EPSON®

T-Series

All-in-One SCARA Robots

The revolutionary Epson T-Series All-in-One SCARA robots

Looking to automate your factory without wasting time or money on complex, expensive, slide-based solutions? Now you can—with **groundbreaking T-Series All-in-One SCARA robots from Epson,** the #1 SCARA robot manufacturer in the world. These innovative robots offer fast, easy integration and take less time to install than most slide-based solutions available. With 110 V and 220 V power and a wide variety of options, including integrated vision guidance, T-Series All-in-Ones truly have it all.

Simplicity redefined in a compact All-in-One solution

What about space constraints? The T-Series virtually eliminates that issue. With a built-in controller, plus built-in power for end-of-arm tooling, these space-saving All-in-Ones have everything you need—and are designed to install in minutes[1]. Plus, they include the same intuitive Epson RC+® software and powerful features found in Epson's high-end robots.

The T3 All-in-One SCARA robot with built-in controller provides fast integration at an ultra low cost.

Feature-packed at an amazing price

Easy to install, fast integration — unlike complex, expensive, linear-slide systems, T-Series robots are designed to install in minutes[1] and require less time and money for system integration

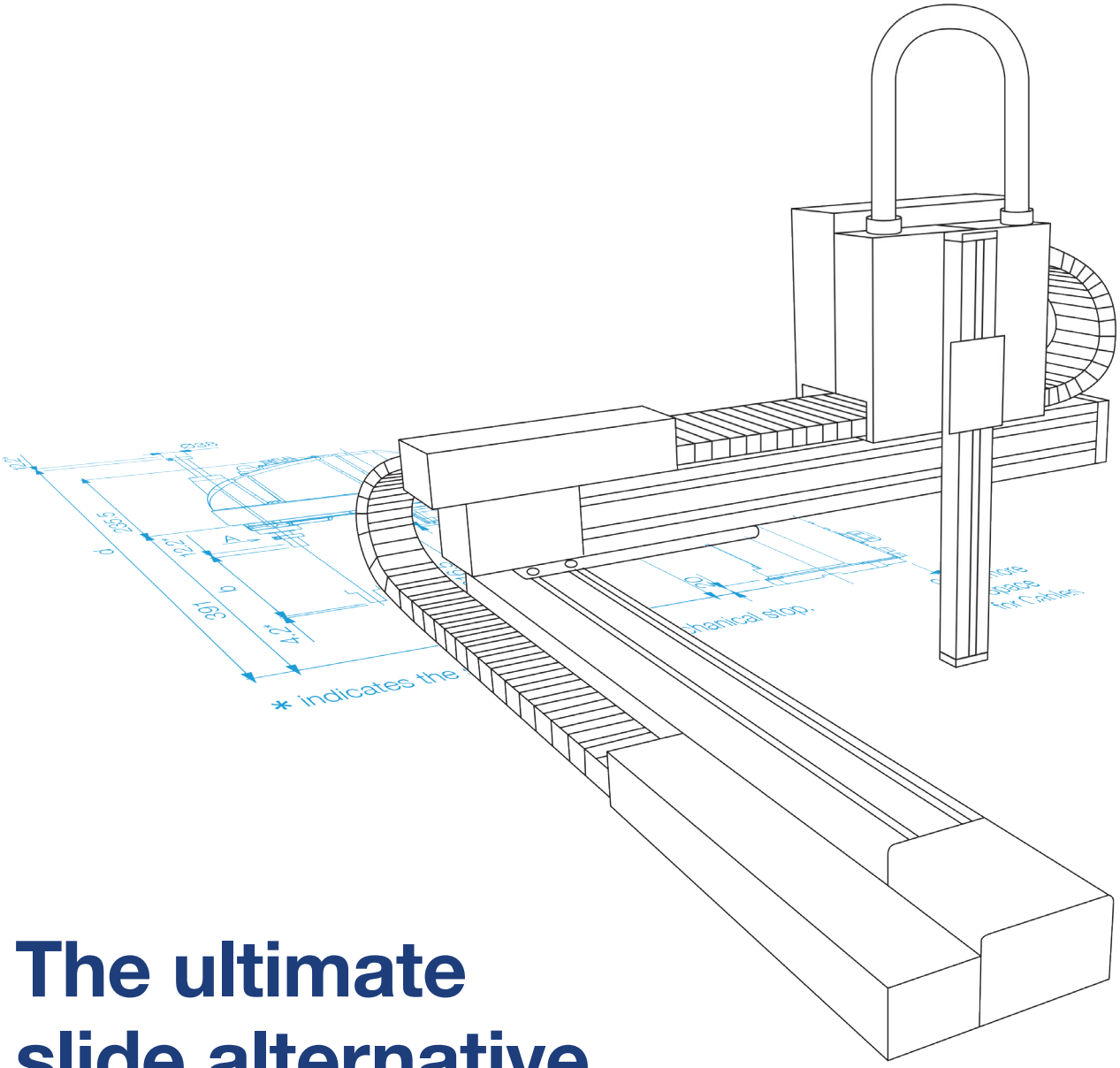
All-in-One solution — built-in controller with power for end-of-arm tooling; takes up less space than linear-slide solutions

