

Taking the stress out of managing your samples



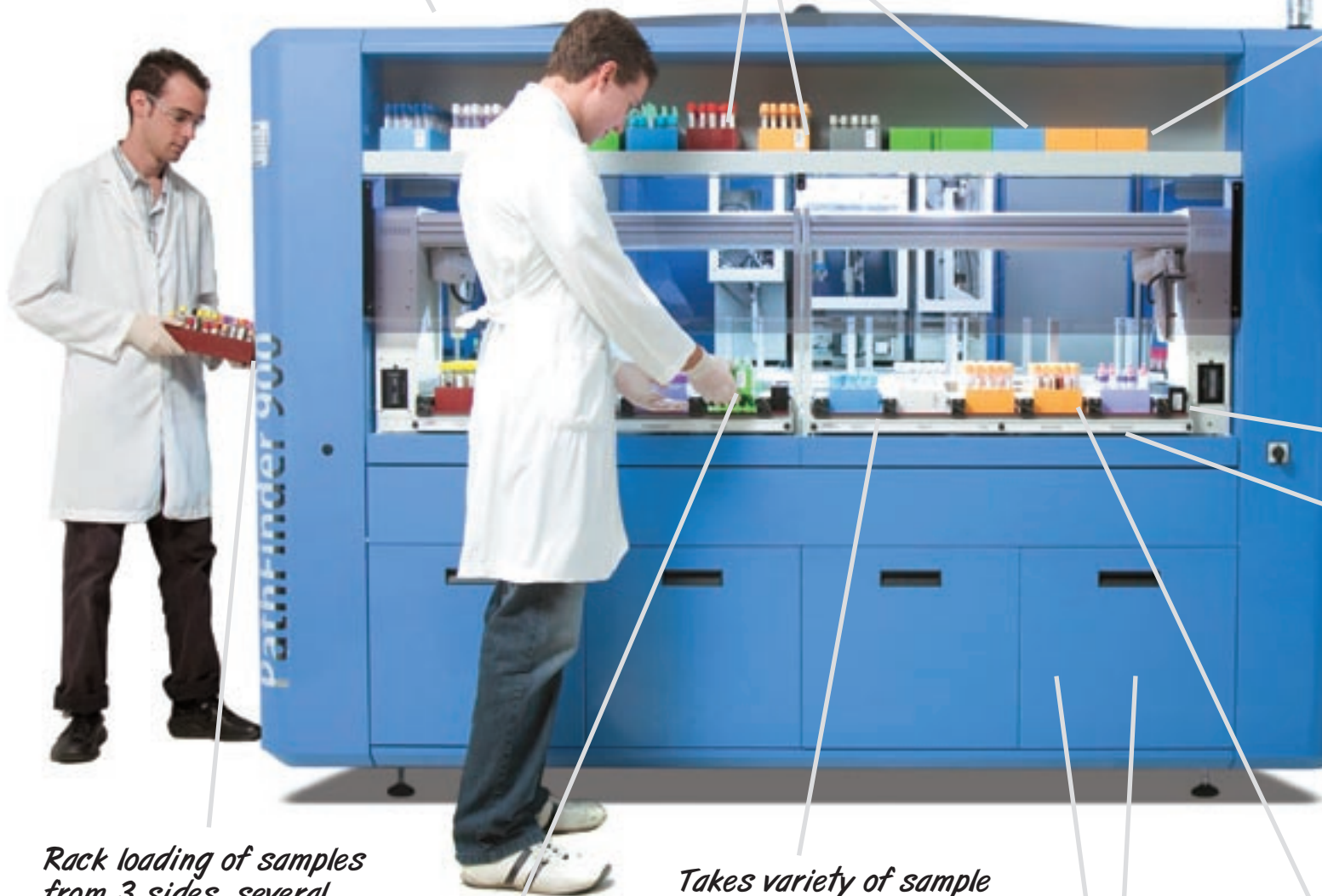
PathFinder 900

Laboratory Automation

Easy loading of consumables at the back, you can do this without stopping the machine!

Samples are quick and easy to identify in the coloured sample racks

Light tower to indicate instrument status



Rack loading of samples from 3 sides, several operators can access the system without getting in each other's way!

Takes variety of sample racks and supports different analyzer personality racks

You don't even have to stop the machine to load or unload racks!

Huge storage area - great for consumables and accessories

Made Easy

Handy shelf at convenient height - holding area for your next sample racks

Easy operator interaction through 17" touch screen LCD - can be located on the left or right side

One of 4 stat positions for priority samples

Configurable specimen tray swaps out in less than a minute! Fantastic! It allows you to change the instrument configuration as your workflow changes

Up to 40 rack positions with no predefined input or output positions. You can set the system up how best it suits your lab's workflow!

PathFinder 900

Aim Lab Automation Technologies PathFinder 900 is a fully automated tube management system. It is designed to automate the receipt, tracking, sub sampling and archiving of samples in a pathology laboratory. The system automates a number of manual steps carried out in processing the samples:

- ✓ Tube type recognition
- ✓ Pre and post analytical sorting
- ✓ Selective primary tube decapping
- ✓ Specimen aliquoting into labelled secondary tubes
- ✓ Selective capping of secondary and/or primary tubes
- ✓ Sample tracking and retrieval

High Throughput

The PathFinder 900 boasts a consistently high sample throughput. Sample tubes are processed at a rate up to 1250 tubes per hour when sorting and the throughput is maintained at over 900 tubes per hour even when 30% of the primary tubes processed are aliquoted into a secondary tube (1:1).

