

- Fully automated sample to result workflow
- Flexible throughput
- Simplify your lab workflow
- Intuitive user interface
- 5 Channel PCR
- Full MDR / IVDR conformity
- Advanced liquid handling and detection

Advanced  
Automation  
in  
Molecular  
Biology

# MDXlab

Fully Integrated  
Nucleic Acid Extraction & Detection

Universal & Compact Platform  
for Clinical Diagnostics

- Nucleic acid extraction
- PCR set-up
- PCR amplification & detection



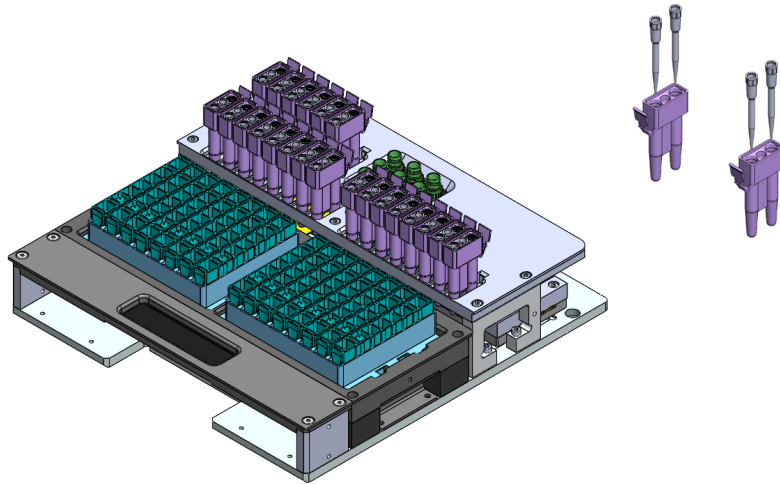
NEW

# MDXlab

THE NEW APPROACH TO MOLECULAR APPLICATIONS

## CARTRIDGE TECHNOLOGY – MINIMUM PREPARATION

- Up to 16 samples / run
- Pre-filled cartridges for contamination free extraction
- Nucleic acid isolation by magnetic beads
- Universal extraction reagent for DNA / RNA from multiple sample types

