

MPR MEDIUM PANEL ROUTER

TOTAL SOLUTION FOR ROUTER BUSINESS

As a world leader in PCB Depaneling systems, **GETECH** presents **MPR**. An in-line machine designed for high-speed routing and high volume production of Medium-sized PCB panels (450mm x 400mm).



FEATURES

DUAL TABLES

HIGH ACCURACY & QUALITY CUT

HIGH-SPEED ROUTING & THROUGHPUT

READY FOR IN-LINE AUTOMATION

HIGH-RESOLUTION CAMERA

AUTOMATIC TOOL CHANGE

SAFETY PROTECTION

POWERFUL DUAL VACUUM SYSTEM

USER FRIENDLY SOFTWARE

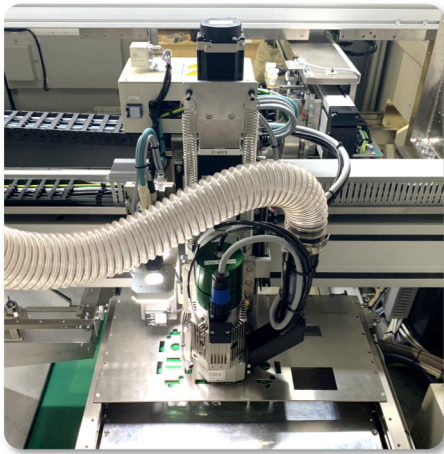
CE CERTIFICATION (OPTION)



ISO 9001 : 2015 Cert. No.: 622220

MEDIUM PANEL ROUTER

Local Agent:



The MPR is an in-line router machine specially designed to route (depanelize) medium-size panels with PCB size up to 450mm x 400mm into individual units. It is a fast, space-saving, and accurate machine designed for high volume production with minimal operator participation. It has two worktables. While one of the worktables is in high-speed routing operation, the other worktable works with the robotic P&P module to unload boards and load the new PCB panel. This gives us 100% operational uptime without the issue of load/unload time.

Using a high-resolution CCD camera and MPR user-friendly Windows-based software allows users to program the routing paths in minutes. There are also no limitations in the number of programs stored. MPR uses high-quality components and a welded steel structure to ensure rigidity and high performance. All the axes and linear guides used are protected from dust and dirt to increase lifespan and performance.

SPECIFICATIONS

Routing Capability	Non-Routing Speed	: 1500 mm/sec
	Routing Speed	: 100 mm/sec max (depending on material, cutting quality & tool diameter)
	Repeatability	: Typical ± 0.1 mm for straight lines, curves, et al. Under controlled condition ± 0.05 mm
Manipulator	Configuration	: X, Y, W, Z, E & F axis
	Manipulator Motors	: AC brushless servo motors
	Manipulator Repeatability	: ± 0.02 mm
	Resolution	: ± 0.01 mm
Workstation	Design	: Dual workstation with dedicated pin fixtures
	Panel Positioning	: Located by tooling holes or edges of PCB
	Panel Loading	: Automatic (In-line Automation ready)
	Panel Size	: L450mm x W400mm
	Panel Thickness	: 0.5 mm – 8.0 mm
	Component Height	: Top max. 11 mm, Bottom max. 40 mm
	P&P Maximum Payload	: 3 Kg
Spindle System	Spindle Motor	: 0.5 kW (60,000 rpm) spindle with ESD / Ceramic bearings
	Tool Change	: Auto-Tool Change
	Cooling	: Ambient cooled
	Router bit	: Shank size 3.175 mm (1/8")
Dust Filtration System	Power	: 2 x 3.0 kW rotary vane vacuum blower
	Filtration	: 3 stage filtrations with disposable filter bag (10 microns)
	Vacuum Location	: Top vacuum on spindle
	Extraction Hose (x2)	: ID 51 mm (2"), L= 4M
Noise Level	: <78 dB	
Vision System	Video camera	: High resolution CCD video camera
Programming	System Platform	: Windows [®] based Industrial PC (Win 10)
	Product Setup	: Vision assisted point to point manual teaching; Vision assisted editing function; Test-run mode
	Variable Functions	: Tool life optimization, Barcode support (1D or 2D), Autoloading of last product, Tool bit diameter compensation, and Fiducial alignment. Other options are available.
Operation Monitor	Router Bit	: Tool life tracking, Tool breakage detection, Routed board count
	Vacuum	: Vacuum filter change alarm
	Machine	: Machine error history
Maintenance	Router Bit	: 100 to 300 M cutting distance before next tool change (depending on PCB)
	Filter Bag	: 1000 to 1500 M before next filter bag change
	Cleaning hose	: Extra hose for periodic internal cleaning included
Conveyor System	Incoming Conveyor	: Belt type edge conveyor (Left to Right or Right to Left)
	Conveyor Width Adjustment	: Manual (Front rail – Fixed, Back rail – Manual adjust); Option: Auto-adjust
	Outgoing Conveyor	: Flat Belt - exposed length of 620mm (default, options available)
	Communication	: SMEMA
	Offload module	: Customer specifications
Safety Features	E-stops, Spindle stop, Spindle motor overheat & Servo overload detection, Enclosed work area with safety doors	
Dimensions & Utilities	Machine Size (W x D x H)	: 1740 mm x 2100 mm x 1750 mm
	Vacuum Tank Size (\varnothing x H)	: 2 x 400 mm x 800 mm
	Weight (Main + 2 Tanks)	: Approx. 1690kg + 50Kg
	Power Supply	: 3+N+E, 380~415V, 50 Hz or 3+E, 208~240V, 60 Hz; 11.5kW
	Air Supply	: 6 bars