



**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.

### Key Features

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Equipped with a 12-nozzle head and can place 38,500 components

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

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



## NPM-W2

<https://latam.connect.panasonic.com/co/en/products/smart-factory-solutions/npm-w2>

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|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>PCB dimensions (mm)</b>                                       | Single-laneBatch mounting2-positin mountingDual-laneDual transfer (Batch)Dual transfer (2-position)Single transfer (Batch)Single transfer (2-position)                                                                                                                                                                                                                                                                                                   |
| <b>Placement Head max Speed</b>                                  | 38 500cph (0.094 s/ chip)                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Placement Head Placement Accuracy (Cpk<math>\geq</math>1)</b> | $\pm 40 \mu\text{m}$ / chip                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Placement Head Component Dimensions (mm)</b>                  | 0402 chip ~ L 6 x W 6 x T 3                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Dispensing Head</b>                                           | Dispensing speed:Dot dispensing: 0.16 s/dot (Condition : XY=10 mm, Z=less than 4 mm movement, No $\theta$ rotation) Draw dispensing: 4.25 s/component (Condition : 30 mm x 30 mm corner dispensing)*9Adhesive position accuracy (Cpk $\geq$ 1) Dot Dispensing: $\pm 75 \mu\text{m}$ /dot Draw Dispensing: $\pm 100 \mu\text{m}$ /componentApplicable components Dot Dispensing: 1608 chip to SOP,PLCC,QFP, Connector, BGA, CSP Draw Dispensing: BGA, CSP |
| <b>Resolution</b>                                                | 2D inspection head (A)18 $\mu\text{m}$                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>View Size (mm)</b>                                            | 44.4 x 37.2                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Inspection Processing Time</b>                                | Solder Inspection 0.35s/ View sizeComponent Inspection 0.5s/ View size                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Inspection Object</b>                                         | Solder InspectionChip component: 100 $\mu\text{m}$ $\times$ 150 $\mu\text{m}$ or more (0603 or more)Package component: $\phi 150 \mu\text{m}$ or moreComponent Inspection: Square chip (0603 or more), SOP, QFP (a pitch of 0.4mm or more), CSP, BGA, Aluminum electrolysis capacitor, Volume, Trimmer, Coil, Connector                                                                                                                                  |
| <b>Inspection Items</b>                                          | Solder Inspection:Oozing, blur, misalignment, abnormal shape, bridgingComponent Inspection:Missing, shift, flipping, polarity, foreign object inspection                                                                                                                                                                                                                                                                                                 |
| <b>Inspection Position Accuracy</b>                              | $\pm 20 \mu\text{m}$                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>No of Inspection</b>                                          | Solder Inspection : Max. 30 000 pcs./machine (No. of components :Max. 10 000 pcs./machine)Component Inspection: Max. 10 000 pcs./machine                                                                                                                                                                                                                                                                                                                 |
| <b>Component Supply Taping</b>                                   | Tape : 4 / 8 / 12 / 16 / 24 / 32 / 44 / 56 mmMax.120 (Tape: 4, 8 mm)                                                                                                                                                                                                                                                                                                                                                                                     |