

TP9-2U™



– the entry-level solution

The TP9-2U™, MYDATA's entry-level machine with a placement speed of 4,800 CPH, is an easy-to-use, cost-effective solution. With its Linux-based system software, split-axis design and 112 x 8 mm tapes, the machine offer has built a solid reputation with users worldwide.

For a fast changing world

MYDATA®

Fast changeovers with Linux

TPSys®, MYDATA's own Linux-based system software, provides multi-user, multi-tasking and multi-board production features. With the machines connected directly to your network, as a seamless linkup, they can retrieve information about the next batch prepared elsewhere - everything from converted CAD files and mount data, to optimal magazine kitting information for line balancing and bill-of-materials information.

Non-stop production

MYDATA's intelligent magazines provide a wide variety of intelligent tape, vibratory, and matrix tray feeders, all designed for convenient and easy operation. The magazines hold up to 16 reels of tape or component sticks, allowing multiple feeder changes in one go. Each magazine has a unique identity, which is recognized by the system software. This feature enables the right components to be picked wherever the magazines are inserted. Pick positions never have to be reprogrammed.

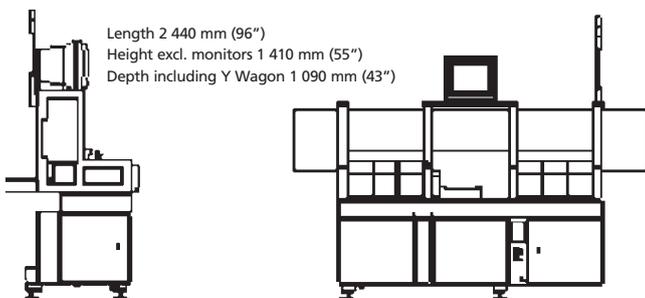
The magazines are also linked with interrelated databases in TPSys, enabling the machine to recognize the presence, absence and location of the components, reducing setup and changeover times.

Vision system

MYDATA's fiducial vision system is used to align each PCB using any type of reference mark. The optional component vision system is used to optically center fine pitch and other selected components.

Seamless communication

The MYDATA® Communication Solution (MCS) can be used to fully automate the process of building a PCB, from CAD drawing to assembly. Linking your machines together in a MYDATA network and integrating with the existing network at your production plant creates benefits that extend beyond the production floor and spread throughout the company. Optimizing and line balancing are just two of the options available.



Feeder capacity

112 x 8 mm tapes or 105 SOIC tubes

Placement rate

Standard performance 4,800 CPH (production average 2,500 to 4,000 CPH, tact time 0.75 sec.)

Placement repeatability

Mechanical	±0.07 mm (0.0028")
Vision	±0.05 mm (0.0016")
Angular for vision	±0.15 degrees
X-axis resolution	0.006 mm (0.00024")
Y-axis resolution	0.005 mm (0.00020")
Theta resolution	0.0267 degrees

Board handling

General features		
Automatic board and component height detection.		
Fiducials supported with auto teach of any pattern.		
Manual or conveyORIZED board handling.		
Adapter to convert from conveyor to stand-alone configuration available as an accessory.		
PCB dimensions		
Type	Board Handling	Width (x) x Length (y) x Thickness
Manual load	Standard	Max: 318 x 456 mm (12.5" x 18")
	Optional	Max: 498 x 564 mm (19.6" x 22.2")
	Minimum	19 x 19 mm (0.7" x 0.7")
Conveyor	Pass Through (400 PT)	Max: 400 x 590 (15.7" x 23.2")
		Min: 50 x 50 mm (2" x 2")
	Tee Style (500 T2)	Max: 440 x 508 mm (17.3" x 20")
		Min: 50 x 50 mm (2" x 2")
Board edge clearance, top (max)		4 mm (0.16")
Board edge clearance, bottom (max)		4 mm (0.16")
For board thickness less than 1 mm (0.04"), the max width: 150 mm (5.91")		

Installation requirements

Power requirements	Single phase AC (2.2 kVA)
Voltages	100, 110, 115, 125, 200, 210, 215, 220, 225, 230, 240, 250 V (± 10%)
Air supply	No air required
Weight	600 kg (1320 lbs)

Programming

Operating system	Linux
System software	TPSys
System security	Hierarchical user access system and automatic data back-up
Logging of production data	TPSys Event Log
Interfaces	RS-232/TCP/IP Network
Programming methods	Converted CAD file download
	Manual entry (X, Y, Z)
	Teach mode with graphical overlay
	Off-line programming
	Digitizer (available as accessory)

Component handling

General features	
Programmable placement force	
Electrical verification on-the-fly (option)	
Vision capability	
Gray scale	256 shades
Camera resolution	512 x 512 pixels
Maximum component size	39 x 39 mm (1.5 x 1.5"), min pitch 0.4 mm (15 mil), min lead width 0.2 mm (8 mil)

Upgradeability

All MYDATA machines can be upgraded with the latest system software and many of the new enhancements in accordance with our machine design policy.

Specifications are subject to change without notice. Linux is a registered trademark of Linus Torvalds.