The simple solution
Ideal for pick-and-place applications

Intelligent, efficient and cost-effective, the comprehensive T-Series range is designed to make simple pick-and-place applications run more smoothly.

These 4-axis robots are the ideal automation solution where linear systems are used.

Introducing the new T6

The new T6 can transport larger, heavier objects using a 6kg payload capacity – double that of the T3 robot. The T6 can be equipped with heavy end-effectors, such as dual end-effectors for holding two objects at once, to help manufacturers increase factory productivity.

Power at an affordable price

The Epson T-Series offers an excellent price/performance ratio. The range of powerful 4-axis robots with integrated controllers starts from EUR 7,500. You have a choice of diverse connection options, including Profinet and Profinet. The T-Series range also supports image processing and integrates with external software. You can even design your own user interface to run on the robots.

The Epson T6 and T3 are available to order at www.epson.eu/store

T3-401S
Range: 400 mm
Load capacity: 3 kg
Price: EUR 7,500 ex. VAT
Benefits of the T-Series at a glance

Flexibility: the 4-axis robot provides a great range of motion

Intelligence: powerful, integrated controller and system connection

Efficiency: simple cabling for easy operation and maintenance

Energy-saving: low power consumption

Space-saving: very small footprint, which includes the controller

Sustainability: battery-free position sensor

T6-602S

Range: 600 mm
Load capacity: 6 kg
Price: EUR 9,500 ex. VAT
A class above manual operation and linear axes

Typical applications for the Epson T-Series include:

- Pick-and-place applications performed manually, or via linear axes, with a repeatability of 0.02 mm
- Part feeding, positioning and inspection tasks
- Assembly tasks, including those supported by the Epson Vision System
- Material coating at moderate speed

Inefficient manual pick-and-place applications

Easy-to-use T series automation

High complexity in applications with combined linear axes
Performance improvements compared with manual operation:
More stable, continuous work processes
Reduced error rate
Seamless traceability in digitised processes
Shorter throughput times

Performance improvements compared with linear axes:
Lower running costs
Significantly lower space requirements
Simpler cabling
Lower maintenance costs
Increased flexibility
Less unplanned machine downtime
No restriction on single-purpose usage
Connections for end effectors
Impressive performance

The T-Series features fully developed SCARA robots, which can be combined with a range of tools. The robots include six inputs and four outputs for end effectors.

An integrated controller not only saves space, but also greatly simplifies installation, commissioning and later replacement of the robot.

Internal power supply cables built into every Epson robot system ensure it is reliable and quick to commission.

Cut energy consumption by 30%

Power consumption on the T-Series robots is up to 30% lower than conventional SCARA robots. The environmentally friendly battery-less motor unit in the T-Series further reduces operating costs.
The perfect fit for your production line

The T-Series supports all these software options:

Vision Guide 7.0 Epson image processing software with support for high-resolution cameras and colour cameras

RC+ API 7.0 For convenient integration of external software and databases and the development of custom user-interfaces

External control point (ECP) For easy teaching of corners and curves

GUI Builder 7.0 For designing your own user interface based on the simple Epson programming language SPEL+

Optical character recognition (OCR) For safe detection and control of fonts and symbols
## Technical specifications

### SCARA T3-401S

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Design</strong></td>
<td>Outwardly oriented horizontal articulated arm</td>
</tr>
<tr>
<td><strong>Load capacity</strong></td>
<td>1/3 kg</td>
</tr>
<tr>
<td><strong>Horizontal range</strong></td>
<td>400 mm</td>
</tr>
<tr>
<td><strong>Vertical range</strong></td>
<td>150 mm</td>
</tr>
<tr>
<td><strong>Arm length</strong></td>
<td>J1 225 mm + J2 175 mm</td>
</tr>
<tr>
<td><strong>Orientation range</strong></td>
<td>J4 +/- 360 °</td>
</tr>
<tr>
<td><strong>Horizontal repeatability</strong></td>
<td>J1, J2 +/- 0.02 mm</td>
</tr>
<tr>
<td><strong>Vertical repeatability</strong></td>
<td>J3 +/- 0.02 mm</td>
</tr>
<tr>
<td><strong>Orientation repeatability</strong></td>
<td>J4 +/- 0.02 °</td>
</tr>
<tr>
<td><strong>Max. working range</strong></td>
<td>J1 +/- 132 °, J2 +/- 141 °, J3 150 mm, J4 +/- 360 °</td>
</tr>
<tr>
<td><strong>Max. axial speed</strong></td>
<td>J1, J2 3,700 mm /s, J3 1,000 mm /s, J4 2,600 °/s</td>
</tr>
<tr>
<td><strong>Mass moment of inertia</strong></td>
<td>0.003 / 0.01 kg.m²</td>
</tr>
<tr>
<td><strong>Permanent press-in force</strong></td>
<td>83 N</td>
</tr>
<tr>
<td><strong>Installation type</strong></td>
<td>Floor</td>
</tr>
<tr>
<td><strong>Z-axis outside / inside</strong></td>
<td>16 H 7 / 11 mm</td>
</tr>
<tr>
<td><strong>Power ratings / cable length</strong></td>
<td>AC 100 V to AC 240 V / 5 m</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>16 kg</td>
</tr>
</tbody>
</table>