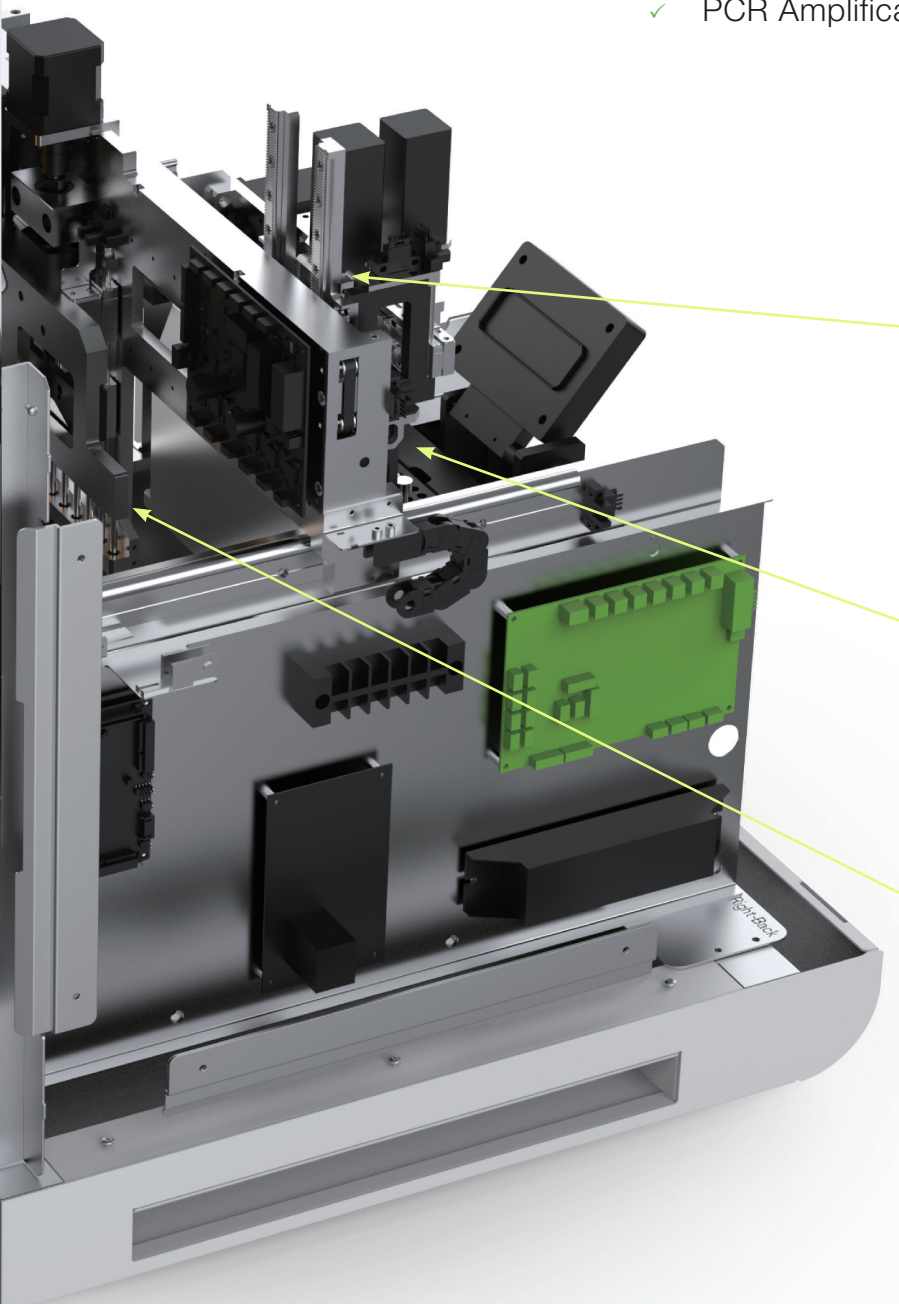


## AUTOMATED PCR MANAGEMENT

- PCR Setup cartridges include Capacitive TIP and PCR tube/cap.
- Automatic PCR setup and capping system
- Refrigerated reagent area for mixes, standards or controls

- ✓ Nucleic Acid Extraction
- ✓ PCR-Set-up
- ✓ PCR Amplification & Detection

- ✓ Less than 2 hours from sample to result
- ✓ True walk-away platform
- ✓ Pre-filled extraction plates
- ✓ Automated PCR setup management
- ✓ Intuitive and easy-to-operate user interface
- ✓ Traceability and data transfer options (LIS)
- ✓ Small footprint



### ADVANCED LIQUID HANDLING

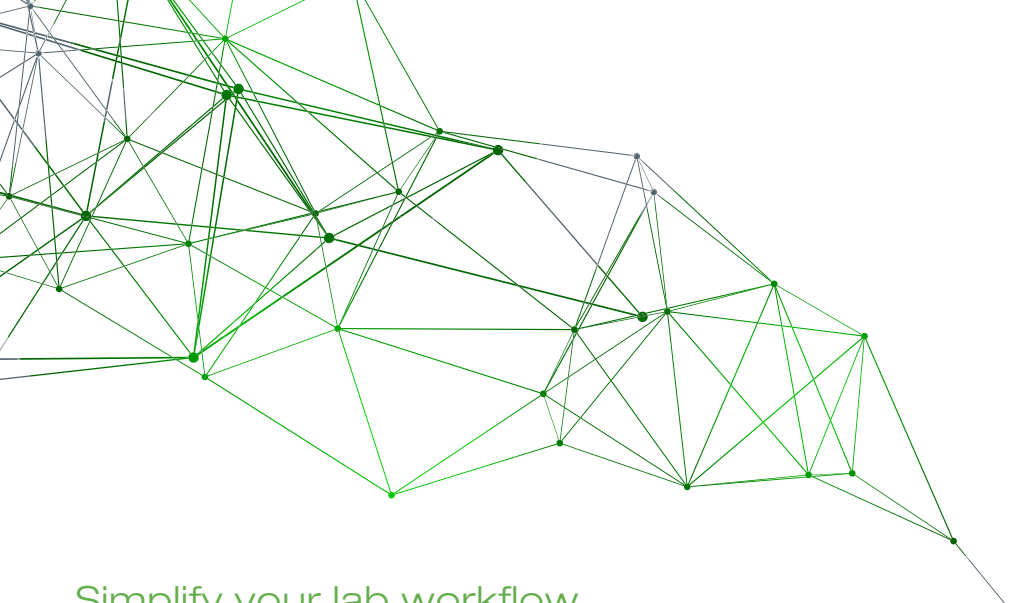
- Rapid and accurate liquid handling
- PCR setup management
- Unique design enables capping and transfer of PCR reaction tubes to PCR module

### PCR UNIT

- 5-channels PCR module
- Fast cycling capability

### EXTRACTION UNIT

- Magnetic bead based extraction, High yield and purity
- Fast and contamination-free nucleic acid extraction in 20 minutes



## Simplify your lab workflow

The MDXlab is designed to optimise nucleic acid isolation and amplification procedures into a single fully integrated platform.

