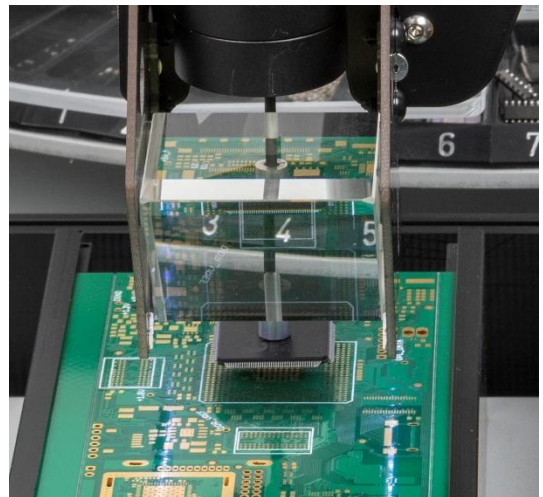


EXPERT II

Pick-and-Place Solutions

Feeder Systems
and Placement Nozzles
– Suited to Your Applications.



Feeder Systems

Turntable - The integrated solution for loose parts



Turntable

Turntable for organizing individual component types.

- **with 45 Bins** (TT-EXP-B45)
- **with 90 Bins** (TT-EXP-B90)



Motorization for Turntable (NRF-TT-MOT-EXP-II)

Motorization allows the rotation of the turntable to the required component bin.

The motor is either operated by two buttons on the placement head (basic SW) or automatically by the full software package according to a project import.



Turntable Cover

Cover for the turntable to protect components during operation and storage. The cover has an opening for component handling, which can be rotated to the desired working position. Available in regular acrylic or in ESLON acrylic for ESD-sensitive components.

- **Acrylic** (TT-EXP-AC)
- **ESD** (TT-EXP-EC)



Locking Mechanism (TT-EXP-LM)

To fasten the cover (acrylic or ESD) to the turntable, ensuring components remain in the bins during storage or when exchanging it with another turntable.

Tape Feeder Boxes – Ideal for multiple tape reels



Base Plate for Feeder Boxes (FD-EXP-BP-TFB)

This option is required to hook-up tape feeder boxes (FD-EXP-TFB-08-AP, FD-EXP-TFB-MX-AP).



Tape Feeder Box 10x 8 mm (FD-EXP-TFB-08-BP)

Requires adapter plate (FD-EXP-AP-TFB)



Tape Feeder Box Mixed (FD-EXP-TFB-MX-BP)

For a mix of tapes: 4x 8 mm, 3x 12 mm and 1x 16 mm
Requires adapter plate (FD-EXP-AP-TFB)



Tape Reel Holder for Feeder Box

In combination with tape feeder box for 10x 8 mm (FD-EXP-TFB-08-BP) or tape feeder box mixed (FD-EXP-TFB-MX-BP).

- **10x 8 mm** (FD-EXP-H-TFB-08)
- **Mixed** (FD-EXP-H-TFB-MX)

Customizable Feeders – Designed to Fit Your Individual Needs



Carrier Plate (FD-EXP-CP)

This multifunctional carrier plate, which can be attached with magnetic stands, is designed for component boxes, cut tape or an external monitor.



Tray Plate (FD-EXP-TRP)

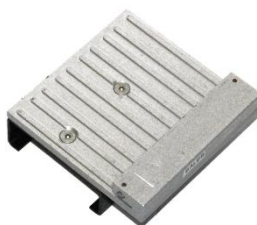
The tray table, measuring 310 × 135 mm, is ideal for JEDEC trays or smaller formats. It can also accommodate component boxes or cut tape.



Long Base Plate (FD-EXP-BP-L)

This option enables hooking up following items:

- Tape feeders (FD-EXP-TP__BP)
- Stick feeders (FD-EXP-ST__BP)
- Cut tape feeder (FD-EXP-CTP-BP)



Short Base Plate (FD-EXP-BP-S)

This option enables hooking up following items:

- Tape feeders (FD-EXP-TP__BP)
- Stick feeders (FD-EXP-ST__BP)
- Cut tape feeder (FD-EXP-CTP-BP)



Tape Feeder

Requires long or short base plate (FD-EXP-BP-L, FD-EXP-BP-S).

- **8 mm** (FD-EXP-TP08-BP)
- **12 mm** (FD-EXP-TP12-BP)
- **16mm** (FD-EXP-TP16-BP)



Stick Feeder

Requires long or short base plate (FD-EXP-BP-L, FD-EXP-BP-S)

- **8 mm** (FD-EXP-ST08-BP)
For SO8-SO28, SO8L-SO28L etc.
- **12 mm** (FD-EXP-ST12-BP)
For PLCC28-PLCC44 etc.
- **16mm** (FD-EXP-ST16-BP)
For PLCC52-PLCC84 etc.



Cut Tape Feeder (FD-EXP-CTP-BP)

A feeder for cut tape strips, which requires the long or short base plate (FD-EXP-BP-L, FD-EXP-BP-S).



Cut Tape Feeder (direct mount) (FD-EXP-CTP-EXP)

A feeder for cut tape strips, which can be directly mounted to the table without a base plate.

