Panasonic BUSINESS



Manufacturing Process Innovation



Nodel ID No.NM-EJM6E



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

機	種	名	NPM-D3A
PCB	Dual-lane mode		L 50 mm × W 50 mm ~ L 510 mm × W 300 mm
dimensions*1	Single-la	ne mode	L 50 mm × W 50 mm ~ L 510 mm × W 590 mm
PCB	Dual-lane mode		OS* *No Os when cycle time is 3.6 s or less
time	Single-la	ne mode	3.6s* *When selecting short conveyors
Electric source			3-phase AC 200, 220, 380, 400, 420, 480 V 2.7 kVA
Pneumatic source *2		rce *2	0.5 MPa、100 L /min (A.N.R.)
Dimensions*2			W 832 m × D 2 652 mm · 3 × H 1 444 mm · 4
Mass			1 680 kg (Only for main body:This differs depending on the option configuration.)

Placement head	Lightweight 16-nozzle head V3 (Per head)		
i lacement nead	High production mode[ON]	High production mode[OFF]	
Max. speed	46 000 cph (0.078 s/ chip)	38 000 cph (0.095 s/ chip)	
Placement accuracy(Cpk≥1)	$\pm 37~\mu$ m/chip	\pm 30 μ m / chip (\pm 25 μ m / chip*5)	
Component dimensions (mm)	0402 chip $_{*6}\sim$ L 6 \times W 6 \times T 3	03015 $_{6}$ $_{7}$ /0402 chip $_{6}$ \sim L 6 \times W 6 \times T 3	
Component supply Taping	Tape:4/8/12/16 mm		
supply Taping	Max. 68(4, 8 mm tape, Small reel)		

^{*}Placement tact time,inspection time and accuracy values may differ slightly depending on conditions

^{*}Please refer to the specification booklet for details.

^{1 :} Due to a difference in PCB transfer reference, a direct connection with NPM (NM-EJM9B) / NPM-W (NM-EJM2D) /NPM-W2 (NM-EJM7D) dual lane specs cannot be established.

^{*2 :} Only for main body

^{*3 :} Dimension D including feeder cart

^{*4 :} Excluding the monitor, signal tower and ceiling fan cover.

^{*5:} $\pm 25~\mu m$ placement support option. (Under conditions specified by Panasonic)

^{*6:} The 03015/0402 mm chip requires a specific nozzle/feeder.

[:] Support for 03015 mm chip placement is optional. (Under conditions specified by Panasonic : Placement accuracy $\pm 30~\mu\text{m}$ / chip)

Features





Adoption of the light-weight 16-nozzle head V3

Improving Placement tact time by simultaneously driving X-/Y-axes and selecting optimal pathways during component recognition operation.



Advancement of head drive unit motion control

Improving placement takt by further advancing motion control and thereby reducing X-/Z-axis travel time.



Use of new pickup operation algorithm

Improving effective productivity by enhancing pickup algorithm for microchips.

Improved O.E.E.* (machine operation/model changeover performance) *O.E.E.: Overall Equipment Effectiveness

Automatic recovery (option)

It automates the task to recover from any pickup or recognition error, thereby cutting downtime losses and enhancing availability.



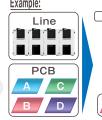
Remote operation (option)

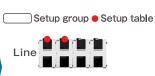
It reduces operators' operating time under the remote control of center control station, thereby cutting loss of time and increasing O.E.E.



DGS setup optimization (option)

It optimizes production involving several different models to minimize setup workloads, thereby increasing model changeover performance while cutting preparation time and increasing availability.









Maintenance

Maintenance notice service (maintenance service^{*1})

Cloud-based contractual service. It makes malfunction analysis based on machine info uploaded by subscriber to our cloud to find any feeder or nozzle that requires condition check, and then sends a maintenance check suggestion list containing the analysis result to the subscriber.

Panasonic Cloud service Uploading of machine info Malfunctioning feeder/nozzle Malfunction analysis Machine info collection tool Maintenance check suggestion list



Head diagnosis (option)

It automatically self-diagnoses placement heads on a regular basis and stores diagnosis histories. Keeping track of any change in the condition of each head, it performs preventive maintenance of the head, reducing losses resulting from heads and sudden machine shutdowns.







Machine head diagnosis screen

LNB history save screen

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.

Panasonic Group products are built with the environment in mind.

Please check the homepage for the details. panasonic.com/global/corporate/sustainability

Inquiries...

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^{*1:} Maintenance service agreement must be concluded with us. (for details, contact our sales representative.)