

Front End Automation for Analytical Instruments

OEM LIQUID
AUTOSAMPLERS



Aim Lab Automation Technologies Pty Ltd designs and manufactures OEM autosamplers for automating sample introduction into a wide range of analytical instruments employing technologies such as molecular and atomic spectroscopy, wet chemical analysis and liquid phase separations. We specialize in single probe autosamplers for sequentially processing large sample numbers. Sample volumes are typically between 0.1ml – 100ml.

Rather than sell a standard off-the-shelf product, Aim Lab offers a variety of different autosampler platforms and works with our OEM customers to provide a customized solution to meet their individual requirements.

The current range of autosampler models outlined in this brochure represents state-of-the-art in autosampler design. They embody years of experience and know how invested by Aim Lab into autosampler design through working with various leading scientific analyzer manufacturers who choose Aim Lab autosamplers as their preferred autosampler solution.

What makes Aim Lab autosamplers distinctive in the marketplace is the unique "Pirouette" motion to access all sample positions. The "x – theta – z" motion simplifies the engineering design, creating faster and more efficient probe movements and greater overall product reliability.

ALL AIM AUTOSAMPLERS SHARE THE FOLLOWING CHARACTERISTICS:

- ✓ **Compact footprint which maximizes available area for samples and standards.**
- ✓ **Exceptional reliability through proven mechanical design.**
- ✓ **Ideal for low level applications.**
The moving probe arm is designed to minimize any wear particles which could lead to possible sample contamination.
- ✓ **Probe travel confined within the boundaries of the autosampler.**
- ✓ **Shorter probe line length compared to linear XYZ design for faster wash out and sampling.**
- ✓ **Highly flexible programming capabilities such as probe speed in all directions, probe depth, probe travel limits, wash pump speed, and specialized probe moves.**
- ✓ **Solid robust design.**
The autosampler can be easily transported around the lab.
- ✓ **High chemical resistance to acids and select solvents.**
- ✓ **Protective transparent sampler cover that takes little or no additional space and is easy to fit.**
- ✓ **No regular on-going user maintenance required.**
- ✓ **Customizable for different application requirements.**
- ✓ **Can be controlled by Aim Lab's MDS software – a test and diagnostic tool for our OEM customers to assist in developing new applications and for product troubleshooting.**



AIM3200 AUTOSAMPLER

2 sample rack version

The smallest autosampler in Aim Lab's range. The AIM3200 is a compact workhorse for those looking for an autosampler to handle typically 100 – 150 samples or less in one run. The AIM3200 can be set up to sample from open vials or tubes, septum capped vials or 96 well microtiter plates.

TECHNICAL SPECIFICATIONS

FOOTPRINT 415mm x 265mm (16.3" x 10.6")

HEIGHT 435mm (17.1")

NET WEIGHT 12kg / 26.5lbs

SHIPPING WEIGHT ~14kg / ~31lbs (with accessories)

SAMPLE RACKS

90 position x 13mm OD

60 position x 16mm OD

40 position x 20mm OD

24 position x 25mm OD

21 position x 30mm OD

4 x 96 well microtiter trays

STANDARD RACK LOCATIONS 1

STANDARD RACK OPTIONS

5 position x 30mm OD

10 position x 17mm OD

MAXIMUM VIAL HEIGHT 125mm

COMMUNICATION

1 x RS232, 1 x RS485, 1 x relay contact (USB optional)

POWER INPUT

85 -264VAC, 49 - 61 Hz, 1.2A

CHASSIS COLOR

Off-white (Grau Weiss)

OPTIONS

Sampler cover	✓
Wash pump	Fixed or variable speed
Septum piercing	✓
Syringe dilution	✓



AIM3300 AUTOSAMPLER

3 sample rack version

The AIM3300 is the most flexible autosampler in the range. It can accommodate two standards racks and has a number of communication connections. It also has available the most sample probe options along with a range of customized sample racks and rack location mats.

TECHNICAL SPECIFICATIONS

FOOTPRINT 490mm x 285mm (19.3" x 11.2")

HEIGHT 510mm (20.1")

NET WEIGHT 15kg / 33lbs

SHIPPING WEIGHT ~18kg / ~39.7lbs (with accessories)

SAMPLE RACKS

90 position x 13mm OD

60 position x 16mm OD

40 position x 20mm OD

24 position x 25mm OD

21 position x 30mm OD

STANDARD RACK LOCATIONS 2

STANDARD RACK OPTIONS

6 position x 30mm OD

11 position x 17mm OD

MAXIMUM VIAL HEIGHT 150mm

COMMUNICATION

1 x RS232, 1 x RS485, 4 x relay contact, 8 digital inputs, (USB optional)

