

EXPERT II

Micro Placer (MPL) Standalone

The EXPERT II MPL Standalone is an ideal solution for precise component placement and is well suited to support your facility assemble prototypes, small batches, or operate in a rework station.



General Information

The assembly of SMT components requires the highest level of accuracy and process control for prototype assembly. The Powatec MPL Standalone fully supports the placement of BGA, micro-BGA, QFN, MLF, QFP, PQFP, CSP, and flip chip components. The integrated zoom camera simultaneously overlays a view of the component's connections (lead or balls) over the placement pads of the PCB to facilitate alignment. The micro-adjustment dials integrated into the working table, along with the motorized lowering head, guarantee components can be placed with a high level of precision (up to 0.03 mm).

The MPL Standalone from Powatec is used in R&D facilities, laboratories, and production facilities worldwide as an ideal precise component placement solution. A single user with this tool and a pair of tweezers can easily and efficiently place all of the supported component sizes on their own. Alternatively, this device can be paired with a soldering station to create a one or two-person rework station at a fraction of the cost with higher versatility.

Specifications

Maximum dimensions of PCB	450mm x 250mm (17.7" x 9.8")
Maximum placement area of PCB	0.5 mm to 5 mm (0.02" to 0.2")
Component sizes supported	BGA, micro-BGA, QFN, MLF, QFP, PQFP, CSP, & flip chip parts
Internal Display	10.1" touch display, 1920 x 1080 px
Width	470 mm
Height	200 mm
Length	330 mm
Weight	20 kg
Main power	110-240 VAC, 50/60 Hz
Power consumption max.	50 W
Compressed Air Supply	2-6 bar, clean and oil free
Vacuum	No external vacuum needed
Certification	CE label, Build according to IEC 204-1

Product Features

Intuitive and guided operation of the system over the movable 10.1" touch display (1920 x 1080). Enable semi-automatic project execution for part pick & place guidance and monitoring for enhanced quality assurance

Precisely adjust zoom and focus of the motorized high-resolution camera and dim pin position light source.

Precise part lifting and theta aligning with the Microplacer

Position BGA, CSP or flip chip parts in an overlay picture by the split optic and two-color illumination.

PCB support with magnets for best workflow placement.

Position alignments down to 0.03 mm with the Microplacer, fine pitch table, and auto-Z function.

Work with panels up to 450mm x 250mm and up to 450mm x 500mm by flipping.



Included in delivery of the MPL Standalone:

	Gauge	Outer diameter	Inner diameter	Tip length	ESD type & color	Suitable for Part	Option or included
	G30	0.31 mm 0.012"	0.16 mm 0.006 "	12.7 mm 0.5 "	YES Black	0201/ 0402	3 x Included
	G27	0.41 mm 0.016 "	0.21 mm 0.008 "	12.7 mm 0.5"	YES Black	0402	2 x Included
	G22	0.71 mm 0.027 "	0.41 mm 0.016 "	12.7 mm 0.5 "	YES Black	0603	1 x Included
	G20	0.91 mm 0.035 "	0.60 mm 0.023 "	12.7 mm 0.5 "	YES Black	0805/ 1206	1 x Included
	G18	1.27 mm 0.05 "	0.84 mm 0.033 "	12.7 mm 0.5 "	YES Black	1206/ 2312	1 x Included
	G14	1.80 mm 0.071 "	1.60 mm 0.062 "	12.7 mm 0.5 "	YES Black	2312/ 4040	1 x Included


 Pick & Place tip
OD 4 mm, ID 3 mm

 Pick & Place tip
OD 10 mm, ID 8 mm


Part placer to pick part with MPL II



4x magnetic stands to place and hold the PCB



magnetic bracket stands to place and hold the PCB



Cable 230V/110V with connector for specific customer country