quality inspection
Error detection
Parts positioning
Tracking on conveyors

Software

Part Feeding System

To separate or singulate the parts for the robot to pick up.

High-speed conveyor tracking

Enables high-precision synchronisation with moving objects.

Industry solutions

Epson Robots is a leading supplier to a wide variety of manufacturing industries including Automotive, Medical, Electronics, Consumer Products, Industrial and many more. Our customers range from large Fortune 100 companies to small manufacturing facilities.

Automotive
Epson Robots are used to manufacture various automotive parts including brakes, clutch components, ignition systems, instrument panels, headlights, mirrors, locks and more.

Consumer products
One of the broadest industries supported by Epson Robots. High speed and high precision functionality help provide the perfect fit for consumer product applications, including the manufacturing of mobile devices, furniture, shoes, jewelry and more.

Electronics
Our robots are vital components in major electronic and semi-conductor facilities across the globe. Industry-specific applications include chip handing and placement, encoder assembly, board and laser diode testing and wire bonding, amongst others.

Medical
Our robots are used widely in the production of medical instruments, where their flexibility and high-precision capabilities deliver outstanding results. Epson robots help manufacture contact lenses, glasses, dental instruments and implants, hearing aids, pacemakers, blood test systems and much more.

Applications

Epson Robots are extremely versatile and provide a wide range of automation possibilities such as assembly, pick & place, palletising, inspections and testing. With a powerful image processing system, tasks that require precise recording can be mastered with high clock rates. Even highly fragile components can be packed and palletised accurately and reliably providing solutions for a range of challenging production lines.

- Assembly
- Pick and place
- Material handling
- Packing
- Kitting/Tray loading
- Machine tending
- Screw driving
- Dispensing
- Palletizing
- Lab automation
- Inspection and testing
- Finishing
- Grinding

Success stories

Since its foundation in 1957, KnitMesh Technologies has developed an enviable reputation for the research, development, and supply of precision Knitted Wire Mesh components around the world. The company had the Epson VT6L All-in-One 6-Axis robot installed to automate the production of bespoke, wire mesh components used in a variety of functions across multiple sectors.

Many of KnitMesh's projects involve high volumes of components and the company has historically relied on pneumatic based automation systems to streamline its processes and meet production quotas on time. However, a recently secured contract to produce 48 million electric vehicle (EV) filter components over eight years afforded the opportunity to move to a robotics-based automation solution instead, which KnitMesh seized with both hands.

After careful evaluation, Epson's VT6L All-in-One 6-Axis robot was selected. KnitMesh installed the VT6L at its Holywell manufacturing facility in North Wales in September 2021 and quickly put it to work producing the new EV filter components. Since implementation, KnitMesh has experienced a tenfold reduction in downtime. Furthermore, the VT6L's incredible repeatability of just +/- 100 microns has produced a 20 percent increase in productivity and virtually eliminated rejects.

Engineering Manager Craig Jones said, "The robot unloads the formed component from a rotary press, loads it into a welding system, waits for the weld to be completed, then deposits the component into the parts chute for transfer to sealed containers, all in less than 8 seconds."

"The Epson VT6L has a great feel and came highly recommended by Nortech. It only took 30 minutes to learn how to programme and felt so intuitive to use, making it a hit with our engineers.
Craig Jones, Engineering Manager, KnitMesh Technologies

High quality customer support

At Epson, our reputation is built on the high quality of our products and services, and maintaining that quality is a worldwide priority. Our outstanding robot lifetime cycle helps you before, during and after your purchase. Benefit from pre-sale, technical sale, and application support, as well as our Robotic Academy and an after-sales service.

Want to learn more?

Book your free digital or personal tour of our unique hybrid ISC+ trade fair now and let our application specialists advise you on your solution.

From the SCARA entry-level model to agile 6-axis robots to special kinematics that take up extremely little space - our robots show what they can do.

Experience in real-world applications how Epson robots help increase yields and improve quality, including:

Sensitive force measurement

Flexible parts feeding

Pick & Place and Palletizing

Spacesaving order picking

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Please recycle responsibly.

* Warranty offers are not available for all countries. Please contact your local Epson representative.
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