



aim|lab
Automation Technologies

SETTING THE BAR IN INNOVATIVE
AUTOSAMPLER DESIGN

AIM4000
AUTOSAMPLER



A GOOD AUTOSAMPLER SHOULD BE:

- ✓ **seen but seldom noticed.** Once installed on your analyzer and loaded up with samples, it should be set and forget. Apart from loading and unloading samples, you don't even realize it's there.
- ✓ **adaptable so it can be customised to meet different application requirements.**
- ✓ **easy to interface with your host analyzer.**
- ✓ **reliable and run continuously 24/7 without fault.**
- ✓ **able to cope with intensive use or harsh conditions without intervention.**
- ✓ **free of any user maintenance or consumables.**
- ✓ **high quality but not over priced so that it doesn't negatively impact the overall cost of the analyzer it is interfaced to.**

But do you really want a good autosampler that just “does the job”? As an integral component, the autosampler becomes part of your overall product image. You want it to look impressive and draw attention to your product rather than something that's just been tacked on at the front end.

A great autosampler has all the desired characteristics required of a good autosampler but in addition enhances your analyzer's marketability as well as performance. The AIM4000 is a great autosampler with an elegant innovative design that will help give your analyzer the WOW factor you're looking for.

Aim Lab Automation Technologies has been making autosamplers and supplying these on an OEM basis to various instrument manufacturers around the world since 1989. In our quest for constant product improvement and innovation, the AIM4000 is Aim Lab's 4th generation autosampler and represents a culmination of over 25 years of design experience and field performance. It is a single probe liquid autosampler that not only looks great but has more features than you can poke a sample probe at:

- Shorter probe line length compared to linear XYZ design for faster wash out and sampling.
 - Standard racks and wash station centrally located to minimize probe travel between samples and wash. This also allows sample racks to be easily replaced during a run.
 - High degree of flexibility with a range of different programming capabilities such as variable probe speed in each axis of movement, definable probe travel limits, wash pump speed and much more.
 - Solid robust construction with high corrosion resistance.
 - Easy to use user calibration wizard for adjusting alignment if the unit is mishandled.
 - Proven “pirouette” design with several thousand units installed since first introduction.
 - Optional integrated protective sampler cover that takes no additional space, is easy to fit and cost effective.
 - Optional three channel wash pump for feeding clean wash solution to either a single or dual port wash station. The third channel can be used to pull wash solution through the drain line when required.
 - Easy access to wash pump, electrical connections and communication ports with the sampler cover fitted.
- Compact footprint which maximizes available area for samples and standards.
 - Ideal for low level applications. The moving probe arm is designed to minimize any wear particles which could lead to possible sample contamination.
 - Electronics elevated well away from liquids and dense acid fumes.
 - Probe travel confined within boundaries of autosampler.

DESCRIPTION

- AIM4000 autosampler with sampler cover fitted, door in open position
- Samples racks with 150mm and 100mm tubes, 5 well standards rack holding 250ml bottles



TECHNICAL SPECIFICATIONS

DIMENSIONS:

600mm (23.6") L x 317mm (12.5") D x 510mm (20.1") H;
D 363mm (14.3") with wash pump installed

WEIGHT:

Approx. 15 kg (33.1lbs)

RACK CAPACITY:

4 sample racks (up to 360 samples) or 8 x 96 well microtitre plates

1 standards rack (either 5 well or 34 well)

MAXIMUM VIAL HEIGHT:

150mm

INPUT POWER:

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

COMMUNICATION:

Host port: USB (Type B connector)

Auxiliary port: RS485 (DB9 Male connector)

Relay contacts: up to 3 available

I/O connections: up to 3 available

PROBE TRAVEL TIME FROM SAMPLE TO WASH:

Adjustable from ~3 to more than 10 seconds

PROBE TIP ACCURACY:

+/- 1.5mm

PROBE TIP PRECISION:

+/- 0.5mm



Description:

- AIM4000 fitted with 2 x 60 well sample racks holding 100mm tubes on LHS,
- 34 well standards rack in the center and 1 x microtiter plate adapter on RHS

AIM4000 ACCESSORIES



SAMPLE PROBE KITS

A range of FEP/PFA sleeved and lined carbon fibre sample probes:

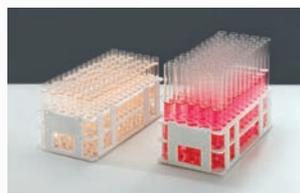
0.25mm ID

0.5mm ID

0.8mm ID

1.0mm ID

1.2mm ID



SAMPLE RACKS

21 wells x 30mm,

24 wells x 24mm,

40 wells x 20mm,

60 wells x 16mm,

90 wells x 13mm



MICROTITER PLATE ADAPTER

Adapter for 4 x 96 well microtiter plates



STANDARDS RACKS

5 wells x 63mm

34 wells (12 x 29mm +
22 x 16mm)



PROBE WASH STATIONS

Single port fixed wash reservoir kit, 150mm H

Dual port fixed wash reservoir kit, 150mm H



SAMPLER COVER

Provide enclosed environment with exhaust connection for extracting corrosive sample fumes



WASH PUMP

Three channel, variable speed

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