Full featured, ultra low cost — includes the same powerful feature set as Epson's high-end robot lineup at an incredibly affordable price

Built-in controller — saves critical workspace with the controller conveniently housed in the robot's base

Easy to use — intuitive and feature-packed Epson RC+ development software makes it easy to create powerful solutions

Comes standard with 110 V and 220 V power — low wattage and power consumption (no special panel or plug required)

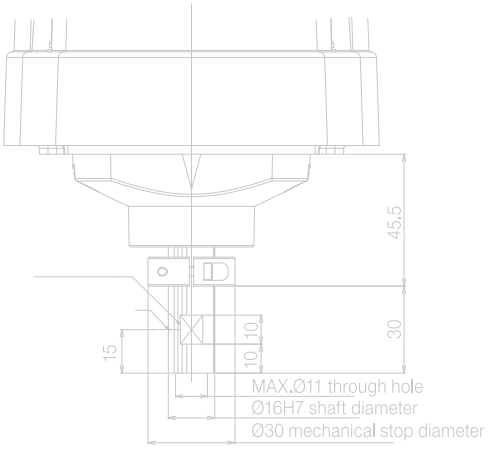


The ultimate slide alternative

T-Series All-in-One SCARA robots take up less space than linear-slide solutions, while providing a large work envelope. The perfect alternative for your automation needs, they offer a number of significant advantages, including:

- Fast integration/installation
- All-in-One design with built-in controller and power for end-of-arm tooling
- Fast cycle times
- Reduced footprint
- Low total cost of ownership
- Powerful options such as Epson's integrated Epson Vision Guide
- Four built-in axes in one compact design

Slide installations can be extremely complex, and many slides require constant adjustments.



T-Series innovations

Providing a unique All-in-One solution, T-Series robots offer the perfect alternative to slide-based solutions, with all the features you need right at your fingertips.

All-in-One design

- **Integrated controller** — saves critical workspace with the controller conveniently housed in the robot's base
- **Built-in power for end-of-arm tooling** — eliminates the need for an external power source

No battery required for encoder — helps minimize downtime and helps reduce the overall cost of ownership

High performance, low cost[2] — motors, amplifiers and other internal components are made by Epson

Built-In Controller

The Epson Advantage

#1 SCARA robot manufacturer in the world

Commitment to excellence — continual improvements in performance, ease of use and integrated options

Advanced servo technology — no overshoot or ringing*

Ease of use — intuitive and feature-packed Epson RC+ development software makes it easy to create powerful solutions

* When operated within specifications.

Award-winning T-Series robots

With reach capability of 400 mm to 600 mm and a payload from 3 kg to 6 kg, all in a space-saving design, T-Series robots offer a truly groundbreaking solution. Add to that the ultra low cost, and you've got the perfect choice for fast, easy, affordable factory automation.

T3

- 3 kg max. payload
- 400 mm reach
- 0.54 sec cycle time
- 0.01 kg·m^2 Joint #4 (J4) allowable moment of inertia
- Single-headed tooling

