## OCEANOGRAPHY



### ASTORIA-PACIFIC

### **Environmental Testing at its Best!**

Oceanographers demand excellence. Whether it is a deep sea submersible capable of operating at bonecrushing depths, a ship big and dependable enough to withstand the most extreme conditions at sea, or a robust, state-of-the-art automated analyzer for nutrient analysis, these scientists' requirements are constantly pushing the limits and raising the bar for suppliers to their industry.

Astoria-Pacific International, a leading manufacturer of automated analyzers, tackles this demand head on, constantly working with our customers to provide the best solutions. For instance, our ultra low level orthophosphate method in seawater has a working range of 0.02 - 3.0  $\mu$ M (as P), a calculable MDL of 0.0012  $\mu$ M (as P) and runs at 42 samples per hour -- thereby maximizing your lab's performance capabilities.

Our FASPac<sup>™</sup>II software is easy to use, provides reports in spreadsheet format and offers internal QC programming, thereby ensuring that your results are consistently accurate. Optional fluorometric methods are available, allowing you to monitor Ammonia, Nitrate and/or Nitrite without dissolved salt concentrations having an adverse affect.

#### Ultra Low Level Ranges and MDL's in Brackish Water or Seawater on the Astoria Analyzer

Nitrite:	0.02 - 2.0 $\mu\text{M}$ (as N), MDL: 0.007 $\mu\text{M}$ (as N)
Nitrate:	0.05 - 7.5 μM (as N), MDL: 0.016 μM (as N)
Orthophosphate:	0.02 - 3.0 μM (as P), MDL: 0.0012 μM (as P)
Ammonia:	0.05 - 5.0 μM (as N), MDL: 0.030 μM (as N)
Silica:	0.05 - 5.0 μM (as Si), MDL: 0.0045 μM (as Si)
Urea:	0.05 - 5.0 µM (as Urea), MDL: 0.013 µM (as Urea)

# ANOG

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#### **Required Bench-top (Operational) Space**

2 channel unit: 11.25 inches W x 17.25 inches D x 10 inches H (28.6 cm W x 43.8 cm D x 25.4 cm H)

3 - 6 channel unit: 22.5 inches W x 17.25 inches D x 10 inches H (57.2 cm W x 43.8 cm D x 25.4 cm H)

#### Expected Total Sample Volume Used in seawater / brackish water analyses

1	Channel:
2	Channel:
3	Channel:

0.489 mL - 0.929 mL 1.124 mL - 1.698 mL

4 Channel: 5 Channel: 1.796 mL - 2.432 mL 6 Channel: 2.565 mL - 3.104 mL 3.299 mL - 3.715 mL Maximum of 4.228 mL

#### Optional Methods for seawater / brackish water samples



Ammonia by Fluorometry 0.05 - 5 µM (as N) MDL: 0.007 µM (as N)

Nitrate by Fluorometry 0.05 - 5 µM (as N) MDL: 0.006 µM (as N) Nitrite by Fluorometry 0.05 - 5 µM (as N) MDL: 0.006 µM (as N)

#### Key Features of FASPac II

- · Timed events: pump, heat bath, lamp control
- Bidirectional LIMS communication
- · Real time Sample Table correction
- Export/Import reports/sample tables

· Pseudo channels for analytical corrections/calculations

- · Peak markers/ID's on real time signal plot
- · Ability to add samples during a run
- Calibration Wizard for online standards prep^ ^NOTE: Diluter module required

Range: 0.05 - 5 µM (as N) Mean=0.047 µM SD=0.0024 µM RSD=4.98% MDL=0.007 µM Analysis rate: 55 samples/hour

We hope you understand our commitment to excellence. By choosing Astoria-Pacific International, you not only gain a compact, robust, reliable analyzer but also gain the best Customer and Technical Support teams in the industry. Whether it is showing you how to run the system for the first time, giving you pointers on the

best ways to prep the system for time at sea, making sure you have the supplies necessary for uninterrupted operation, or helping you push your detection limits, Astoria-Pacific is dedicated to making sure that your needs are met. Essentially, by choosing Astoria-Pacific, you are choosing the Best!

### Peak signal plot of the Fluorometric Ammonia method