

## NPM

NEXT PRODUCTION MODULAR

### Manufacturing Process Innovation



Model ID **NPM-TT2**  
Model No. NM-EJM1E



\*It may not conform to Machinery Directive and EMC Directive in case of optional configuration and custom-made specification.

Model ID		NPM-TT2	
PCB dimensions	PC size	Single-lane mode	L 50 mm × W 50 mm ~ L 510 mm × W 590 mm
		Dual-lane mode	L 50 mm × W 50 mm ~ L 510 mm × W 300 mm
	M size	Single-lane mode	L 50 mm × W 50 mm ~ L 510 mm × W 510 mm
		Dual-lane mode	L 50 mm × W 50 mm ~ L 510 mm × W 260 mm
PCB exchange time		Single-lane mode	4.0s (With no component mounted on the reverse side of PCB)
		Dual-lane mode	0 s* *No 0s when cycle time is 4.0 s or less
Electric source		3-phase AC 200, 220, 380, 400, 420, 480 V 2.5 kVA	
Pneumatic source		Min.0.5 MPa, 200 L / min (A.N.R.)	
Dimensions *1		W 1 300 mm*2 × D 2 798 mm*3 × H 1 444 mm*4	
Mass		2 690 kg (Only for main body : This differs depending on the option configuration.)	
Placement head		Lightweight 8-nozzle head ( Per head )	3-nozzle head V2 *5 ( Per head )
Placement speed	PC size	18 000 cph (0.20 s / chip)	7 200 cph (0.50 s / chip) 5 900 cph (0.61 s / QFP)
	M size	17 460 cph (0.21 s / chip)	6 984 cph (0.52 s / chip) 5 723 cph (0.63 s / QFP)
Placement accuracy (Cpk ≥ 1)		± 40 μm / chip ± 30 μm / QFP □12 mm ~ □32 mm ± 50 μm / QFP □12 mm Under	± 40 μm / chip ± 30 μm / QFP
Component dimensions (mm)		0402 chip*6 to L 32 × W 32 × T 12 Tape : 4 to 56 / 72 mm	0603 chip ~ L 150 × W 25 (diagonal 152) × T 30 Tape : 4 to 56 / 72 / 88 / 104 mm
Component supply	Taping	Specifications for front/rear tray feeders : Max.52 Specifications for front/rear feeder carts : Max.120 (Tape : 4, 8 mm)	
		Specifications for front/rear tray feeders : Max.12 (Single stick feeder) Specifications for front/rear feeder carts : Max.28 (Single stick feeder)	
	Tray	Max. 40 (Front supply unit : Max. 20 + Rear supply unit : Max. 20)	

\* Placement tact time, inspection time and accuracy values may differ slightly depending on conditions

\* Please refer to the specification booklet for details.

\*1 : Only for main body

\*2 : 1 820 mm in width if extension conveyors (260 mm) are placed on both sides

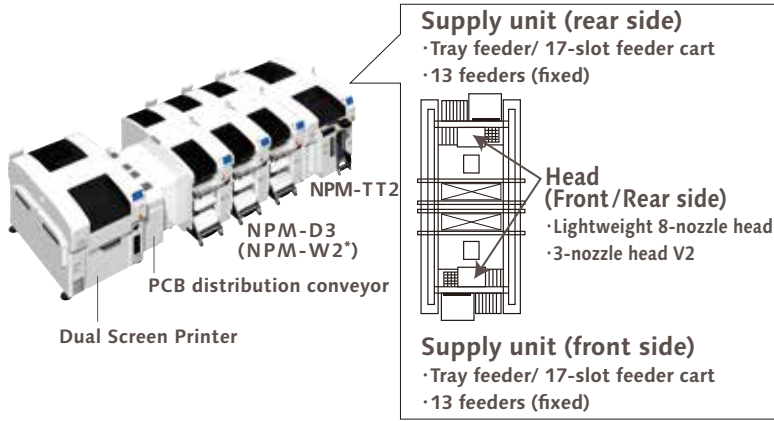
\*3 : Dimensions shown are specifications for front/rear tray feeders .  
Dimensions of specifications for front/rear feeder carts : 2 893 mm

\*4 : Excluding the monitor, signal tower and ceiling fan cover.

\*5 : 3-nozzle head V2 cannot be installed on NPM-D3

\*6 : The 0402 chip requires a specific nozzle/feeder.

