■ Specifications

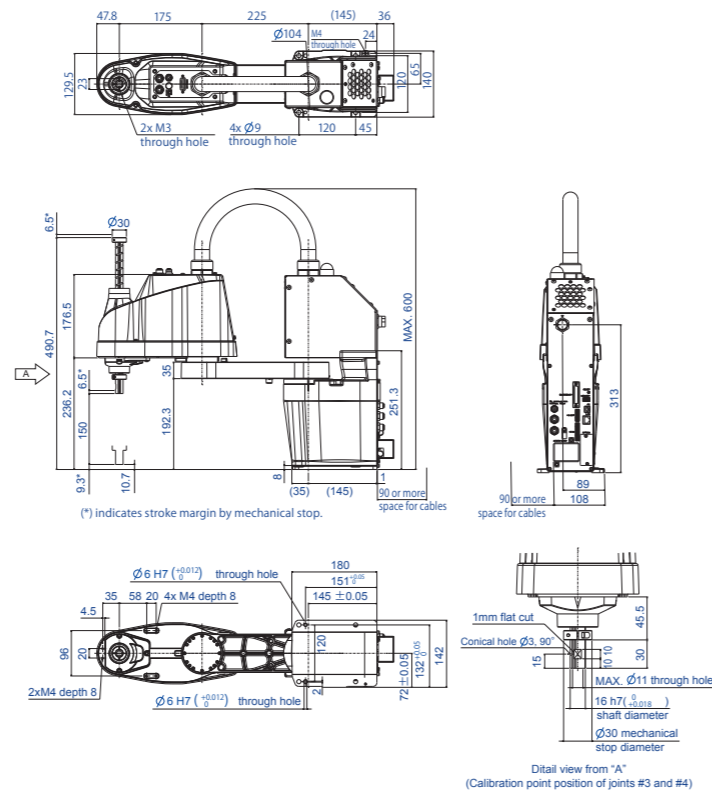| Item		T3-401S
Mounting type		Table Top
Arm length (Joints #1+#2)		400mm
Weight (cables not included)		16 kg
Max. motion range	Joint#1	± 132 deg
	Joint#2	± 141 deg
	Joint#3	150 mm
	Joint#4	± 360 deg
Repeatability	Joint#1-2	± 0.02 mm
	Joint#3	± 0.02 mm
	Joint#4	± 0.02 deg
Payload (Load)*[1]	Rated	1 kg
	Max.	3 kg
Standard cycle time*[2]		0.54 sec
Join#4 allowable moment of inertia*[3]	Rated	0.003 kg·m^2
	Max.	0.01 kg·m^2
Joint #3 down force		83 N
Installed wire for customer use		Hand I/O: IN6/OUT4 (D-sub 15pin), 24V User I/O:IN18/OUT12
Installed pneumatic tube for customer use		ø6 mm x 2, ø4mm x 1 : 0.59 MPa (6 kgf/cm^2 : 86 psi)
Power / cable length		AC100-240V / 5m
Applicable Controller		Inside of manipulator
Model		Standerd
Safety standard		CE mark

*1:Do not apply the load exceeding the maximum payload.
*2:Cycle time based on round-trip arch motion (300mm horizontal, 25mm vertical) with 1 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.

Item	
Teaching pendant TP1	—
Teaching pendant TP2, TP3	●
Conveyor tracking	—
PG motion system	—
Emergency stop switch	●
RS-232C cards	—
I/O expansion cards	—
Fieldbus I/O (slave)*4	●
Fieldbus I/O (master)	●
I/O cable kit	—
Vision option (PV1, CV1, CV2)	●
Force sensor option (S250)	—
Drive unit (DU)	—

Item	
Vision Guide 7.0	●
Force Guide 7.0	—
RC+ API 7.0	●
ECP	●
GUI Builder 7.0	●
Force sensing	—
OCR	●

*4: CC-LINK is available.

Dimensions [Unit: mm]

(*) indicates stroke margin by mechanical stop.

Ditail view from "A"
(Calibration point position of joints #3 and #4)

Motion Range [Unit: mm]
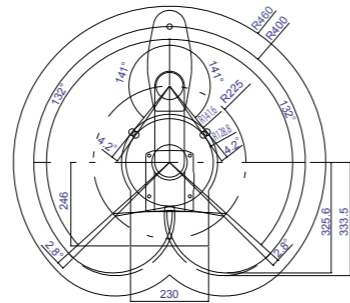
Epson Robot | T3
Scara Robots

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

An easy-to-use SCARA robot you can put to work right away!

