

Mini Pick & Place Machine - Desktop SMT Ultra Intro

1. Overview

It is an advanced desktop pick-and-place machine designed for precise and efficient PCB assembly. With a three-vision camera system, automatic feeders, and dual placement heads.

Its compact design suits both home and professional environments, offering intelligent, high-speed features for small-scale prototyping and diverse production needs.

*Work flow: 1) Solder paste printing/dispensing solder paste 2) SMT 3) Reflow soldering.

2. Feature

- 2.1. **High Precision:** Simultaneous top and bottom camera capture, with up to three cameras on the machine. Closed-loop stepper motor control ensures stability with no missed steps. Custom nozzle motor is durable, and the linear guide structure ensures smooth movement.
- 2.2. **Fast & Efficient:** Thanks to powerful S-curve motion control, speed is 80% faster than similar machines, with a maximum placement speed of up to 3000 CPH, ensuring stability and minimal vibration.
- 2.3. **Easy Operation:** Proprietary intelligent placement software with a simple interface and clear logic. Guided tutorial-style help files are available. Supports passive automatic head change and multiple types of Mark recognition.
- 2.4. **Versatile Feeding:** Vision-assisted loose part feeder, capable of handling polarized components with ease. Electric feeder with automatic barcode marking, driven by all-metal gears, compact and supports 0402 components. Loose part feeder. Tray feeder.
- 2.5. **Sturdy &Stable:** Integrated welded sheet metal frame, stable at high speeds with no vibration. Linear guide ensures smooth and steady motion.

3. Specs

Equip Size	W530×D450×H330mm	Equip Weight	18.4 kg(N.W)		
Packaging Size	W647×D545×H390mm	*Packaging Weight	24 Kg(G.W)		
XYZ Stroke	X260×Y370×Z20mm	Max PCB Area	W220×D300mm		
Vision Camera	Triple, One Top&Dual Bottom	Frame	Integrated Sheet Metal		
Placement Head	Dual	Feeder Capacity	12×8mm Tri-tape E- Feeder 20 × Strip Feeder		
Position Accuracy	0.05mm	Nozzle Recoil Range	5mm		
Drive Motor	57 Closed Loop stepper	Light Source	LED		
OS	Windows 7 and above	Software	SMTEZ		
Power Supply	220V/50HZ	Average Power 150W			
XY Axis Rotation	Timing belt + Linear Guideway	Max Speed 3100 mm/s			
Tree-Vision Mounting speed	2500 CPH	Vision-less Mounting speed			
Vacuum	External vacuum pump	Electric FeederTri-tape Auto Feeder485 communication			
Programming	CSV coordinate file import or manual entry				
SMT Range	0402/0603/0805/1206/LED lamp beads Diode, transistor, SOT/45×45mm range pins QFP, BGA, etc. with pitch greater than 0.3mm				

4. Default & Optional4.7. Default Delivery List

	Sort	Name	Quantity	Mark
	Equip	Desktop SMT Ultra	1	High-speed dual placement heads, Triple Vision, automatic head change
	Nozzle	CN065	1	0603, 0805
		CN140	1	1206, Sop8
	Feeder	Strip Feeder	3	8mm、12mm、16mm one of each
4		8mm Tri-tape Auto Feeder	1	Supports 0402 to Sop16, positioning accuracy 0.01m
2	Others	Nozzle Change Holder	1	5 workstations, providing 4 nozzle replacements
		Calibrate PCB	1	Calibration Position
		Vacuum Pump	1	Provides vacuum power to the nozzle

Sort	Name	Applicable Component		OD(mm)	ID(mm)	Price
Nozzle	CN040	0402		0.7	0.4	\$8
	CN065	0603, 0805		1.2	0.6	\$8
	CN 140	1206, sop8		2.2	1.1	\$8
	CN220	Sop8 sop16		3.6	2.2	\$8
	CN400	Sop8 & above large components		6.2	4.0	\$8
Feeder	8mm Str	ip Feeder	8mm Wide Tape, 3D Printed			\$4
	12mm Strip Feeder		12mm Wide Tape , 3D Printed			\$4
	16mm Strip Feeder		16mm Wide Tape , 3D Printed			\$5
	Vision Feeder		Uniform luminescence, clear component outline recognition rate of 99% *Can't be used for square component *Only one can be mounted on the magnetic base power supply			\$15
	8mm Tri-tape Auto Feeder		Tape Wide 8mm, positioning accuracy 0.01mm			\$49
	12mm Dual-tape Auto Feeder		Tape Wide 12mm, positioning accuracy 0.01mm			\$40
	16mm Dual-tape Auto Feeder		Tape Wide 16mm, positioning accuracy 0.01mm			\$40
Solder Paste Stencil Printing Station		Effective size 170×170mm			\$52	

4.8. Optional

5. Warranty

- 5.1. 12-month warranty for quality problems caused by non-human factors
- 5.2. After the warranty period expires, parts will be replaced and repaired at cost price.

6. Details

Auto Feeder



Machine



Strip Feeder

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Vision Feeder

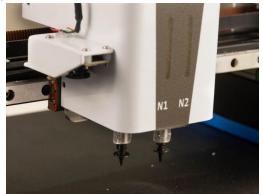




Samsung Nozzles



Dual Nozzle



Nozzle Tip Changer

