## Panasonic CONNECT



High placement quality and high throughput are the characteristics of Panasonic's NPM-DX, the next generation of smart pick and place equipment.

## **NPM-DX**

The NPM-DX provides a greater line throughput, better quality and lower production cost featuring an autonomous line control, which guaranties a stable operation based on automatic functionality. This functionality in combination with the machine set up offers a laborsaving production with improved utilization. In combination with the Panasonic software environment and embedded into an Industry 4.0 philosophy, the user can expect a modern shop floor management system including various remote operation options, feeder setup navigation, component supply navigation etc. In total, the NPM-DX reduces downtimes and increase the line throughput. With 92 400 cph and a feeder capacity for up to 136 reels, the NPM-DX is the ideal solution to meet the expectation of an evolving electronics assembly industry. The NPM-DX can process PCB sizes of up to 510 x 590 mm and place large connectors (up to 150 x 25mm) and other components (up to 120 x 90mm). This and other features make the NPM-DX the best solution for high volume-mix manufacturing.

## **Key Features**

92 400 cph and feeding with up to 136 reels

Ready for line automatization

Available APC system

Integrated floor management

Lowest total cost of ownership (TCO) with maintenance services



## NPM-DX

https://ap.connect.panasonic.com/sg/en/npm-dx

Model Number	NPM-DX
PCB dimensions (mm)	Single-lane mode: L 50 $\times$ W 50 $\sim$ L 510 $\times$ W 590Dual-lane mode: L 50 $\times$ W 50 $\sim$ L 510 $\times$ W 300*When the long spec. conveyor is selected
PCB exchange	2.1 s (L 275 mm or less); 4.8 s (L 275 mm or over to L 460 mm or less)*May differ depending on PCB specifications.*When the short spec. conveyor is selected
Electric Source	3-phase AC 200, 220, 380, 400, 420, 480 V 5.0 kVA
Pneumatic Source	Min.0.5 MPa、200 L /min (A.N.R.)
Placement Head max Speed	Lightweight 16-nozzle head V2 (Per head): 46 200 cph(0.078 s/ chip)Lightweight 8-nozzle head (Per head): 24 000 cph(0.150 s/ chip)4-nozzle head (Per head): 8 500 cph (0.424 s/ chip)8 000 cph (0.450 s/ QFP)
Placement Head Placement Accuracy (Cpk≧1)	Lightweight 16-nozzle head V2 (Per head): $\pm 25~\mu$ m/Square chipLightweight 8-nozzle head (Per head): $\pm 25~\mu$ m/ Square chip; $\pm 40~\mu$ m/QFP $\Box$ 12 mmUnder; $\pm 25~\mu$ m/QFP $\Box$ 12 mm to $\Box$ 32 mm4-nozzle head (Per head): $\pm 20~\mu$ m/ QFP
Placement Head Component Dimensions (mm)	Lightweight 16-nozzle head V2 (Per head): 0201 component / 03015 component; 0402 component to L 6 x W 6 x T 3Lightweight 8-nozzle head (Per head): 0402 component ~L 45 x W 45 or L 100 x W 40 x T 124-nozzle head (Per head): 0603 chip ~ L 120 x W 90 or L 150 x W 25 x T 30
Component Supply Taping	Lightweight 16-nozzle head V2 (Per head): Tape: 4 / 8 / 12 / 16 / 24 / 32 / 44 / 56 mmLightweight 8-nozzle head (Per head): Tape: 4 / 8 / 12 / 16 / 24 / 32 / 44 / 56 mm4-nozzle head (Per head): Tape: 4 ~ 56 / 72 / 88 / 104 mm