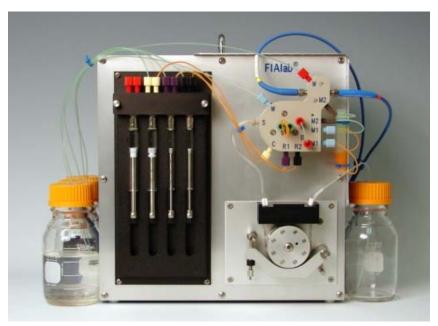
FIAlab-2700 - Multi-Syringe Flow Injection Analysis



FIAlab-2700 with the Integrated FIA Lab-On Valve® Manifold (shown made from PEEK)

The FIAlab-2700 is the first commercially available FIA system which offers a four channel syringe pump for aspirating/dispensing carrier, sample, and reagents. The FIAlab-2700 also includes the same four channel peristaltic pump as the FIAlab-2500, and can thus be run in classical peristaltic pump based FIA mode. Or utilize both the syringe and peristaltic pumps for more complex "hybrid" assays. This is system ideal for the research laboratory exploring new FIA approaches. Several advantages are realized by using the four syringe pump system

- No need to ever replace expensive peristaltic pump tubing.
- Precise speed and volume control, allowing methods to run in either continuous or stop flow mode.
- Pulsation is all but eliminated, allowing smoother flow. This can be critical for ultra low level assays.
- Relative flowrate between the channels is achieved by using different syringe sizes.
- Less reagent is used than with classical peristaltic pump based FIA

The FIAlab-2700 is an excellent choice for commercial laboratories performing routine Agricultural and Environmental Assays, as well as development of new methods.

Typical Configuration and Accessories

| | Automated | I flow in | jection a | analysis | system. | Four | channel | syringe |
|-------------|-----------|-----------|-----------|----------|---------|--------|------------|-----------|
| FIAlab-2700 | pump, for | ır chann | el perist | altic pu | mp (six | channe | el availat | ole), six |
| | port, two | | | | | | | I |

| | loop, operation and experiments manuals. FIAlab for Windows software. | | | | | | |
|----------------------|--|--|--|--|--|--|--|
| FIA-Lab-On-Valve | Integrated manifold which mounts directly on the injection valve, and includes integrated flow cell. | | | | | | |
| P600-20 | SMA-terminated 600 micron fiber optic cables | | | | | | |
| USB4000 | S4000 spectrometer with USB interface, set to measure wavelengths between 350 to 1000 nm (software selectable). Also available for 200 to 850 nm ranges, please inquire. | | | | | | |
| LS-1 | Tungsten halogen light source for ~360 nm to 2 mm wavelength range | | | | | | |
| Autosamplers | | | | | | | |
| ASX-260 | Random Access XYZ Sample Changer (180 samples, 10 standards) | | | | | | |
| ASX-520 | Random Access XYZ Sample Changer (360 samples, 10 standards) | | | | | | |
| AIM-3200 | Random Access XYZ Sample Changer (180 samples, 10 standards) | | | | | | |
| AIM-3300 | Random Access XYZ Sample Changer (270 samples, 10 standards) | | | | | | |
| | | | | | | | |
| Optional Accessories | | | | | | | |
| Dual-FC | Dual Flowcells for extended dynamic range. Simultaneous use of a 1 cm and 10 cm flowcell, in series, offers a significantly increased dynamic range. Uses a dual channel spectrometer. Other flowcell length combinations can be used, please inquire. | | | | | | |
| SCSP-2500 | Auto Dilutor - No need to prepare multiple standards, let the SCSP-2500 dilutor prepare the standards automatically. The SCSP-2500 aspirates standards and samples from autosampler, delivers the resulting sample to the FIAlab-2500, filling the sample loop to the desired dilution level. Accurate dilutions up to twenty fold. Easily create calibration curves from a single standard. | | | | | | |
| RQV | The new Rapid Queuing Valve option allows assays of phosphate and ammonia to be performed at around nine seconds per sample with no loss of accuracy or sensitivity. Some limitations do apply, for instance the RQV is not compatible with the SCSP-2500 autodilutor option. Please inquire for additional information to see if the Rapid Queuing Valve will work with your specific application(s). | | | | | | |
| FTHEAT | Flow through heater required for elevated temperature assays such as Ammonia. Temperature control from ambient up to 50 C. Accuracy is +/- 0.5 C. Coil is made from Teflon tubing 0.03 ID, total coil volume is approximately 700 microliters (other sizes available). | | | | | | |
| Flow Cells | Flowcells from 1 mm to 10 cm optical path lengths | | | | | | |
| AS-VALVE | Automatic Shutdown Valve. At method completion, the AS-VALVE dual 3-way valve switches to rinse position for | | | | | | |

| | automatic removal of reagent(s) from manifold. | | | | |
|-------------|---|--|--|--|--|
| PMT-FL | Photomultiplier Based Flow Through Fluorometer | | | | |
| Misc. Lamps | UV and Visible light sources | | | | |
| AIM600 | Digestion System for Kjeldahl Nitrogen (TKN) assays of environmental, plant, and food samples | | | | |
| Computer | Choose the model to suit your needs and budget. Desktop or Notebook. | | | | |