

NPM-W2 Panasonic Modular Chip Mounter

I. Equipment Features

- 1、 The NPM-W2 amplifies the original NPM-W capabilities with a 10% throughput boost and 25% more accuracy.
- 2、 These features extend the component range down to the 03015mm microchip.
- 3、 Retention capability for components up to 120x90mm, connectors up to 40mm high and nearly 6 inches long (150mm)
- 4、 Brings imaging capabilities into a single system: 2D alignment, component thickness inspection, and 3D coplanarity measurement.
- 5、 For larger boards and larger PCBs up to a size of 750 x 550 mm with component range up to L150 x W25 x T30 mm
- 6、 Quick-change feeder carts and nozzle banks
- 7、 Lightweight 16-nozzle head (for 77,000 CPH) with increased placement accuracy to 25um (cpk $\geq$ 1.0)



II. Technical Parameters:

Model	Panasonic NPM W2 Pick and Place Machine				
PCB Dimension (mm)	Singlelane*1	Batch mounting	L50xW50~L750xW550		
		2-positinmounting	L50xW50~L350xW550		
	Dual-lane*2	Dual transfer(Batch)	L 50xW50~L750xW260		
		Dual transfer(2-positin)	L50xW50~L350xW260		
		Single transfer(Batch)	L50xW50~L750xW510		
		Single transfer(2-positin)	L50xW50~L350xW510		
Electric source			3-phase AC 200,220,380,400,420,480V 2.8kw		
Pneumatic source*2			0.5 MPa,200 L/min (A.N.R.)		
Dimensions*2(mm)			1280*3x2332*4x1444*5		
Mass			2470kg		
Placement head	Lightweight head(Per head)	16-nozzle	12-nozzle head(Perhead)	Lightweight 8-nozzle	3-nozzle headV2

	High production mode[ON]	High production mode[OFF]	High Production mode[ON]	High production mode[OFF]	head(Perhead)	(Per head)
Max.speed	38500cph (0.094s/chip)	35 000eph (0.103s/chip)	32250cph (0.112s/chip)	31 250eph (0.115s/chip)	20 800eph (0.173s/chip)	8320cph (0.433s/chip) 6 500cph (0.554s/QFP)
Placement accuracy (Cpkl)	±40μm/chip	±30μm/chip (±25μm/chip)*6	±40μm/chip	±30μm/chip	±30μm/chip ±30μm/QFP 12mm to 32mm ±50 μm/QFP 12mmUnder	±30μm/QFP
Component dimensions(mm)	0402*7 chip~L 6xW6xT3	03015*7*8/0402* 7c chip~L6x W6xT3	0402*7chip~L12xW12xT 6.5	0402*7chip ~L32xW 32xT12	0603 chip to L150 x W25 (diagonal 152 x P 30	
Component supply	Taping	Tape:4/8/12/16/24/32/44/56mm Tape:4 to 56 mm Tape:4 to 56/72/88/104mm				
		Max.120(Tape 4,8 mm) Front/rear feeder cart specifications:Max.120 (Tape width and feeder are subject to the conditions on the left) Single tray specifications:Max.86 (Tape width and feeder are subject to the conditions on the left) Twin tray specifications:Max.60 (Tape width and feeder are subject to the conditions on the left)				
	Stick	Front/rear feeder cart specifications: Max.30 (Single stick feeder) Single tray specifications: Max.21 (Single stick feeder) Twin tray specifications: Max.15(Single stick feeder)				
	Tray	Single tray specifications:Max.20 Twin tray specifications : Max.40				

Dispensing head	Dot dispensing	Draw dispensing
Dispensing speed	0.16s/dot(Condition:XY=10 mm,Z=less than 4 mm movement,No 0 rotation)4.25s/component(Condition:30mmx30 mmcomer dispensing)*9	
Adhesive position accuracy(Cpk)	±75μm/dot ±100μm/component	
Applicable components	1608 chip to SOP,PLCC,QFP,Connector,BGA,CSP BGA,CSP	
Inspection head	2D inspection head (A)	2D inspection head(B)
Resolution	18μm	9μm
View size(mm)	44.4x37.2	21.1x17.6
Inspection process ing time	Solder Inspection*10 0.35s/View size	
	Component Inspection*10 0.5s/View size	
Inspection object	Solder Inspection*10 Chip component:100μmx150 μm or more(0603 or more) Package component: p150 um or more	
	Component Inspection*10	Square chip(0603 or more),SOP,QFP (a pitch of 0.4mm or more),CSP,BGA,Aluminum electrolysis capacitor, Volume,Trimmer,Coil,Commecor*11
Inspection items	Solder Inspection*10 Oozing,blur,misalignment,abnormal shape,bridging	
	Component Inspection*10 Missing,shift,flipping,polarity,foreign object inspection"12	
Inspection position accuracy*13 Cpk1	±20μm	±10μm
No.Of inspection	Solder Inspection*10 Max.30 000 gS3/machine (No.of components:Max 10 000 gg/machina)	
	Component Inspection*10 Max.10 000 pS5/machine	