



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 guarantees a stable operation based on automatic functionality. This functionality in combination with the machine set up offers a labor-saving 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/th/en/products/smart-factory/npm-dx>

Model Number	NPM-DX
PCB dimensions (mm)	Single-lane mode: L 50 × W 50 ~ L 510 × W 590 Dual-lane mode: L 50 × W 50 ~ L 510 × 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): ±25 μm/Square chip Lightweight 8-nozzle head (Per head): ±25 μm/ Square chip; ±40 μm/QFP □12 mm Under; ±25 μm/QFP □12 mm to □32 mm 4-nozzle head (Per head): ±20 μm/ 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 3 Lightweight 8-nozzle head (Per head): 0402 component ~L 45 x W 45 or L 100 x W 40 x T 12 4-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 mm Lightweight 8-nozzle head (Per head): Tape: 4 / 8 / 12 / 16 / 24 / 32 / 44 / 56 mm 4-nozzle head (Per head): Tape: 4 ~56 / 72 / 88 / 104 mm