The dual track design allows selective sample processing to improve overall efficiency. Samples that require only sorting will bypass sample queues for aliquoting and capping. The PathFinder 900 workcell controller monitors the input workload to automatically optimise the work directed to each module to a level that allows those modules to perform at maximum throughput. This workload balancing capability takes advantage of the parallel processing and ensures there is conveyor capacity available for parallel sorting up to the full output performance.

Key Benefits

- ✓ Optimizes laboratory workflow
- ✓ Minimizes manual handling errors and decision steps
- ✓ Decreases biohazard exposure
- ✓ Reduces lost or misplaced tubes
- ✓ Prepares tubes for storage and/or shipping

Flexibility

The PathFinder 900 is one of the most flexible systems on the market. Sample racks can be loaded or unloaded from the front or either side of the instrument onto easily configurable specimen trays. Any rack position (and there can be up to 40 in total) can be set up as either an input or an output position.

Sample tubes (primary and secondary, capped and uncapped) can be directed to one of several destination positions. These could be for different departments for specific tests or for priority processing. They may be specific analyzer racks or racks for storage or transport.

As a result, the instrument can be orientated to best suit your laboratory's workflow. Operators are alerted to empty input racks or full output racks as soon as they need replacement.

Unique Modular Design

PathFinder 900 is a truly modular system with a number of dedicated modules arranged around a two lane conveyor track. A standard PathFinder 900 system includes four sorter modules, a sample tube ID module, a secondary tube preparation module, an aliquoting/decapping module and a capping module.

Samples tubes are transported around the system in pucks and are diverted to the outside track as they require processing. If a specific module happens to go down, the PathFinder 900 continues to operate with a reduced capacity until the module is rectified.



Tubes are transported in pucks around the dual lane track.



Specimen tubes passing through ID module

Functionality

With simple robust functionality, the PathFinder 900 has been designed to meet the many day-to-day challenges associated with sample management. Taking proven design elements from our existing lab automation platforms, it enhances and integrates these with several innovative new technologies to improve performance without compromising reliability. Unique technologies such as the tube type identification by image analysis and foil capping are patented technologies.

Specific capabilities include:

- ✓ Full clot detection
- ✓ Processing capped or uncapped primary tubes
- ✓ Capping primaries with its original cap or a foil cap.
- ✓ Multiple aliquots per primary tube

Compact Size

With a footprint of only 2.5m x 1.4m (8.2' x 4.6') and a working area that allows operator access from both the front and the sides, the PathFinder 900 is compact in size for the functionality and flexibility it offers. It has been specifically designed to be broken down into modules that fit through a standard doorway so it can be subsequently assembled on site with minimal disruption to your existing operations and laboratory layout.

Easy-to-use software

Interaction with the PathFinder 900 software is through an intuitive, icon-driven Graphical User Interface (GUI) with a web-style layout that provides a high level of familiarity to the novice operator.

At a glance the home page reveals the status of the entire system. The operator can be guided through each module, providing more detailed information about the hardware, consumables and running state.

The GUI also provides the system administrator with the ability to configure the system for the laboratory's particular requirements. Spreadsheet style configuration pages present data in a readable, easily edited format.

The GUI can also be viewed on any PC on the same network as the PathFinder 900 allowing reports to be generated or the system to be configured or monitored without interrupting workflow.

Features include:

- ✓ Dynamic interface that updates system status in real time
- ✓ Full management and workflow reporting
- ✓ Workflow productivity graphs and statistics
- ✓ Ability to track, search and locate tubes on demand
- ✓ Complete customization of work area and tube types
- ✓ Web based technology which allows multiple PCs to use the same interface
- ✓ In-built user diagnostics

The main menu lets you know exactly what is happening at a glance



For more details just click on the module of interest

PathFinder 900 Specifications

Throughput

- Over 1250 sorted tubes/hour.
- Over 900 sorted tubes/hour with a 30% aliquots. (1 primary:1 secondary)

Sample ID

- Positive barcode identification
- Positive verification of primary tube type

Presented tubes

- PathFinder 900 is capable of handling capped and uncapped tubes of 12 - 16mm OD and between 63 - 120mm high.
- Handles common tubes from major tube manufacturers including Becton Dickinson, Greiner, Sarstedt, Terumo, etc.

Rack types

- PathFinder coloured racks - 50 well (PF50) and 20 well (PF20)
- Third party analyzer racks
- Custom racks

Tube capacity

- Specimen tubes: 1000 (when using 20 x PF50 racks), configurable
- STAT positions: up to 4

Rack capacity

- Up to 20 x PF50 sample racks
- Up to 36 x PF20 sample racks
- Up to 40 defined locations

LIS interface

- Independent or bi-directional interface (enabling sample tracking); CLSI/NCCLS LIS2-A

Dimensions

- 2.5m L x 1.4m W x 1.8m H
- 8.2' L x 4.6' W x 5.9' H

Power supply

- 220 - 240VAC, 50 - 60Hz, 2400W


Operating temperature range

- 10°C - 35°C (50°F - 95°F)

Utilities required

- Power
- Network point
- Compressed air

Certification

- Designed and manufactured in accordance with ISO13485
-  2004/108/EC and 2006/95/EC

The PathFinder family



To compliment the PathFinder 900, Aim Lab Automation Technologies also offer smaller bench top automation systems. The PathFinder 350S for dedicated sorting applications and the PathFinder 350A for post analytical capping and archiving of sample tubes.

The PathFinder family share the same interface specification. By linking a network of PathFinder units through a common LIS, laboratories can realise increased throughput and efficiency, as well as sample tracking both within and between laboratory sites.

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