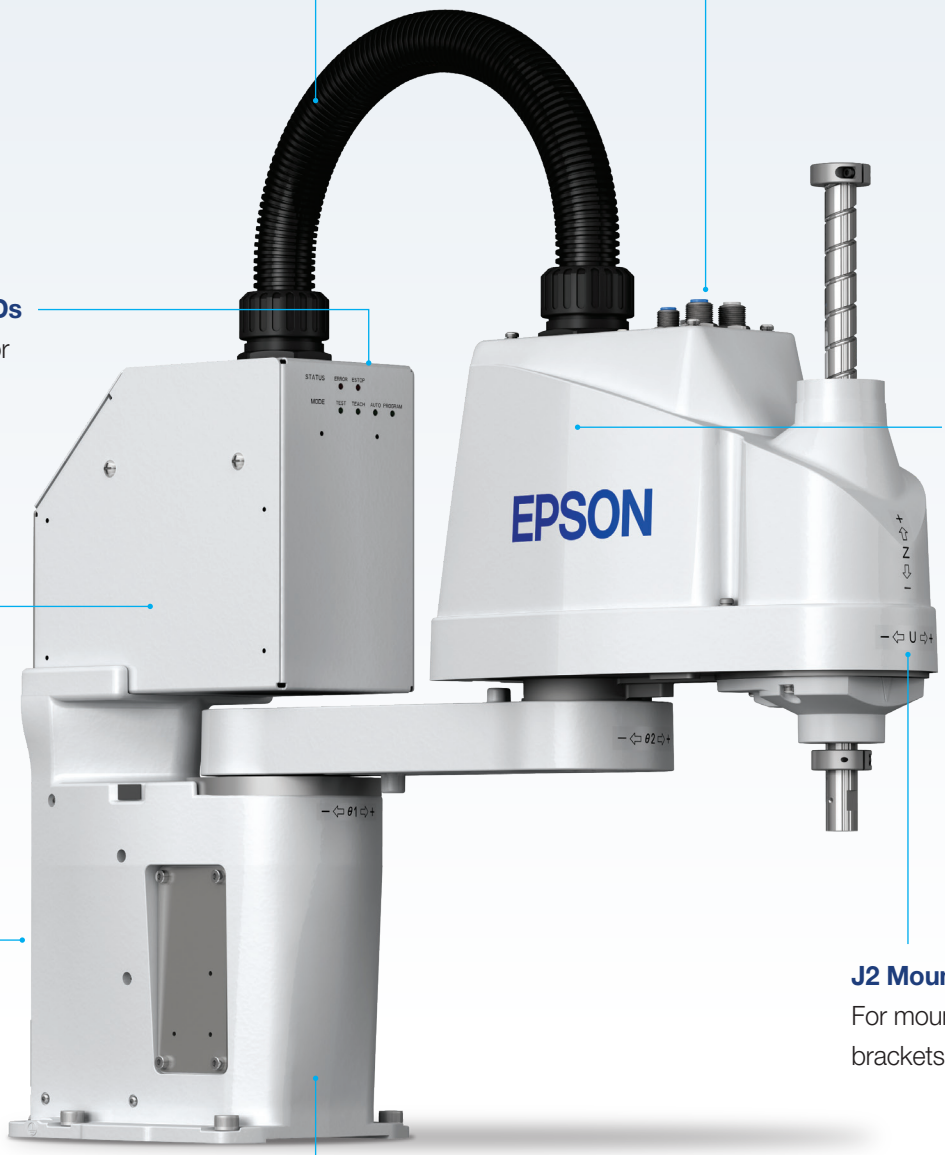
T6

- 6 kg max. payload
- 600 mm reach
- 0.49 sec cycle time
- 0.08 kg·m^2 J4 allowable moment of inertia
- Supports single- or dual-headed tooling

Reduced-Height Cable Duct
Minimizes vibration

Through-Arm Connections
EOA I/O, air tubes and brake release

Controller Status LEDs
Display error conditions



Self-Contained Motor Encoder, AMP Units
Joint #1 (J1), Joint #2 (J2), Joint #3 (J3), (J4)

Built-In Power Module
Power supply and distribution

Easy-Access Back Panel Connections
Ethernet, I/O, air and more

J2 Mounting Holes
For mounting camera brackets

Built-In Controller
CPU, DPB, CPU battery and CF card

Automation applications

T-Series All-in-One SCARA robots are extremely versatile, providing a wide range of automation possibilities:

- Assembly
- Pick and place
- Material handling
- Packaging
- Kitting / Tray loading
- Machine tending
- Screwdriving
- Dispensing
- Palletizing
- Lab analysis and testing
- Inspection and testing
- Finishing
- Grinding/Polishing

Options and accessories

Integrated vision guidance

Highly regarded in the industry as simple to use with a wide variety of powerful tools, Epson vision systems have provided integrated robot guidance for over 25 years. Our Epson Vision Guide software features high-performance tools in an intuitive point-and-click environment.

T-Series robot shown with mobile-mounted camera as part of the Epson Vision Guide option.

Fieldbus interface options

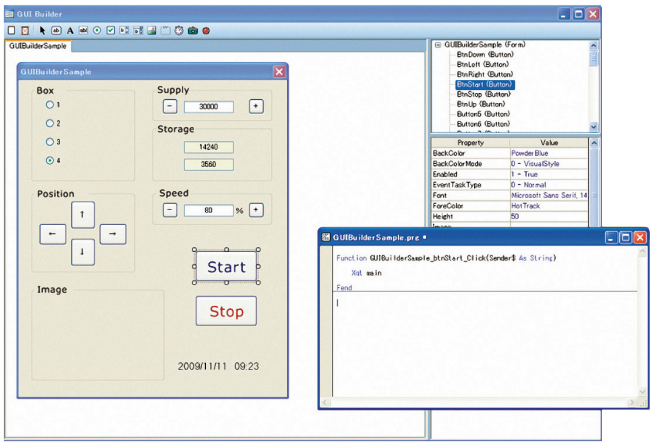
Fieldbus I/O interfaces are used in factories worldwide to reduce cabling costs and setup time, and promote standard device usage. However, there is not one accepted Fieldbus I/O standard. That's why we offer a wide variety of options including:

- EtherNet/IP®
- DeviceNet®
- EtherCAT®
- PROFINET
- PROFIBUS
- CC-Link®

GUI Builder

Epson's GUI Builder provides the tools necessary to create graphical user interfaces from within the Epson RC+ development environment. With the built-in GUI Builder toolset, users can work from one development environment, which helps reduce overall development time.

