

# Constituent of Smart Factory

Much more than just data

Of course, the acquisition and analysis of production data is the main focus of our Smart Factory approach, because measures must be derived from this with which the entire production system and its individual processes can be designed more effectively.

Our pick and place machines are a constituent of this concept. Options for further optimisation of your processes are also derived from your production data.

This networking of manufacturing systems opens up new possibilities for analysing and controlling the manufacturing. Be it the APC control loops between paste inspection and the printer or pick and place machine or the comprehensive manufacturing planning using a "digital twin" and the associated MFO planning software, thanks to these software options the machines of the NPM-X series are ideal for any manufacturing tasks. If you use the NPM-X series inline, the iLNB line management gives you with complete control of the production line, including all non-Panasonic systems.



Find out more about NPM-WX ▶



Find out more about NPM-DX ▶



# Panasonic CONNECT

## Pick and place machines

### NPM-WX NPM-DX

For your efficiency of today and tomorrow



# Panasonic

European Headquarters

Panasonic Connect Europe GmbH  
Caroline-Herschel-Strasse 100  
85521 Ottobrunn, Germany

Phone: +49 (0) 89 45 354-1000  
Email: [pfse.info@eu.panasonic.com](mailto:pfse.info@eu.panasonic.com)

[pfse.panasonic.eu](http://pfse.panasonic.eu)

# Efficient precision placement for prototyping, small series manufacturing and high-volume manufacturing

The NPM-X series from Panasonic fulfils the requirements of current and future high mix/low volume placement concepts.

As well as a low-maintenance, robust machine, particularly the European market requires a high degree of flexibility in manufacturing to implement a wide range of applications. Depending on the configuration, these range from very small batches which require a high degree of flexibility to high placement capacities.

Panasonic's NPM-X series provides numerous state-of-the-art options for these requirement profiles, which make tailor-made solutions for efficient placement possible: be it a single or double lane transport system, one, two or four placement heads with up to 16 vacuum nozzles, a wide variety of feeder and tray systems, and standard and special nozzles. Various options are available to users for perfect prototyping, highly flexible small series production or cycle time-optimized high-performance placement.

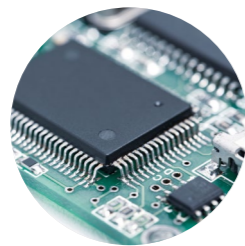
The range of services is rounded off by state-of-the-art functions for the automated optimization of the placement process and a line control system with the iLNB line computer which can be used for the entire line. This paves the way to the smart factory.

## Machine highlights



### Placement heads and range of components

Three placement heads with up to 16 vacuum nozzles cover a **very wide range of components**, from 0201 components to components measuring 120 x 90 mm and 40 mm high.



### Component detection

The 3D camera system provides the best component and pin detection, allows coplanarity measurements to be made on QFPs without loss of time, and the detection of upside-down transistors.



### Feeders

**Intelligent feeders** for all component shapes, feeder carts with integrated feeder cutters and fully automatic tray changers provide the **most flexible component feeding options**.



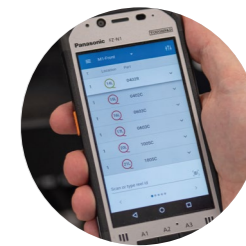
### Configuration

The X series provides a wide range of configuration option for placement heads, feeders, feeder carts and camera systems. Software solutions in accordance with the production requirements.



### Minimal maintenance

The **amount of maintenance is minimised** thanks to the robust design and automatic monitoring and maintenance functions for placement heads and feeders.

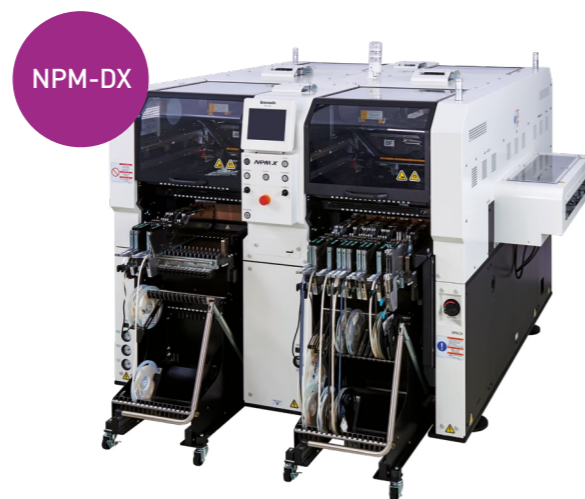


### Line control and operation

**Intelligent and manufacturer-independent** line control with the iLNB line computer. Intuitive set-up with Toughbook scanners and PanaCIM Gen2.



NPM-WX



NPM-DX

# Panasonic pick and place machines

## Technical data comparison

	NPM-WX	NPM-DX
Theoretical placement capacity	86,000 cph	184,800 cph
Placement capacity in accordance with IPC	64,500 cph	130,000 cph
Number of feeder stations	136 (4 carts, each 34 x 8 mm)	
Range of components	0201 metr. to 120 x 90 mm, max. 40 mm high	
Placement accuracy	Chip ±25 µm QFP: ±20 µm with 3 sigma	
PCB format	50 x 50 mm to max. 750 x 610 mm (in single-lane system; with NPM-DX 510 x 590 mm)	
Placement heads	High speed 16, High Flex 8, Flex 2/3/4, placement force of 0.5 N to 100 N	
Machine size (L x D)	1,410 mm x 2,588 mm Height: 1,444 mm	1,665 mm x 2,570 mm Height: 1,444 mm
Transport systems	Optional single-lane or flexible double transport	Flexible double transport

Disclaimer: Right reserved to make changes; the respective current Panasonic machine specification applies.

## Other machine options

- 4.0 Industry 4.0 solutions**  
Flexible incorporation in Smart Factory solutions from Panasonic and external systems
- Automated maintenance**  
Feeder and placement head maintenance systems (integrated or external)
- Remote operation**  
Troubleshooting and optimisation via remote maintenance
- Auto load feeder**  
No belt splicing required
- Automatic program generation**  
Based on production plan
- LCR checker**  
Checking of electrical component values
- AOI info**  
Analyse fault patterns from AOI on the machine
- LED placement solutions**  
Different solutions concerning LED placement