



# AA100

**NEXT GENERATION  
SEGMENTED FLOW ANALYZER**

**A new generation of flow analyzers from SEAL – focusing on simplicity of use**

The AA100 is designed to be a sleek system that is reliable and simple to use.

# AA100



*The dual channel AA100 is ideal for all types of water analysis for laboratories needing a simple, uncomplicated system to run dedicated chemistries. Its light weight and compact design means it can sit in any orientation on the bench.*

## **USEPA, ASTM, ISO**

*and other international regulatory compliant methods are available.*

### **APPLICATIONS INCLUDE**

**Water & Wastewater**  
**Drinking Water**  
**Soil & Plants**

### **PARAMETERS INCLUDE**

**Ammonia**  
**Chloride**  
**Cyanide**  
**Nitrate+Nitrite**  
**Nitrite**  
**Phenol**  
**Phosphate**  
**Total Nitrogen**  
**Total Phosphorous**

## HOW DOES THE AA100 WORK?

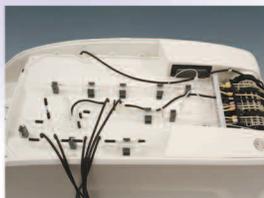
A basic SFA system consists of an autosampler, a peristaltic pump, a chemistry manifold, a detector and data acquisition software. Sample and reagents are pumped continuously through the chemistry manifold. Air bubbles are introduced at regular intervals forming unique reaction segments which are mixed using glass coils. Glass is ideal, as it is inert, stays clean and enables easy visual checks.

In SFA, all reactions run to completion. The ratio of sample to reagents in the detector reaches a constant maximum value – the steady-state condition. This ensures maximum sensitivity resulting in lowest detection limits and exceptional reproducibility. Variations in reaction time, temperature and sample matrix do not affect the results as they do in other colorimetric techniques, such as flow injection analysis, where the reaction is not brought to completion.

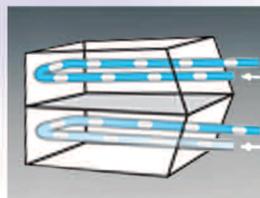
▶ **As a market leader**, SEAL has over 1,000 applications available and under continual development. Markets include water, wastewater, soil, plant, fertilizer, food and beverage. Please contact us for your specific application.

The new AA100 Segmented Flow Analyzer is a fully automated instrument designed specifically for environmental and industrial testing laboratories.

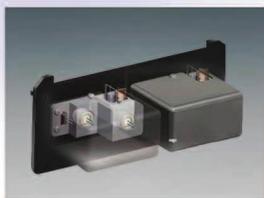
## ADVANTAGES AND BENEFITS



Integrated distillation unit for Cyanide, Phenol and Ammonia.



Ammonia analysis by gas diffusion manifold eliminating pH and salinity issues.



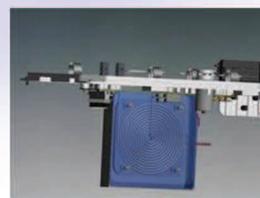
The unique AA100 digital photometer provides high sensitivity, wide dynamic ranges and low detection limits. LED light sources are used.



The high quality multi-speed metal pump ensures regular reproducible dosing of liquid.



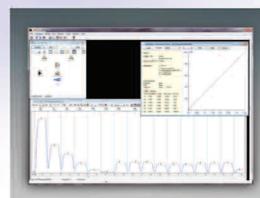
The chemistry manifold is comprised of close-tolerance glass components, which are chemically inert and allow for easy visual check of operation.



The new, unique software controlled heating unit provides consistent even heating, ensuring stable results.



The AA100 carousel sampler is robust and simple to use. Samples can be added at any time during the run.



Instrument control and data acquisition is carried out through the intuitive, easy to use AACE Lite software package.

### DIMENSIONS

**610 mm**  
X  
**295 mm**  
X  
**290 mm (h)**

WEIGHT  
only **13 kg**

### OTHER FEATURES

- ▶ **Compact design – small footprint**
- ▶ **Up to 2 channels per system**
- ▶ **Simplified tubing – easy to use**
- ▶ **Intuitive software – easy to learn**
- ▶ **Add samples once run has started**
- ▶ **Up to 120 tests per hour**
- ▶ **Low cost per test**

**SEAL**  
Analytical



PLEASE VISIT

[www.seal-analytical.com](http://www.seal-analytical.com)

or contact your local SEAL Analytical representative about your specific application.

## Colorimetric Nutrient Analyzers

### DISCRETE ANALYZERS



**AQ270**



**AQ300**



**AQ400**

### SEGMENTED FLOW ANALYZERS



**AA100**



**AA500**



**AA3**



**QuAAtro39**

## 50 Years' Experience in Environmental Analysis Built into Every Analyzer

50 years' experience in designing, developing and manufacturing automated wet chemistry analyzers specifically for very low detection levels in environmental applications has helped SEAL to apply the most useful, easy to use features into the SEAL range of Discrete and Segmented Flow analyzers. The SEAL analyzers are widely acknowledged as the best for environmental analysis, giving you everything you need to achieve equal or superior results to the manual and approved laboratory methods the SEAL analyzer replaces.

SEAL Analyzers are monitoring environmental samples in every corner of the globe. They are manufactured in the USA, Germany and the Netherlands. Engineering and chemistry support is provided from SEAL global facilities in USA, Germany, England, the Netherlands and China along with a worldwide network of specialist distributors.

### COMPREHENSIVE SUPPORT

We offer comprehensive applications, technical service and software support.

#### INCLUDING

- ▶ A choice of preventative maintenance and service contracts to meet your specific requirements
- ▶ In-house and online training
- ▶ Guaranteed availability of genuine consumables and spare parts
- ▶ Adaptation of methods to specific requirements such as matrix, range or detection limit
- ▶ Continuous in-house development of software to incorporate new customer requested features

## Robotic Handling Systems

SEAL Robotic Minilab systems for automating sample (pre) treatment in the laboratory – improving your sample handling efficiency. Typical applications include BOD, pH, COD, Alkalinity, and conductivity measurements with options such as decapping/capping, sample splitting, and filtration. Call us about your laboratory needs and we will design a robot to suit you.



**SEAL Minilab 1200**

## Digestion Systems

### FOR METALS AND TKN, TP DIGESTION



**BD50**



**SmartBlock II**



**DEENA 3**

**SEAL Analytical**



[www.seal-analytical.com](http://www.seal-analytical.com)

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