POWER INPUT

85 – 264 VAC, 49 - 61 Hz, 1.8A

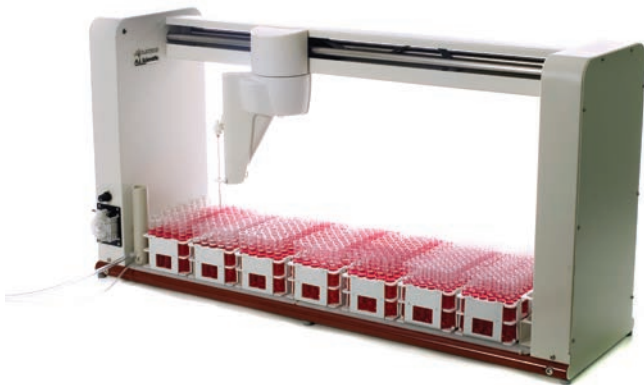
CHASSIS COLOR

Off-white (Grau Weiss)

Light grey (Oyster grey)

OPTIONS

Sampler cover	✓
Wash pump	Fixed or variable speed
Septum piercing	✓
Syringe dilution	✓



AIM3600 AUTOSAMPLER

7 sample rack version

The highest capacity autosampler in the range. The AIM3600 autosampler accommodates 7 sample racks and 2 standards racks – that's up to 630 samples and 22 standards. There is some flexibility where the wash station is located with 4 alternative positions. The AIM3600 is suited for long unattended sample runs.

TECHNICAL SPECIFICATIONS

FOOTPRINT 1000mm x 285mm (39.4" x 11.2")

HEIGHT 510mm (20.1")

NET WEIGHT 22kg / 48.4lbs

SHIPPING WEIGHT ~ 30kg / ~66.1lbs (with accessories)

SAMPLE RACKS

90 position x 13mm OD

60 position x 16mm OD

40 position x 20mm OD

24 position x 25mm OD

21 position x 30mm OD

STANDARD RACK LOCATIONS 2

STANDARD RACK OPTIONS

6 position x 30mm OD

11 position x 17mm OD

MAXIMUM VIAL HEIGHT 150mm

COMMUNICATION

1 x RS232, 1 x RS485, 4 x relay contact, 8 digital inputs, (USB optional)

POWER INPUT

85 - 264VAC, 49 - 61 Hz, 1.8A

CHASSIS COLOR

Off-white (Grau Weiss)

OPTIONS

Protective cover	✓
Wash pump	Fixed or variable speed
Septum piercing	✓



AIM4000 AUTOSAMPLER

4 sample rack version

The AIM4000 represents the latest autosampler design from Aim Lab. The electronics have been moved into the upper gantry away from any fluids optimizing the available bench space for samples. The standards rack and wash station are centrally located to minimize probe travel.

TECHNICAL SPECIFICATIONS

FOOTPRINT 600mm x 317mm (23.6" x 12.5")

HEIGHT 510mm (20.1")

NET WEIGHT 15kg / 33.1lbs

SHIPPING WEIGHT ~18.6kg / ~41.0lbs (with accessories)

SAMPLE RACKS

90 position x 13mm OD

60 position x 16mm OD

40 position x 20mm OD

24 position x 25mm OD

21 position x 30mm OD

4 x 96 well microtiter tray adapter

STANDARD RACK LOCATIONS 1

STANDARD RACK OPTIONS

5 position x 62mm OD

34 position (22 x 16mm OD + 12 x 29mm OD)

MAXIMUM VIAL HEIGHT 150mm

COMMUNICATION

1 x USB, 1 x RS485,
Up to 3 relay contacts, up to 3 digital inputs /outputs

POWER INPUT

100 - 240V, 47 - 63 Hz, 1.5A

CHASSIS COLOR

Cool white

OPTIONS

Protective cover	✓
Wash pump	Variable speed (software controlled)

