

### Space efficient solution for flexible manufacturing



The 4797R HSP delivers an optimal combination of flexibility, performance and space-saving design. We trimmed the footprint, expanded the board handling capacity and retained more than enough feeders to place the components you need at a high throughput. Incredibly productive as a stand-alone machine, you can also group multiple machines for increased flexibility and volume. For EMS businesses, the 4797R covers all your requirements without exceeding your available space.

This scalable solution is perfect for assembling network and telecom infrastructure products, PC motherboards, and backplanes. Because you can re-deploy it worldwide for virtually any application, you will reap an outstanding return on your investment; even with the most radical business roadmap.

#### Machine Performance

Placement Rate	48,000 cph
Placement Tact Time	0.075 sec. (within the X,Y table movement of 12mm, with picks within the same feeder)
Feeder Axis Tact Time	.09 sec. (one lane movement) / .08 sec. with dual-track feeder
Programmable Orientation	0° - 359.9° in 0.01° increments
Placement Pressure	Not programmable; however, component Z-height is automatically adjusted by the machine and each nozzle maintains a nominal 100g - 150g spring-loaded placement force
Final Placement Performance	100 parts per million, 99.99%
Intrinsic Availability	95%
Placement Accuracy	X,Y Axis MELFs: ±0.08mm (0.003") @ 3 sigma Chips: ±0.08mm (0.003") @ 3 sigma Leaded Parts: ±0.05mm (0.002") @ 3 sigma
Feeder Slots	Up to 72 unique components (8mm tape) Up to 96 unique components with dual-track 8mm feeders
Feeder Types	Tape (8mm to 44mm), 8mm dual-track tape, bulk
Placement Head	Twelve 5-spindle, advanced direct-drive placement heads

#### Component Range

	Minimum	Maximum
Length	0.3mm (0.012")	26mm (1.024")
Width	0.6mm (0.024")	26mm (1.024")
Thickness	0.3mm (0.012")	6.5mm (0.256")
Ball/Lead Pitch	0.5mm (0.020")	1.27mm (0.050")
Lead Width	0.18mm (0.007")	—
Ball Size	0.3mm (0.012")	—
MELF Length	1.6mm (0.063")	5.9mm (0.232")
MELF Diameter	0.8mm (0.031")	2.2mm (0.087")

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## PCB Dimensions

	Minimum	Maximum
Length	50mm (1.968")	610mm (24")
Width	50mm (1.968")	460mm (18")
Thickness <sup>1</sup>	0.5mm (0.02")	5mm (0.197")
Weight	–	2kg (4.4 lbs)
Top-Side Clearance	6.5mm (0.256")	–
Standard Bottom-Side Clearance	30.0mm (1.181")	–

<sup>1</sup>PCMCIA and ceramic board applications require factory review and quote.

## Options

Component Library Data Teach  
 Pattern Program Data Teach  
 Barcode Validation System (BVS)  
 Traceability Package  
 BGA/CSP Recognition  
 Black Light PEC Camera  
 GEM/SECS II

## Software

UCT-53 offline programming utility  
 Microsoft® Windows 2000® operating system

## Service Requirements

**Electrical** 200 VAC (±20 VAC)  
**Pneumatic** 28 liters/minute @ 4.1 bar (1 scfm @ 60psi)

## Machine Dimensions

Length	Depth	Height	Weight
3,100mm (122")	2,155mm (84.8")	Max. 2,100mm (82.7")	4,000kg (9,012lbs.)

