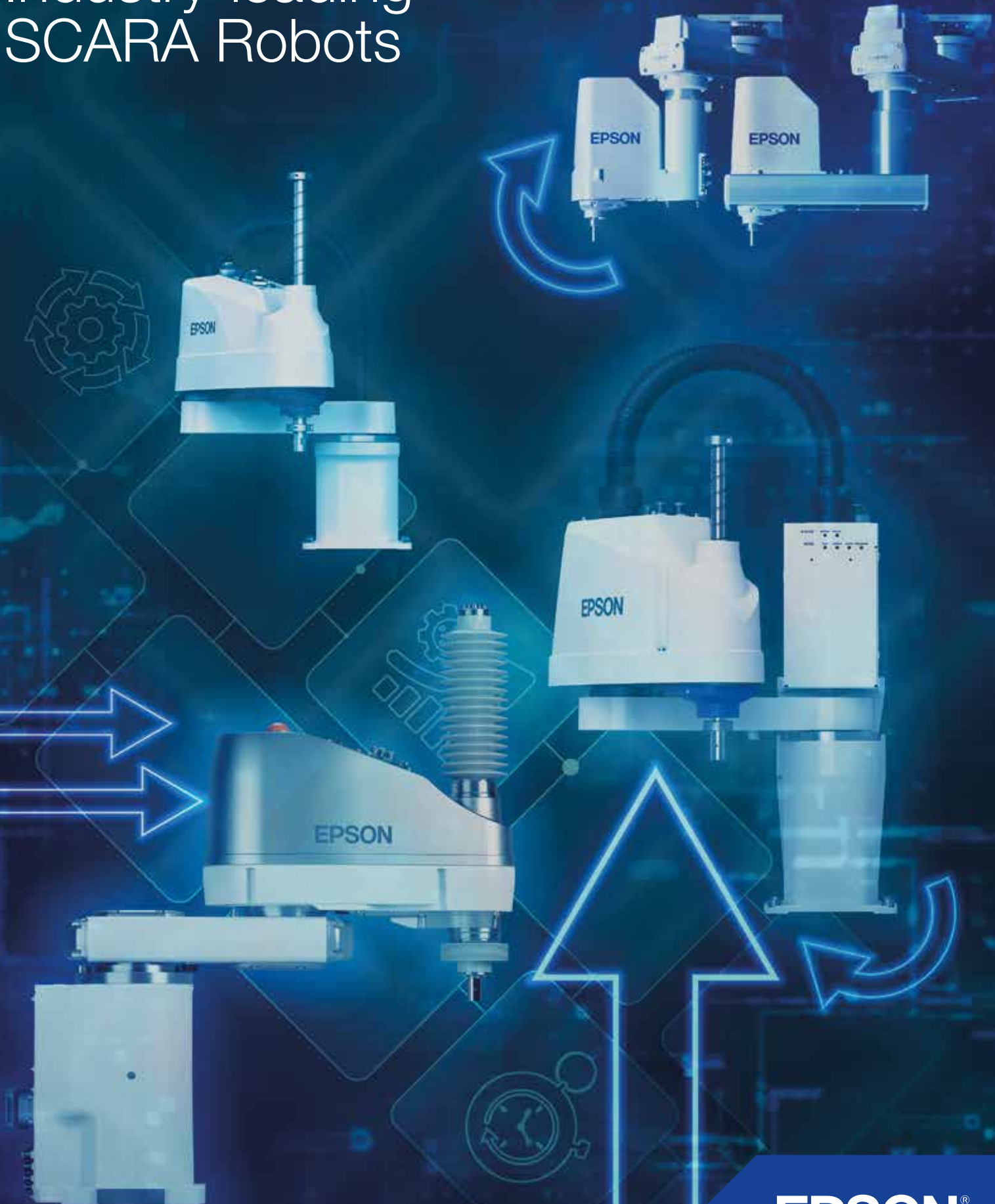


Industry-leading SCARA Robots



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, 2011-2021. (Source: Fuji Keizai "2012-2022 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 150,000 robots

We speak your language, localized organization and partners

How we guarantee success

We have been building our SCARA 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

Technical sales support

- Validation of the Customer requirements
- Feasibility study/cycle time analysis
- Evaluation and choosing the right robot

After Sales Service

- Maintenance
- Service operation
- Spare parts

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



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Building on 40 years of expertise, the GX-Series takes high-power-density SCARA robots to a new level of performance and flexibility, offering high throughput with heavy payloads and leading-edge precision. The G-Series is designed to suit different environments and mounting types to fit into any machine – whether it's new or a retrofit. It's a high-speed and high-precision model, with different payloads and arm reaches. The RS-Series offers unique flexibility, with zero-footprint robots that can use the entire workspace underneath the arm.