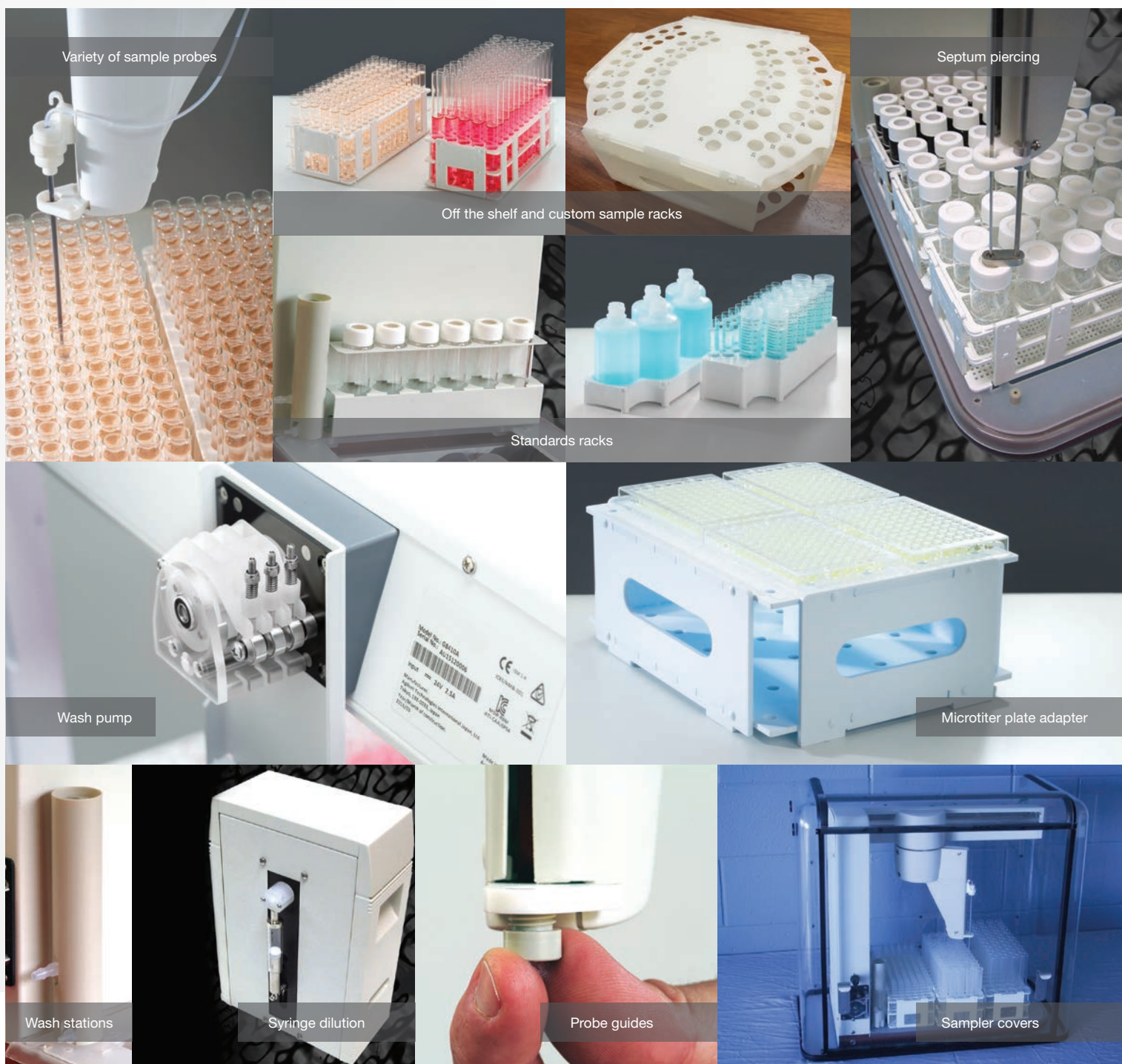
OEM Partnership

Aim Lab understands that there is more to just designing and manufacturing a quality product in any on-going successful OEM relationship. To start with, no two OEM customers have the same requirements. We take it on as our responsibility to understand what issues are important to the success of your application. If we understand the chemistry and how you want to use the autosampler, we can call on our experiences in working with multiple OEM customers over the years to assist you getting the right configuration for the job at hand.

Aim Lab values our OEM relationships as a long term commitment. We aim to provide you with a complete and seamless solution as though we are part of your organization. This means what's important to you is important to us – things like responsiveness to your enquiries, on time delivery, flexibility to make modifications, providing ready access to our support services when required, training and several more that are unique to every relationship.

AUTOSAMPLER ACCESSORIES

AIM Autosamplers come with a wide range of accessories including:



AUTOMATION CAPABILITIES

As well as liquid autosamplers, Aim Lab designs and manufactures a range of robotic workstations for automating the processing of specimen tubes in pathology laboratories which are sold globally through distributor arrangements.

Automated technologies developed in-house include:

- ✓ Sample sorting
- ✓ Tube decapping
- ✓ Tube recapping
- ✓ RFID tracking
- ✓ Workcell control
- ✓ Foil sealing
- ✓ Aliquoting
- ✓ Barcode reading
- ✓ Level sensing
- ✓ Pick and place
- ✓ Tube type identification
- ✓ Image analysis
- ✓ Tube labelling
- ✓ Customised rack design



PATHFINDER 900 PLUS



PATHFINDER 350A

aim|lab
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