**J1 = Axis 1  J2 = Axis 2  J3 = Axis 3  J4 = Axis 4**

### Package:

- Epson robot with integrated controller
- 1 Epson RC+ program DVD including simulator
- 1 plug for emergency stop
- 1 plug for standard I/O
- 1 USB programming cable
- Manuals on CD
- 1 installation / safety manual
- 1 TP/bypass plug (pre-installed at factory)

### Available options:

- **Fieldbus slave card:**
  - CC-LINK, Profinet, Devicenet, Ethernet I/P, EtherCat
- **Fieldbus master card (requires external PC):**
  - Profinet, Devicenet, Ethernet I/P

Price ex. VAT from EUR 7,500
### Technical specifications

**SCARA T6-602S**

<table>
<thead>
<tr>
<th>Design</th>
<th>Outwardly oriented horizontal articulated arm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load capacity</td>
<td>2/6 kg</td>
</tr>
<tr>
<td>Horizontal range</td>
<td>600 mm</td>
</tr>
<tr>
<td>Vertical range</td>
<td>200 mm</td>
</tr>
<tr>
<td>Arm length</td>
<td>J1 325 mm + J2 275 mm</td>
</tr>
<tr>
<td>Orientation range</td>
<td>J4 +/- 360 °</td>
</tr>
<tr>
<td>Horizontal repeatability</td>
<td>J1, J2 +/- 0.04 mm</td>
</tr>
<tr>
<td>Vertical repeatability</td>
<td>J3 +/- 0.02 mm</td>
</tr>
<tr>
<td>Orientation repeatability</td>
<td>J4 +/- 0.02 °</td>
</tr>
<tr>
<td>Max. working range</td>
<td>J1 +/- 132 °, J2 +/- 150 °</td>
</tr>
<tr>
<td></td>
<td>J3 200 mm, J4 +/- 360 °</td>
</tr>
<tr>
<td>Max. axial speed</td>
<td>J1, J2 4180 mm /s</td>
</tr>
<tr>
<td></td>
<td>J3 1,000 mm /s, J4 1800 ° /s</td>
</tr>
<tr>
<td>Mass moment of inertia</td>
<td>0.01 / 0.08 kg.m²</td>
</tr>
<tr>
<td>Permanent press-in force</td>
<td>83 N</td>
</tr>
<tr>
<td>Installation type</td>
<td>Floor</td>
</tr>
<tr>
<td>Z-axis outside / inside</td>
<td>20 H7 / 14 mm</td>
</tr>
<tr>
<td>Power ratings / cable length</td>
<td>AC 100 V to AC 240 V / 5 m</td>
</tr>
<tr>
<td>Weight</td>
<td>22 kg</td>
</tr>
</tbody>
</table>

J1 = Axis 1  J2 = Axis 2  J3 = Axis 3  J4 = Axis 4

**Package:**

- Epson robot with integrated controller
- 1 Epson RC+ program DVD including simulator
- 1 plug for emergency stop
- 1 plug for standard I/O
- 1 USB programming cable
- Manuals on CD
- 1 installation / safety manual
- 1 TP/bypass plug (pre-installed at factory)

**Available options:**

- Fieldbus slave card:
  - CC-LINK, Profinet, Devicenet, Ethernet I/P, EtherCat

- Fieldbus master card (requires external PC):
  - Profinet, Devicenet, Ethernet I/P

Price ex. VAT from EUR 9,500
Maximise your production line efficiency

Epson robot systems: precise, fast and reliable

Epson offers one of the world’s most extensive SCARA model ranges, including 6-axis robots, controllers and software.

