

Semi-automatic Pick & Place System  
LPKF ProtoPlace® S



# LPKF ProtoPlace S

System for Precise SMT Assembly

- Precise fine-pitch component assembly
- Axes blocking and fine adjustment
- Controlled component placement
- Micro camera
- Multifunctional dispenser
- Motorized turntable



## Reliable and precise pick & place system

The LPKF ProtoPlace S is a semi-automatic pick & place system for the professional assembly of complex SMD printed circuit board prototypes and small-batch projects. Mechanism, micro table and automated placement enable placing of fine-pitch components while the multifunctional dispenser increases functionality.

### Precise fine-pitch component assembly

With ProtoPlace S it is possible to place various components including fine-pitch down to 0,4 mm (16 mil). Precise placing of fine-pitch components is ensured by a x/y/z locking mechanism, micro table fine adjustment and automated placing. Final placement is done automatically thus eliminating operator errors.



### Micro camera for greater control and precision

The micro camera can be easily installed onto the system, providing greater control and accuracy. The camera is tilted for a side view of the components giving the operator a very clear view of the placement area.



### Multifunctional dispenser

The removable dispenser provides precise dispensing of pastes or glues in manual or automatic modes. Air pressure regulation with time control and the non-drop vacuum function guarantee precise flow, quantity and timing of media dispensing. Using a micro camera and blocking system the most complex dispensing tasks are possible (as for 0201 pads).



### User friendly interface

Ergonomic design and the simple menu-based navigation make operating the ProtoPlace S easy and handy. The arrow designed keyboard and LCD enable fast and easy setting of different operating modes and parameter values.

### Feeding systems

The ProtoPlace S offers a wide variety of feeding possibilities such as the turntable, feeders and pallets. All are easily replaced for maximum flexibility. The feeder carrier supports tape and stick distribution systems in a modular way.

### Motorised turntable

A great advantage of the ProtoPlace S system is its motorized turntable which contains 45, 75 or 90 antistatic bins for loose components. Table cover opens only one bin at a time.





## Technical data: LPKF ProtoPlace S

<b>Maximum circuit board size</b>	297 × 420 mm (11.8" × 16.5")
<b>Min. size of components</b>	0201 chip components
<b>Operating air pressure (dispensing)</b>	0,1 – 4 bar (1.4 – 58 psi)
<b>Pulse / Pause duration</b>	0,1 - 9 s/0,1 - 2 s
<b>Number of dosing points</b>	up to 300/min
<b>Dosing quantity</b>	min. 0,2 mm <sup>3</sup>
<b>Vacuum</b>	0 – 0,8 bar (0 – 0,8 × 10 <sup>5</sup> Pa)
<b>Turntable position</b>	Back
<b>Feeders position</b>	Left
<b>Power supply</b>	115/230 V, 50-60 Hz, 10 W
<b>Compressed air supply</b>	6 bar (6 × 10 <sup>5</sup> Pa), min. 10 L/min., oil free, water free
<b>Dimensions of basic device (W x H x D)</b>	760 × 250 × 760 mm
<b>Dimensions (with options)</b>	1000 × 500 × 900 mm (with feeders and turntable)
<b>Weight</b>	25 - 35 kg (with additional/optional equipment)
<b>Ambient conditions</b>	Temperature: 15 - 35 °C Humidity: 30 - 80 % General level of lighting: 500 lx

### Options:

**Movable micro CCD camera NTSC**  
**Movable micro CCD camera PAL**  
**Colour LCD monitor 17" AV input**  
**LPKF SMT Vacuum Table**  
**Accessory set for dispensing and placement** (included in basic configuration)  
**Pedal switch with 2 m cable** (included in basic configuration)  
**Magnetic edge support 4x**  
**Air supply unit** (air pressure regulator with 5 µm filter and water separator)

### Turntables & Feeders:

<b>Motorized Turntable with:</b> - 45 antistatic component bins, - 75 antistatic component bins or - 90 antistatic component bins.  <b>Feeder-carrier for up to 12 feeders</b>	<b>Tape feeder 8 mm</b> <b>Tape feeder 12 mm</b> <b>Tape feeder 16 mm</b>  <b>Stick feeder SO8 - SO28, SO8L - SO28L</b> <b>Stick feeder PLCC28 - PLCC44</b> <b>Stick feeder PLCC52 - PLCC84</b>
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