

# Sampling Accessories

## Fluid Analysis Systems

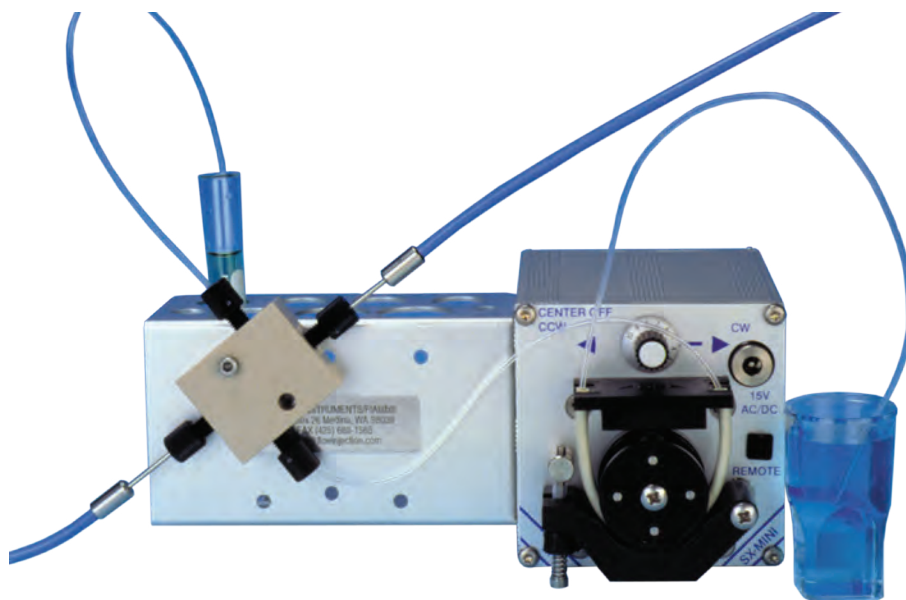
Our FIA-1000-Z Flow Cell Kit is a convenient, low-cost fluid handling system that couples to Ocean Optics high-sensitivity miniature spectrometers and light sources for fast, quantitative analysis of solutions.

The FIA-1000-Z system consists of a two-channel peristaltic pump, a 1-cm pathlength fiber optic flow cell, a fittings kit and Windows-based operating software. A pair of optical fibers or special bifurcated assembly (priced separately) completes the package.

### High-throughput Z-cell Option

The FIA-Z-SMA-PEEK-LENSED is a 10 mm Z-type flow cell that includes two collimating lenses and special SMA 905 adapters that increase the UV-VIS throughput of the flow cell by up to 10x compared with the standard Z-cell. The high-throughput cell can be used as part of any system that has an Ocean Optics spectrometer configured for optical absorbance measurements, but is especially attractive as part of a multichannel Jaz system configured for chromatographic applications.

The FIA-Z-SMA-PEEK-LENSED cell has good chemical resistance to a wide range of organic and inorganic materials. Its lens material is UV-grade fused silica with response from 200-900 nm. By adding accessories such as the FIA-PUMP-C and a pair of QP450-1-XSR 450  $\mu$ m extreme solarization resistant optical fibers, you can create a system comparable to the FIA-1000-Z Flow Cell Kit.



### Specifications

| Criteria           |  |
|--------------------|--|
| Spectral range:    | 260-2000 nm  |
| Cell materials:    | PEEK, Plexiglas, Teflon, Stainless Steel or Ultem            |
| Inner diameter:    | 1.5 mm   |
| Window material:   | UV-grade fused silica  |
| Pathlength:        | 10 mm  |
| Fiber connectors:  | SMA 905  |
| Tubing:            | 1/16" Teflon, ~3 m   |
| Tubing connectors: | 1/4-28   |
| Pump dimensions:   | 105 mm x 105 mm x 185 mm                                     |
| Pump weight:       | 2100 g   |
| Flow rate:         | 200 mL/minute/channel (depending on RPM and tubing diameter) |
| Pressure rating:   | 25 psi   |

### Available Items

| Item            | Description   |
|-----------------|---|
| FIA-1000-Z      | Z-SMA flow cell with peristaltic pump. Includes operating software with code for computer control of pump. User specifies cell material: Teflon, Plexiglas, Stainless Steel, PEEK polymer or Ultem. |
| FIA-ZSMA        | Replacement Z-SMA flow cell for FIA-1000-Z. User specifies cell material: Teflon, Plexiglas, Stainless Steel, PEEK polymer or Ultem.  |
| FIA-ZSMA-100    | Z flow cell w/SMA 905, 100 mm pathlength  |
| FIA-ZSMA-50     | Z flow cell w/SMA 905, 50 mm pathlength   |
| FIA-ZSMA-20     | Z flow cell w/SMA 905, 20 mm pathlength   |
| FIA-ZSMA-ML     | Z flow cell with SMA 905 connector, microliter volume. User specifies cell material: Teflon, Plexiglas, Stainless Steel, PEEK polymer or Ultem.   |
| FIA-ZSMA-ML-100 | Z flow cell w/SMA 905, microliter volume 100 mm path  |
| FIA-ZSMA-ML-50  | Z flow cell w/SMA 905, microliter volume 50 mm path   |
| FIA-ZSMA-ML-20  | Z flow cell w/SMA 905, microliter volume 20 mm path   |
| FIA-Z-CELL      | Adjustable replacement cell for use with FIA-1000-Z. Connects to fiber optics w/ferrule termination. Standard cell materials are Plexiglas, Stainless steel, Teflon, Ultem or PEEK.                 |
| FIA-P200-SR     | Custom 200 $\mu$ m ferrule-termination fiber optic for use with FIA-Z-CELL; requires 2 fibers.  |
| FIA-P400-SR     | Custom 400 $\mu$ m ferrule-termination fiber optic for use with FIA-Z-CELL; requires 2 fibers.  |
| FIA-PUMP-C      | Replacement peristaltic pump (computer-controlled) for FIA-1000 flow cells  |