Our products work together with precision, even at breathtaking speeds and often for up to 24 hours a day.

Epson Spider Robots
A unique design means the Epson Spider robot reaches every corner of its workspace to achieve unmatched cycle times.

Epson Scara Robots
Compact and powerful Epson SCARA robots work with total precision even at high speeds. We offer the world’s largest range of SCARA robots, with over 400 variants.
Total support for your Epson robot systems

We offer a comprehensive pre- and after-sales support programme on all our robot systems, including:

- Feasibility studies to maximise planning and project security
- Support to improve planning and implementation
- Introductory seminars, programming/maintenance courses, operator training
- Inspection and individual maintenance ideas
- Hotline and on-site repair service
- Central spare part stocking

**Epson Controllers**
Robust, space saving integrated controllers manage both manipulators and peripherals.

**Epson 6-Axis Robot**
Extra flexibility from rotating axes offers unrivalled point-and-track accuracy, so complex work processes can be executed precisely.
Simulation of robot cells

Good preparation is everything. Plan and visualise all procedures in your production, validate your program offline initially and carry out troubleshooting and editing work easily from your desk. With the Epson RC+ Simulator – included in the software package – you save time and money through all phases of your project.

Phase 1
Design
Plan your robot cell at full size in advance and work out the expected cycle time for your application to check feasibility before a single part for the system has been made. Plan future system expansions in the simulation system to keep downtime to a minimum.

Phase 2
Integration
Completing the program validation process before the robots are delivered enables you to create programs at the same time, with the system capable of displaying and evaluating even complex motions. Collision risks are identified and equipment damage is prevented.

Phase 3
Operation and maintenance
Troubleshoot and modify programs from your desk. Use the 3D layout to visualise collision detection, reachability checks and robot motions.
About Epson

Epson Robotic Solutions is one of the leading suppliers of high tech robot systems that are renowned worldwide for their reliability. The product range includes six-axis robots, SCARA robots, the SCARA entry-level LS and T models, the special Epson-developed Spider and N robots types, as well as the pioneering Dual Arm robot. Added to this are image processing controls and the Epson Force Sensor for force-controlled applications.

This gives Epson Robotic Solutions one of the most comprehensive ranges of high-precision industrial robots in the world, making them a technological pioneer for intelligently controlled automation processes.

Technological pioneer

1982
Epson SCARA robots freely available in Japan for the first time

1986
First cleanroom robot class 1

1997
First PC-based controller

2008
Inventor of the right or left arm-optimised G3 SCARA robot

2009
Inventor of the spider – a unique SCARA robot with no dead zones

2013
First application of Epson QMEMS® sensors in robotics, reducing six-axis kinematics vibrations

2014
Epson Compact Vision CV2: Epson’s own ultra-fast image processing computer

2016
Epson N2 series: World’s first 6-axis robot with folding arm – extremely compact and space-saving

2017
Epson Dual Arm robot with an arm geometry inspired by human physiology, as well as integrated sensors such as cameras, force sensors, and accelerometers

Pre and after-sales support

Feasibility studies for maximum planning and project security
Support for planning and implementation
Introductory seminars, programming/maintenance courses, operator training
Inspection and individual maintenance concepts
Hotline service, on-site repair service
Central spare part stocking
Experience all our Epson robots in action. Build, simulate and improve your automation application in a workshop cell, with help from our experts. The cell can be controlled and networked using all conventional fieldbus systems. In addition, we can supply you with modern peripherals such as a vision and conveyor tracking system.

Make an appointment

Call us on
+49 2159 5381800

or send an email to
info.rs@epson.de

Epson Deutschland GmbH
Robotic Solutions
Otto-Hahn-Strasse 4
40670 Meerbusch

Phone: +49 2159 5381800
Fax: +49 2159 5383170
E-mail: info.rs@epson.de
www.epson.de/robots

For further information please contact your local Epson office or visit www.epson-europe.com