## Basic Specification



- 1 Direct connectivity with NPM-D3/W2**  
 Connecting with NPM-D3/W2 enables high area productivity & versatile line configurations  
 \*M-size dual conveyor(option)is required for direct connection with NPM-W2.
- 2 Placement head (Lightweight 8- nozzle head & 3-nozzle head V2)**  
 Selectable Lightweight 8-nozzle head/3-nozzle head V2 to support odd-shaped components capability. 3-nozzle head V2 placement load: Max.100 N
- 3 Selectable & configurable supply unit spec**  
 Lines can be configured according to parts supply forms by rearranging a tray feeder/cart
- 4 Adoption of Multi Recognition Camera**  
 Higher speed recognition inspection of parts in the height direction enables high-speed and stable mounting of odd-shaped components
- 5 Alternate & independent mounting support**  
 Optimum mounting methods can be selected according to production PCB

## Changeover capability

### Multi Recognition Camera

Recognition data is consolidated with NPM-D3/W2. In addition, the recognition speed became higher including vertical inspection of parts condition.

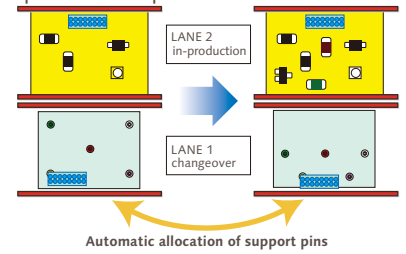
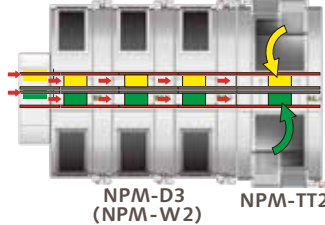
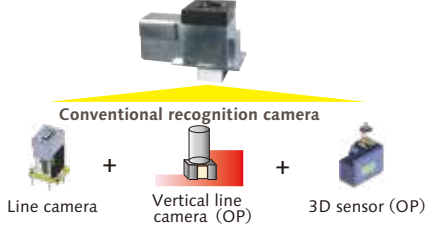
Multi-recognition camera

### High productivity through fully independent placement

Capable of fully independent placement of tray components improving cycle time of mid-, large-sized component placement with 3-nozzle head V2. Output of entire line is enhanced.

### Support Pin Automatic Change (option)

Automate position change of support pins to enable non-stop changeover and help save man-power and operation errors.



## Versatility

### Feeder cart changeover spec (option)

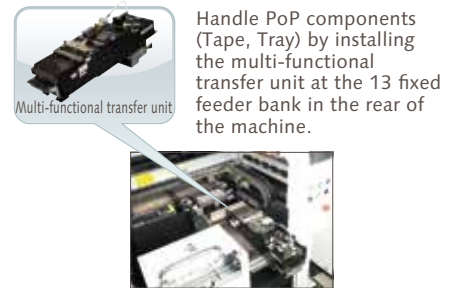
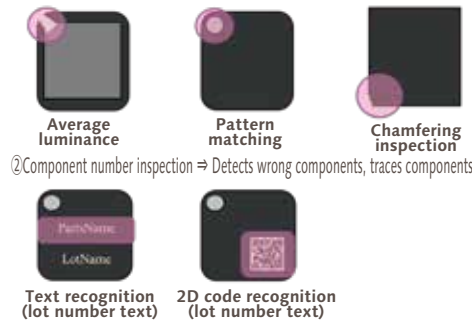
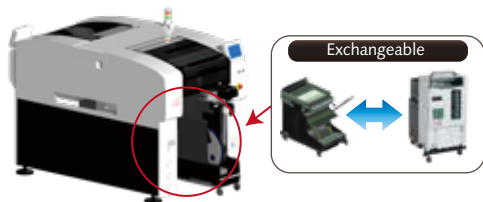
Tray feeder and 17 inputs feeder cart and be exchanged at customer side to enable equipment configuration according to parts supply forms.

### Inspection option before pick-up

Inspect tray or reel components before pick-up to prevent misplacement.

### Transfer Unit (option)

Handle PoP components (Tape, Tray) by installing the multi-functional transfer unit at the 13 fixed feeder bank in the rear of the machine.



\*Transfer unit (using 8 input slots) can be used only with the Lightweight 8-nozzle head & 3-nozzle head V2.

## ⚠ Safety Cautions

- Please read the User's Manual carefully to familiarize yourself with safe and effective usage procedures.
- To ensure safety when using this equipment, all work should be performed according to that as stated in the supplied Operating Instructions. Read your operating instruction manual thoroughly.

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