Nucleic acid isolation is automated, via pre-filled cartridges, utilising magnetic bead technology allowing for contamination free extraction with high yield and purity from a number of sample types.

PCR setup is managed by the liquid handling module that can manage a variety of master mixes, controls and standards from the refrigerated reagent module.

The integrated 5 channel PCR thermocycler allows for multiple protocols and PCR modes including Melting curve, SNP and touchdown step.

All functions are managed by the on-board processing system through the intuitive touchscreen interface. Advanced analysis settings allow the laboratory professional to evaluate the results in detail and link to any laboratory information system via LAN or Wi-Fi.

With its compact benchtop design and fast processing capability this fully integrated platform is ideally suited to every laboratory settings with a desire for maximum flexibility.

Multifunction robotic arm	
Sample capacity	1 – 16 samples / run
Sample input volume	50 – 300 µl
Elution volume	50 – 200 µl
Extraction time	10 – 40 minutes / run (dependent on protocol used)
Liquid handling tool	≥ 98%
UV Decontamination	Build-in
Liquid handling	
Pipetting Volume	10-200 µl
Pipette Accuracy	CV < 5% at 15 µl CV < 1% at 200 µl
Dead Volume	5 µl
Liquid Level Detection	Capacitive (cLLD)
PCR setup platform	
PCR Reagent Capacity	Max 9 tube, Cooling
Cartridges	16 sample cartridges, 6 dispensing cartridges
PCR module	
Sample Input Volume	25 – 50 µl
Reaction Temperature	40 – 99 °C
Light Source	High-Brightness LED
Excitation Wavelength	470 nm – 678 nm (± 10 nm) [FAM, HEX/VIC, ROX, CY5, CY5.5]
Detection Wavelength	520 nm – 695 nm (± 10 nm) [FAM, HEX/VIC, ROX, CY5, CY5.5]
Platform dimensions	
Dimensions (WxDxH)	610 × 670 × 660 mm
Weight	76 kg

## ADVANCED TECHNOLOGY

- Integrated 5-channel fluorescence PCR module
- Magnetic bead extraction technology
- Advanced liquid handling

## CARTRIDGE SYSTEM

- 16 Cartridge capacity
- No manual preparation of reagents
- Pre-sealed reagents
- Internal liquid handling and PCR tube management

## FLEXIBLE THROUGHPUT

- DNA/RNA Extraction only mode
- DNA/RNA Extraction and PCR Amplification
- PCR Only mode

## COMPATIBILITY

- Multiplexing tests are available
- Positions for standards and controls

## EASE OF USE, USER-FRIENDLY OPERATION

- Integrated PC and touch UI
- User and service software
- LIS connection

## FULL TRACEABILITY

- Sample ID tracking via barcode
- Reagent management via barcode



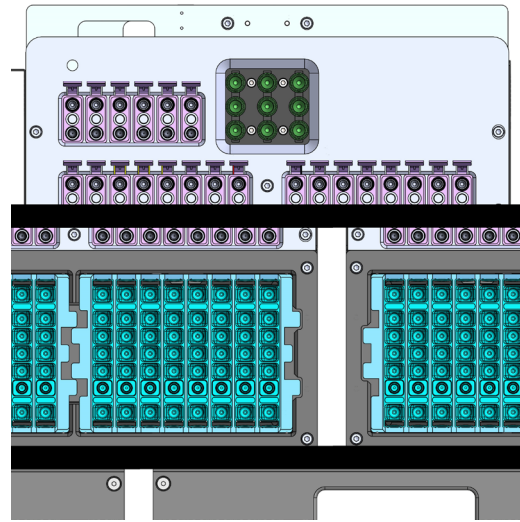


Scan kit barcodes & sample ID (LIS)  
 Load consumables & samples  
 5-8 minutes hands-on