Placement Nozzles at the EXPERT Placement Head

Standard - Placement Nozzles for Most Use Cases



Placement Nozzle Set Standard

(PN-SET-EXP-GP)

(Ø is the outer diameter in mm)

- **Ø0.3**
6 mm length 3x (PN-EXP-STD-0.3S) 
12.7 mm length 3x (PN-EXP-STD-0.3)
- **Ø0.4**
6.35 mm length 2x (PN-EXP-STD-0.4S) 
12.7 mm length 2x (PN-EXP-STD-0.4)
- **Ø0.7**
12.7 mm length 1x (PN-EXP-STD-0.7) 
- **Ø0.9**
12.7 mm length 1x (PN-EXP-STD-0.9) 
- **Ø1.3**
12.7 mm length 1x (PN-EXP-STD-1.3) 
- **Ø1.8**
12.7 mm length 1x (PN-EXP-STD-1.8) 
25.4 mm length 1x (PN-EXP-STD-1.8L)

Every EXPERT II comes with a toolbox including maintenance tools, a variety of standard placement nozzles in different diameters and lengths and a rubber tip for planar components. All nozzles are ESD-proof and have a colored dot to distinguish them.

This set covers most user applications. The nozzles can be used for pick-and-place work and for dispensing. However, once a nozzle was used for dispensing it mustn't be used for pick-and-place.

PRO – Placement Nozzles for Highest Quality Standards



Placement Nozzle PRO Ø6.0 (PN-EXP-PRO-6.0)

A placement nozzle for large-surface components such as QFP, PLCC, BGA, and similar packages.

Outer Diameter: 6 mm

Inner Diameter: 4 mm



Placement Nozzle PRO Ø1.1 (PN-EXP-PRO-1.1)

A placement nozzle recommended for >0603 (EIA imperial package code).

Outer Diameter: 1.05 mm

Inner Diameter: 0.69 mm



Placement Nozzle PRO Ø0.5 (PN-EXP-PRO-0.5)

A placement nozzle recommended for 0402-0603 (EIA imperial package code).

Outer Diameter: 0.50 mm

Inner Diameter: 0.25 mm



Placement Nozzle PRO Ø0.3 (PN-EXP-PRO-0.3)

A placement nozzle recommended for 01005-0201 (EIA imperial package code).

Outer Diameter: 0.31 mm

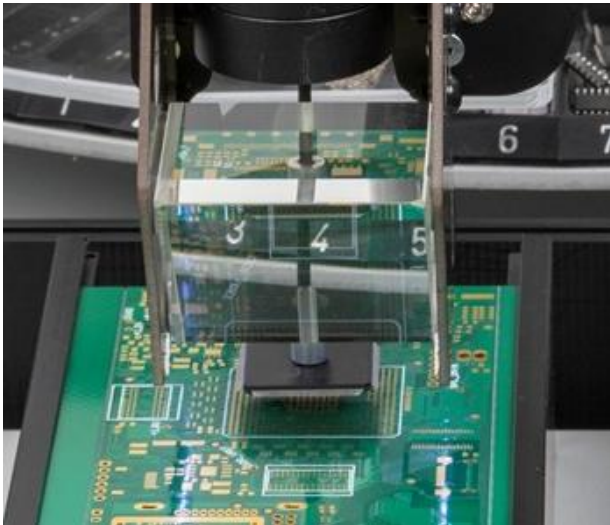
Inner Diameter: 0.15 mm



Placement Nozzle for Bare Die (PN-EXP-PRO-BD)

A Teflon-coated nozzle for handling bare dice

Glass Prism Set – For parallax-free component placement (GP-SET-EXP-II)



The glass prism (GP) is typically used when a parallax-free top view of the components is preferred or even required like when processing planar components with pins to the outside, such as SOP or QFP packages, to ensure that the component pins align precisely with the pads.

By attaching the glass prism to the placement head, LED lights are automatically switched on, providing ideal work area illumination.

This option comes with a variety of specific placement nozzles designed for use with glass prism.



Tip: The already included rubber tip from the standard placement nozzle set can be attached to bare carbon needle, GP Placement Nozzle Ø2.0 (PN-GP-2.0).

GP Nozzle Set (PN-SET-GP-EXP-II)

If in need of spare parts, the nozzles for the glass prism can be bought as a set or individually.

The parts are listed from left to right:

- **GP Nozzle Adapter** (ACC-EXP-II-GP-NAD)
Needle adapter for attaching the carbon needle
- **GP Placement Nozzle Ø6.0** (PN-GP-6.0)
Aluminum nozzle on carbon needle
OD 6 mm, ID 4 mm
- **GP Placement Nozzle Ø2.0** (PN-GP-2.0)
Carbon needle
OD 2 mm
- **GP Placement Nozzle Ø0.9** (PN-GP-0.9)
Steel tip on carbon needle
OD 0.91 mm, ID 0.71 mm
- **GP Placement Nozzle Ø0.7** (PN-GP-0.7)
Steel tip on carbon needle
OD 0.71 mm, ID 0.41 mm



Placement Nozzles at the MPL

MPL Standard – MPL Nozzles for Most Components

These two MPL nozzles are included in all Microplacer models (EXPERT II-M-MPL, EXPERT II-FP-MPL, MPL II Standalone).



MPL Placement Nozzle Standard Ø10.0 (PN-MPL-STD-10.0)

Outer Diameter: 10.0 mm

Inner Diameter: 8.0 mm



MPL Placement Nozzle Standard Ø4.0 (PN-MPL-STD-4.0)

Outer Diameter: 4.0 mm

Inner Diameter: 3.0 mm

MPL PRO – MPL Placement Nozzles for the Finest Components



MPL Placement Nozzle PRO Ø3.0 (PN-MPL-PRO-3.0)

Outer Diameter: 3 mm
Inner Diameter: 1.5 mm



MPL Placement Nozzle PRO 1.2 (PN-MPL-PRO-1.2)

Outer Diameter: 1.2 mm
Inner Diameter: 0.7 mm



MPL Placement Nozzle PRO Ø0.8 (PN-MPL-PRO-0.8)

Outer Diameter: 0.8 mm
Inner Diameter: 0.4 mm