GX-Series

The GX offers a new class of high-power-density SCARA robots. Engineered to meet your unique automation needs, it offers multiple arm configurations and high throughput with heavy payloads to accomplish the most demanding tasks with leading-edge precision.

| | | |
|---------------------------------|--|---|
| Payload | 4kg - 8kg | 1kg - 20kg |
| Arm reach | 250-650mm | 175-1000mm |
| Repeatability | Between +/- 0.008mm and 0.015mm | Between +/- 0.005mm and 0.025mm |
| Cycle time¹ | Starting at 0.28s | Starting at 0.29s |
| Installation environment | Standard/ESD/Cleanroom ISO Class 3 with ESD/Protected IP65 | Standard/Cleanroom ISO Class 3 with ESD/Protected IP54 and IP65 |
| Available controllers | RC700D | RC700A |

G-Series

G-Series robots are ideal for applications which need fast cycle times and unrivalled accuracy.

They feature a high-rigidity design that delivers high speed, high precision and low vibration.

RS-Series

These zero-footprint robots are some of the most unique and flexible SCARA robots available in the market today. With the ability to cross back under, as well as reach behind themselves, RS-Series robots are able to utilise the entire workspace underneath the arm. As a result, there is no lost space in the centre of the work envelope.

| | |
|---------------------------------|------------------------------------|
| Payload | 3kg - 4kg |
| Arm reach | 350-550mm |
| Repeatability | Between +/- 0.010mm and 0.015mm |
| Cycle time¹ | Starting at 0.34s |
| Installation environment | Standard/Cleanroom (ISO 3) and ESD |
| Available controllers | RC700A |

¹Cycle time based on a round-trip arch motion (300 mm horizontal, 25mm vertical; G1: 100 mm horizontal, 25 mm vertical).

¹Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical).

Available to buy online



*Market share based on unit sales of industrial SCARA robots, 2011-2021. (Source: Fuji Keizai "2012-2022 Reality and Future Outlook of Worldwide Robot Market").

LSB-Series and T-B 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 – making them easy to deliver all across the EMEA region.



LS-B Series

The perfect solution for factories looking for maximum value without sacrificing performance, the LS-B Series offers fast, compact performers at a low cost. With reach distances ranging from 400 to 1,000 mm, and payloads from 3kg to 20kg, they feature cycle times starting at 0.38 sec.

| | |
|---------------------------------|---------------------------------|
| Payload | 3kg - 20kg |
| Arm reach | 400-1,000mm |
| Repeatability | Between +/- 0.01mm and 0.025 mm |
| Cycle time¹ | Starting at 0.39s |
| Installation environment | Standard/Cleanroom (ISO 4) |
| Available controllers | RC90-B |

¹Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical).

T-B Series

All-in-one SCARA robots are the perfect alternative to complex, more expensive slide-based solutions.

These space-saving robots install in minutes and include the same intuitive software and powerful features found in Epson's high-end robots.

With features such as a built-in controller and an encoder with no battery required, they make automating your factory fast, easy and affordable.

| | |
|---------------------------------|-------------------------------|
| Payload | 3kg - 6kg |
| Arm reach | 400-600mm |
| Repeatability | Between +/- 0.02mm and 0.04mm |
| Cycle time¹ | Starting at 0.46s |
| Installation environment | Standard |
| Available controllers | Build in |

¹Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical).

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



Integrated software tools

Vision Guide
Force Guide
Part Feeding Control
GUI Builder
etc.

Teach Pendant

Easy and safe robot controlling



Integrated image processing with Epson Compact Vision System

Measurement
Quality inspection
Error detection
Parts positioning
Tracking on conveyors



Robot



Controller



Software

Communication and I/O Boards

Optional fieldbus, digital and analog I/O cards.



Part Feeding System

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



Euromap67 Option

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



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.

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.

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.

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.

Success stories

The German manufacturing company ISD System GmbH, has recently mastered the process of producing Printed Circuit Boards (PCB). How? By using Epson's SCARA robots to create fully automatic handling machines that can take care of everything, from placement to assembly, palletising, inspection and polishing. Precise, fast, and equipped with a long reach, the robots can effortlessly adapt to a wide range of changing PCB formats.

The Epson SCARA LS20 is the linchpin of powerful and flexible handling. With its space-saving arm length of 1,000 mm and a payload of up to 20 kg, it can take on a variety of tasks even in confined work areas. It's precise and sensitive, too. Even wafer-thin PCBs of up to 25 µm are transported safely and gently with the high-tech handling system. Thanks to the modular design of the robotic cell and Epson's global service network, maintenance work can be carried out quickly and easily anywhere in the world. Another decisive factor for ISD was the easy installation and maintenance as well as a high power density at a very profitable investment.

Managing Director Torsten Schmid said, "Of course, price plays a role for us as a compact technology forge. With the Epson SCARA LS20, we have a powerful multi-tool with which we can fully concentrate on programming. This makes our design work much easier."

"Epson SCARA robots make our design work much easier."
Torsten Schmid, Managing Director ISD System GmbH

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



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

Get in touch:

Epson Deutschland GmbH
Manufacturing Solutions
Schiesstraße 49
40549 Düsseldorf
Germany

Tel.: **+49 211 5422 9007**

E-Mail: **info.ms@epson.eu**

www.epson.eu/robots

