The NPM-W2 combines accurate component placement, precise SPI and AOI inspection and reproductive adhesive dispensing in one high-speed solution.

NPM-W2

Higher productivity and quality thanks to the integration of printing, placement and inspection processes make the NPM-W2 one of the most flexible and versatile pick-and-place solutions on the market. This machine provides the user with a tool that allows him to choose between high speed or high accuracy, depending on the PCB requirements. In addition, the NPM-W2 is optimised for larger boards and larger components, such as PCBs up to 750 x 550 mm and components up to 150 x 25 x 30 mm (L,W,H). For high productivity, dual lanes can be used. Features The multifunctional NPM-W2 is equipped with a 16-nozzle head and can place 42,000 components. 120 feeders can be mounted. Additionally, the NPM-W2 can automatically inspect solder depots and components according to the production data. As a third function, the NPM can be fitted with the conventional HDF discharge mechanism, which ensures high-quality non-contact dispensing with a screw valve-dispenser.

Key Features

Equipped with a 16-nozzle head and can place 42,000 components

Automatical inspection of solder depots and components according to the production data

HDF discharge mechanism compatible, which ensures high-quality non-contact dispensing with a screw valve-dispenser

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CONNECT

NPM-W2

https://ap.connect.panasonic.com/th/en/npm-w2

PCB dimensions (mm)	Single-lane Batch mounting 2-position mounting Dual-lane Dual transfer (Batch) Dual transfer (2-position) Single transfer (Batch) Single transfer (2-position)
Placement Head max Speed	42 000cph (0.094 s/ chip)
Placement Head Placement Accuracy (Cpk≧1)	±40 μm / chip
Placement Head Component Dimensions (mm)	0402 chip ~ L 6 x W 6 x T 3
Taping	Tape : 4 / 8 / 12 / 16 / 24 / 32 / 44 / 56 mm Max.120 (Tape: 4, 8 mm)
Dispensing Head	Dispensing speed: Dot dispensing: 0.16 s/dot (Condition : XY=10 mm, Z=less than 4 mm movement, No θ rotation) Draw dispensing: 4.25 s/component (Condition : 30 mm x 30 mm corner dispensing)*9 Adhesive position accuracy (Cpk≥1) Dot Dispensing: ± 75 μ m /dot Draw Dispensing: ± 100 μ m /component Applicable components Dot Dispensing: 1608 chip to SOP,PLCC,QFP, Connector, BGA, CSP Draw Dispensing: BGA, CSP
Resolution	2D inspection head (A) 18 μm
View Size (mm)	44.4 x 37.2
Inspection Processing Time	Solder Inspection 0.35s/ View size Component Inspection 0.5s/ View size
Inspection Object	Solder Inspection Chip component: 100 μm × 150 μm or more (0603 or more) Package component: ϕ150 μm or more Component Inspection: Square chip (0603 or more), SOP, QFP (a pitch of 0.4mm or more), CSP, BGA, Aluminum electrolysis capacitor, Volume, Trimmer, Coil, Connector

Inspection Items	Solder Inspection: Oozing, blur, misalignment, abnormal shape, bridging Component Inspection: Missing, shift, flipping, polarity, foreign object inspection
Inspection Position Accuracy	± 20 µm
No of Inspection	Solder Inspection : Max. 30 000 pcs./machine (No. of components :Max. 10 000 pcs./machine) Component Inspection: Max. 10 000 pcs./machine