



Ultra-High-Speed Modular Mounter

Achieves revolutionary productivity of 200,000 CPH* making it the world's fastest compact SMT platform available.

* Comparison of chip mounting capability (CPH: chips per hour) under ideal conditions among 4-beam 4-head class surface mounters. In-house research as of April 2016.

World's fastest chip mounter **200,000 CPH**

Compact Machine of 1 m width and 2.1 m deep Flexible **Available in 3 head variations**

Astounding productivity 200,000 CPH/meter line length



FEATURE 1 Highest productivity in the world!

World's fastest! 200,000 CPH

Speed is achieved by cutting-edge technology including innovative high-speed rotary heads and servo motors incorporating new, high-speed algorithms.

Multi-camera system

Innovative multi-camera system has faster recognition speed along with high accuracy. This system can also include a coplanarity check function and side-view camera.



Compact space-saving design

Whether configured as a 2 or 4 beam system, the YSM40R maintains the same small footprint of only one meter wide and 2.1 meters deep. The Z:TA-R delivers class leading productivity per square meter making it a powerful tool for maximizing limited production areas.

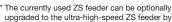
• Ultra-high-speed rotary head

Delivers revolutionary productivity by employing our unique simultaneous component pickup technology, newly developed rotary control technology, and a significant weight reduction over our previous highspeed heads.

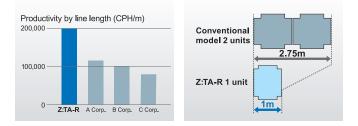
• Ultra-high-speed ZS feeder

A light-weight compact motorized feeder incorporates a new type control algorithm to ensure super-high-speed operation.*





upgraded to the unra-high-speed 23 feeder by upgrading the software version and adjusting with the tune-up station.



FEATURE 2 Flexible response for different production configurations!

3 types of head variations

Maximum flexibility with 3 headtypes to match the production configuration.



Ultra-high-speed head (RS head)

RS head delivers powerful productivity spanning a range from 0201 to \emptyset 6.5 mm on up to heights of 2 mm.

Beam variations in 2 types

Select from two beam variations to meet your specific need focusing on maximizing speed or flexibility. Our 4-beam platform is optimized for high speed chip mounting or the 2-beam platform that offers flexible handling of a wide range of components including odd-shaped chips and connectors.



Multi-head (MU head)

MU head offers the advantages of both component adaptability and high-speed to handle components from 03015 chips through 45 x 100mm and heights up to 15 mm.

• Flexible head (FL head)

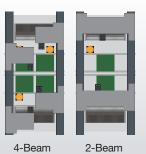
FL head is ideal for large components from 0603 chips through 45 x 100 mm and heights up to 25.5 mm. These functions including e-Vision for auto-generation

• 4-BEAM

Optimal configuration for a high-speed chip shooter

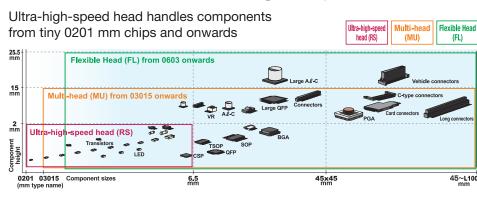
• 2-BEAM

This general-purpose type allows mounting tray feeders at front and rear.



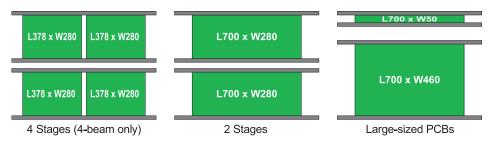


Head variations & matching components



Dual lane system handles large-size PCBs

The YSM40R employs a dual lane system that gives superb versatility in feeding 2 parallel lanes of PCB in sizes ranging from small to midsized PCB on up to large-sized PCBs of 700 mm in length.



Flexible nozzle station

Nozzle station (ANC) is changeable to match the

head. Also handles nozzle free layouts for high-speed head compati



head compatibility.

Tray and feeder Carriages

Feeder carriages available for the YSM40R include externally attached quick-change replacement feeders and carriage type trayfeeders attachable at the machine front or rear.





Automatic tray I supply carriage

Feeder exchange carriage

FEATURE 3 High tech to support high mounting quality & a high machine operating rate

Nozzle Diagnostic function

Automatically diagnoses the nozzle function and appearance then replaces any problem nozzle with a spare nozzle as needed.



Rotary head tip filter

A filter attached to the shaft tip prevent debris from entering the vacuum system. This eliminates recognition data failures which minimizes downtime and maintenance costs.



High speed side-view camera

Monitors component presence in realtime with verification at component pickup and again pre and post placement.



Blow station

The blow station automatically selfcleans the nozzle shaft to drastically reduce the time normally required for maintenance. It is also effective on nozzles for extremely small components such as 0201 mm chips.



Auto recognition optimizer functions

These functions including e-Vision for auto-generation and tracing of recognition data, and smart recognition to easily create component data for complex shapes to help prevent pickup and component recognition errors.

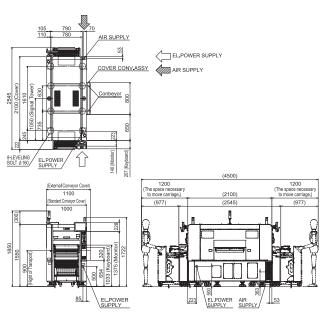
Highly stable & reliable pickup system

This system automatically maintains high reliablity component pickup by employing a high-performance vacuum pump, pickup position auto-correction function and pickup height auto-teach function.



Model		Z:TA-R YSM40R	
		4-beam, 4-head specs. (YSM40R-4)	2-beam, 2-head specs. (YSM40R-2)
	Applicable PCB	L 700 x W 460 mm to L 50 x W 50 mm	
Applicable components	Ultra-high-speed (RS) head	0201 mm to Ø 6.5 mm (Height 2.0 mm or less)	_
	Multi (MU) head	03015 to 45 x 60 mm (Height 15 mm or less)	
	Flexible (FL) head	-	0603 to 45 x 100 mm (Height 25.5 mm or less
Mounting capability (Under optimum conditions as defined by Yamaha Motor)		200,000 CPH (When using RS head) 140,000 CPH (IPC9850)	58,000 CPH (When using MU head)
Mounting accuracy (Under optimum conditions as defined by Yamaha Motor when standard evaluation materials are used)		± 35 μm (25 μm) Cpk ≥ 1.0 (3 σ)	± 40 μm (30 μm) Cpk ≥1.0 (3 σ)
Number of component types (8 mm width tape conversion)		Max. 80 feeders with RS heads Max. 88 feeders with MU heads Max. 84 feeders with RS x 2 + MU x 2 heads	92 feeders with MU or FL heads
	Power supply	3-Phase AC 200/208/220/240/380/400/416 V	/ +/- 10 %, 50/60 Hz
Air supply source		0.45 MPa or more, in clean, dry state	
	External dimension	L 1,000 x W 2,100 x H 1,550 mm (excluding p	projections)
	Weight	Approx. 2,100 kg	

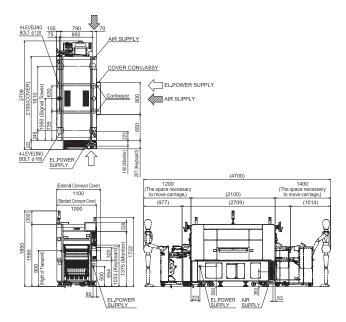
YSM40R-4 External dimension



Specifications and appearance are subject to change without prior notice.

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YSM40R-2 External dimension



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