

MALDI Biotyper®

MBT Pathfinder® IVD with Feeder IVD Option

Towards automation of MALDI target preparation

Innovation with Integrity

Standardized, documented and fully transparent MALDI target preparation

With the IVD MALDI Biotyper being the gold standard for microbial identification in many clinical laboratories worldwide, the threshold to increase the number of samples for identification has become minimal due to the low consumable cost per sample, ease of use and fast time-to-result.

Automated sample preparation for MALDI-TOF analysis becomes the next logic step to an improved microbiology workflow. Automated MALDI target plate preparation reduces not only manual labor, also the possibility of human errors in sample misplacement and/or possible cross-contamination are minimized. The MBT Pathfinder IVD combines semi-automated colony picking based on adjustable geometry, mimicking the movement of a hand, with a unique sample preparation procedure of transferring the colonies onto the MALDI target plate.



MBT Pathfinder IVD & Feeder IVD

Key features and benefits

- Robotic system for colony transfer and complete MALDI target preparation, increasing standardization and reproducibility
- Preselection of colonies powered by Al software
- Significantly reducing hands-on time
- Feeder IVD option for a higher level of laboratory automation in Petri dish handling
- Fully documented system with data archive providing full workflow traceability and transparency
- No need for manual picking tools and disposable tips, keeping running costs low and minimizing waste



Automated sample preparation for your IVD MALDI Biotyper

MBT Pathfinder IVD

- Workflow for precise colony selection
- Automated reagent deposition on MALDI target plates for microbial identification with the IVD MALDI Biotyper
- Top and bottom camera for handling of the selected colonies on the Petri dish
- Front and side camera for process control, complete workflow documentation and transparency
- Expandable with the Feeder IVD option



MBT Pathfinder IVD with Feeder IVD Option

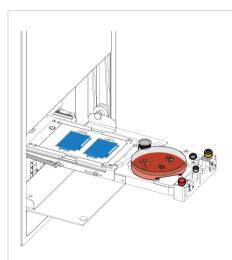
- Semi-automated robotic solution combining the colony transfer functionality of the MBT Pathfinder IVD with an automated Petri dish exchanger
- Carousel with a capacity for up to 100 Petri dishes
- Integrated barcode reader for reading of various types of (1D) barcodes
- Automated capping/uncapping of Petri dish covers
- Petri dishes are fed into the tray of the MBT Pathfinder IVD by a high precision robotic arm
- Adding the Feeder IVD Option frees up valuable technician work time



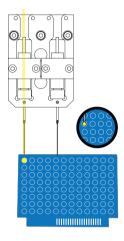




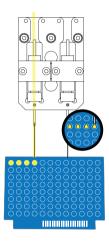
Clever designed process of colony picking and deposition



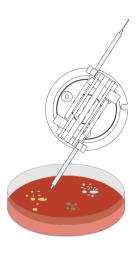
MALDI target and Petri dish are inserted for transfer of colonies



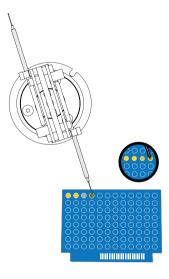
Pre-deposition of formic acid using a liquid deposition needle



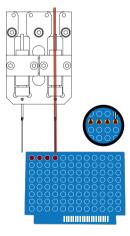
Formic acid deposited only on positions preselected for colony transfer



Each selected colony is precisely picked...



...and smoothly smeared into the formic acid droplet



After drying of all colonies, MALDI matrix is added





Technical specifications

MBT Pathfinder IVD

- Support of Petri dish size of 90 mm
- Support of MBT Biotarget 96 IVD
- 5 White LED lighting systems allowing lighting adjusted to the respective step in the workflow
- Software (SW) predefined illumination schemes for optimal visualization of the colonies on the Petri dish
- 4 full HD cameras, 5 Megapixels
- SW driven camera modes, Live-view/shooting
- 2 transfer needles with thermal sterilization
- Contactless deposition of formic acid and MALDI matrix onto the MALDI target
- Fast workflow for semi-automated processing
- Detailed workflow for manual selection of different colonies for individual identification
- USB 3.0 connection (Instrument-PC)
- Wideband power source 100 240V, 50/60Hz
- Dimensions of the MBT Pathfinder IVD: 361 x 466 x 800 mm / 14.21 x 18.35 x 31.50 in
- Weight of the instrument: 65 kg / 143 lbs

Feeder IVD Option

- Two independent micro-movement rotation axes combined into the precise robotic arm with sensitive Petri dish gripper module
- Standard carousel with sequential access for up to 100 Petri dishes located on the right side of the MBT Pathfinder IVD
- Revolver carousel with 6 top load sleeves
- Integrated barcode reader supporting various types of (1D) barcodes located on the side of the Petri dishes
- Special sleeve for dishes with unrecognized barcode
- USB 2.0 connection (Instrument-PC)
- Wideband power source 100 240V, 50/60Hz
- Dimensions of MBT Pathfinder IVD with Feeder IVD option: 730 x 710 x 1120 mm / 28,74 x 27,95 x 44,09 in
- Weight of the combined instruments: 100 kg / 220 lbs

Order information

MBT Pathfinder IVD

Part No. 1885100

Feeder IVD

Part No. 1885300





Please contact your local representative for availability in your country.





MALDI Biotyper® is a registered trademark of the Bruker group of companies. MBT Pathfinder® is a registered trademark of the Bruker group of companies in the EU, US, and Great Britain.

Bruker Daltonics GmbH and Co. KG

Bremen · Germany Phone +49 (0) 421-2205-0

info.md@bruker.com

Online information bruker.com/microbiology