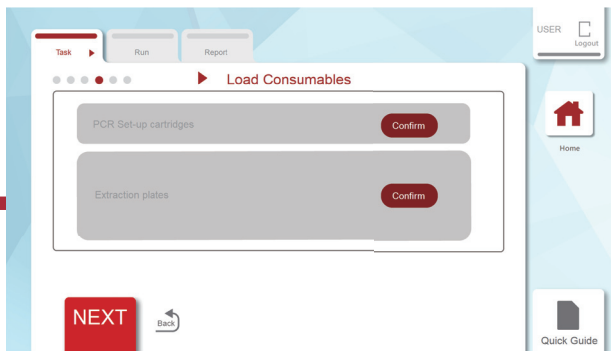
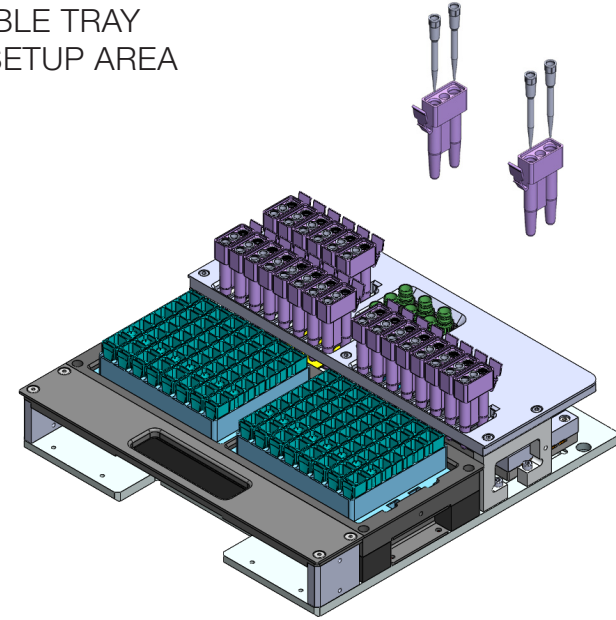
Scan Extraction details

Scan PCR assay details

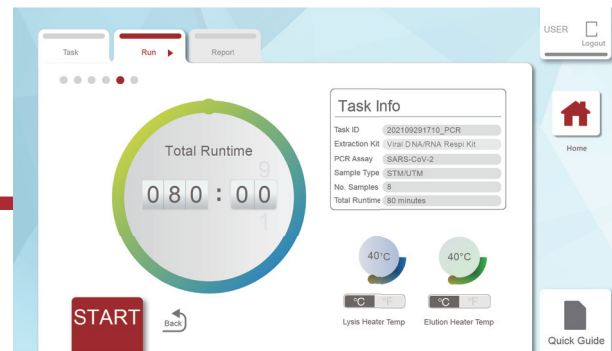
Scan sample IDs



CONSUMABLE TRAY  
AND PCR-SETUP AREA  
LAYOUT

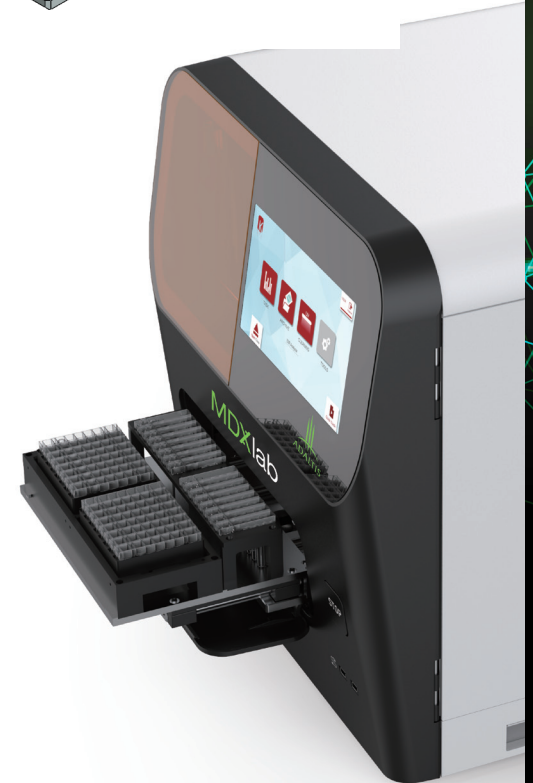


Load consumables



Start run

Results analysis & display





For more information

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ADALTIS is certified in compliance with ISO9001 and ISO 13485.  
Our products are CE-IVD.



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