Built-in controller.
Batteryless motor unit for greater convenience.
Operates on 100V–240V AC power.

Epson T3 compact SCARA robots feature a built-in controller that eliminates the need to deal with complicated cabling during setup and maintenance, and a batteryless motor unit that improves cost efficiency to help keep total operating costs low. Affordable and cost-efficient, T3 robots are an ideal way to automate simple manual tasks or replace multi-unit, single-axis robot setups that are complicated to set up and reconfigure.

No bulky external controller required

Connect directly to power outlet
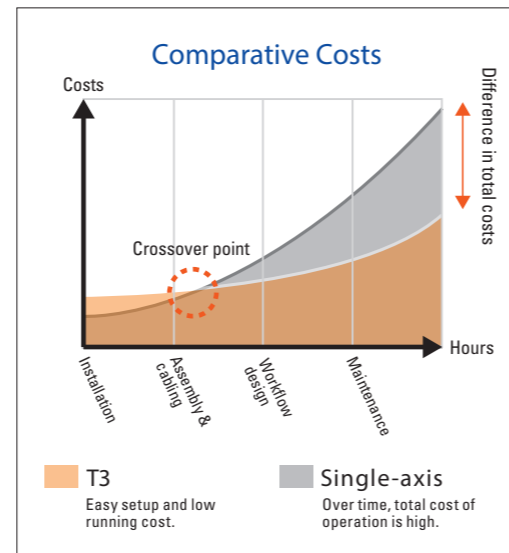
Accepts 100V~240V AC power

Power-saving 0.66kVA - 30% down*

* VS. Epson conventional robot : LS3-401S

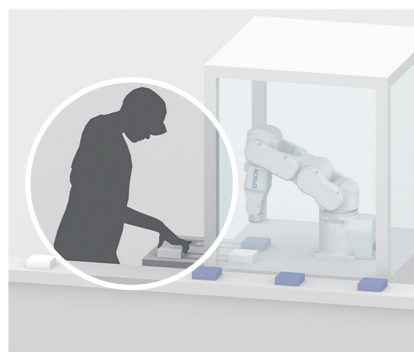## Easy, efficient automation of manual pick-and-place tasks

Epson T3 robots make the cost of automating simple manual tasks truly affordable. There is no need to expand or alter existing workspaces, and maintenance is easy. With outstanding operating efficiency, T3 robots cut costs every day — the more you use them, the more you save.

Lower TCO than single-axis robot units

Although the up-front cost of installing single-axis robots may be low, the complexity and long-term costs of setting up and maintaining multiple single-axis units and associated cabling can quickly add up. In addition, single-axis units require more installation space, resulting in larger workcells that reduce overall factory floor space. T3 robots, on the other hand, are easy to set up and can be adapted to a wide range of tasks. They also take up little floor space, and deliver higher productivity that reduces overall costs.
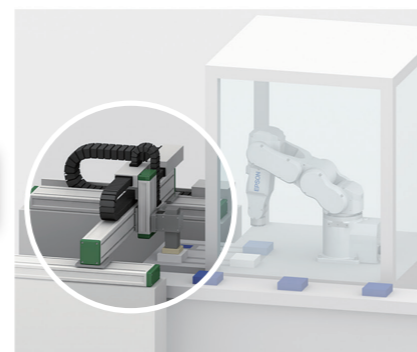
Comparative Costs

Costs

Difference in total costs

Crossover point

Hours

Installation / Assembly & cabling / Workflow design / Maintenance

- T3 — Easy setup and low running cost.
- Single-axis — Over time, total cost of operation is high.

Manual pick & place inefficiency

Easy-to-use T3 automation!

Single-axis multi-unit complexity

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3 KEY ADVANTAGES!

COMPACT SIZE & EASY SETUP!

Built-in SCARA controller
A built-in controller unit reduces installation space requirements and greatly simplifies initial setup and reconfiguration.

Easy cable connection and removal

Controller built into robot

SIMPLE CABLING!

Simple I/O and short cable conduit
I/O ports are located close to the hand for easy cabling. In addition, a short, sturdy conduit simplifies external cabling.
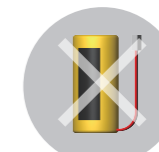
Short conduit

Top panel

HAND I / O
IN : 6
OUT : 4
INCOM / OUTCOM
24V / GND (~500mA)

Back panel

User I / O
IN : 18
OUT : 12

Can get 24V power from Robot-arm directly.

BATTERYLESS CONVENIENCE!

Batteryless motor unit
Batteryless motor unit retains starting point position data in memory without a battery, reducing running costs and factory downtime.

Batteryless motor unit