- Create GUIs without Visual Studio® or other third-party software tools
- Create and debug GUI forms from your Epson RC+ project
- Form and control events are executed as SPEL™+ tasks



T3 SCARA robot

Specifications

Mounting Type Tabletop
Arm Length (Joints #1 and #2) 400 mm
Payload
Rated: 1 kg
Maximum: 3 kg
Repeatability
Joints #1 and #2: ±0.02 mm
Joint #3: ±0.02 mm
Joint #4: ±0.02 deg
Standard Cycle Time[3] 0.54 sec
Maximum Motion Range
Joint #1: ±132 deg
Joint #2: ±141 deg
Joint #3: 150 mm
Joint #4: ±360 deg
Weight (Cables not Included) 16 kg (35.3 lb)
Joint #4 Allowable Moment of Inertia
Rated: 0.003 kg·m^2
Maximum: 0.01 kg·m^2
Joint #3 Downward Force 83 N
User Electric Lines
Hand I/O: In: 6 / Out: 4 (D-sub, 15-pin)
User I/O: In: 18 / Out: 12
User Pneumatic Lines
ø6 mm x 2, ø4 mm x 1

Other

Power AC: 100 V – 240 V
Power Consumption 660 kVA
Power Cable Length 5 m
Controller Inside of manipulator
Safety Standards
CE Mark, EMC Directive, Machinery Directive, RoHS Directive
ANSI/RIA R15.06-2012
NFPA 79 (2007 Edition)

What's Included

T3 All-in-One SCARA robot
Robot power cable
Epson RC+ software
USB cable
E-Stop unit with cable
T3 Robot System Safety and Installation Manual
Connector set (I/O, hand I/O and safety circuit connectors)

Support

Customer Service (562) 290-5920,
service@robots.epson.com

Applications Support (562) 290-5930,
applications@robots.epson.com

Sales Inquiries (562) 290-5997,
info@robots.epson.com

T6 SCARA robot

Specifications

Mounting Type Tabletop
Arm Length (Joints #1 and #2) 600 mm
Payload
Rated: 2 kg
Maximum: 6 kg
Repeatability
Joints #1 and #2: ±0.04 mm
Joint #3: ±0.02 mm
Joint #4: ±0.02 deg
Standard Cycle Time[3] 0.49 sec
Maximum Motion Range
Joint #1: ±132 deg
Joint #2: ±150 deg
Joint #3: 200 mm
Joint #4: ±360 deg
Weight (Cables not Included) 22 kg (48.5 lb)
Joint #4 Allowable Moment of Inertia
Rated: 0.01 kg·m^2
Maximum: 0.08 kg·m^2
Joint #3 Downward Force 83 N
User Electric Lines
Hand I/O: In: 6 / Out: 4 (D-sub, 15-pin)
User I/O: In: 18 / Out: 12
User Pneumatic Lines
ø6 mm x 2, ø4 mm x 1

Other

Power AC: 100 V – 240 V
Power Consumption 1.2 kVA
Power Cable Length 5 m
Controller Inside of manipulator
Safety Standards
CE Mark, EMC Directive, Machinery Directive, RoHS Directive
ANSI/RIA R15.06-2012
NFPA 79 (2007 Edition)

What's Included

T6 All-in-One SCARA robot
Robot power cable
Epson RC+ software
USB cable
E-Stop unit with cable
T6 Robot System Safety and Installation Manual
Connector set (I/O, hand I/O and safety circuit connectors)

Support

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Sales Inquiries (562) 290-5997,
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Epson Business Solutions

Driven by a relentless pursuit of innovation and market leadership, Epson empowers organizations to achieve their unique goals through a wide breadth of precision-engineered solutions. With a full suite of efficient and compact products ranging from printers to projectors and robots to microdevices, Epson is uniquely positioned to provide enduring partnerships and world-class expertise to those we serve every step of the way.

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Scan to learn more.

1 Actual installation time may vary depending on experience, environment and setup. | **2** Compared to current Epson robots using third-party components. | **3** Cycle time based on round-trip arch motion (300 mm horizontal, 25 mm vertical).

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