xylem
Lab Solutions

Flow Solution FS3700

CONTINUOUS FLOW ANALYZER

BROCHURE

4072-01

Automating Wet Chemistry for Laboratory Productivity

For years, laboratories have turned to OI Analytical for accurate, reliable continuous flow analyzers. Our next generation of flow instrumentation features game-changing technology that significantly improves laboratory workflow, making the Flow Solution 3700 Automated Chemistry Analyzer the most efficient, flexible, and easy-to-use system available for automated wet chemistry analysis.

- Perform 30-90 analyses per hour, per channel
- Automate sample preparation and analysis of USEPA, ASTM, ISO, DIN or in-house QA/QC methods
- Save time and money by automating digestion, distillation and/or dialysis
- Use any combination of SFA, FIA, iSFA and/or sFIA methods with a variety of detectors
- Versatile single platform for regulatory monitoring, QA/QC, and research
- Intuitive FlowView software provides powerful data analysis capability

Advanced Technology for Superior Performance

Flexible, Modular Design

The unique, modular design of the FS 3700 gives the system superior flexibility. Different flow methods, including SFA (segmented flow analysis), FIA (flow injection analysis), iSFA and SFIA can be run on different channels on the system simultaneously. A variety of pre- configured chemistry cartridges and industry-leading detectors can be utilized with plug-and-play ease. Multiple systems can be linked to provide additional channels of concurrent analysis.

Validated Methods

OI Analytical validates the hardware configuration and performance of every method supplied with the

FS 3700 analyzer, providing users a total analysis solution. Methods for aqueous samples, soil or plant extracts are available to support environmental compliance monitoring, process optimization and research applications.

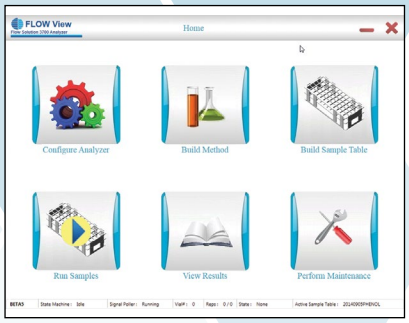
Ammonia, Chloride, Cyanide, Fluoride, Nitrate, Phenol, Phosphorous, Silica, TKN, and more!

Powerful Software Capabilities

FlowView™ Software

The intuitive FlowView software is unparalleled in competitive systems. Designed for 32- or 64-bit Windows® operating systems, FlowView's improved user interface streamlines scheduling, operation and report generation from the FS 3700. The icon-driven user-interface simplifies navigation and helps new users quickly become proficient.

- On-the-fly sequence editing and calibration monitoring
- LIMS-compatible import/export with user-friendly, customizable report generation
- New, refined algorithms for peak detection, baseline handling, and carry-over correction
- System configuration and method parameters are archived with the data in each result file
- Unparalleled access to instrument component diagnostics in real-time, even during data collection



Versatility with Plug-and-Play Ease

Interchangeable Chemistry Cartridges

The FS 3700 utilizes interchangeable, pre-assembled chemistry cartridges for maximum versatility and ease of use. Each chemistry cartridge is configured with all of the components needed to perform each validated analysis method. Just attach the pump tubing and detector flow cell and you are ready to go. The FS 3700 runs up to 2 channels simultaneously, each with its own cartridge, with additional channel configurations available. Modular, flexible hardware provides a great platform for research, in-house or proprietary methods.

Plug-in Detector Modules

The FS 3700 comes standard with two detector boards, each capable of supporting photometric, amperometric, ion-selective electrodes and third-party detectors out of the box. This provides additional flexibility to tailor methodology for research or quality control processes while utilizing fluorescence, flame photometric or other detectors. Refinements in detector design have improved signal–to-noise ratio and doubled sensitivity.

The Expanded Range™ photometric detector and auto- scaling software virtually eliminate off-scale samples. Calibration curves can span four orders of magnitude, providing accurate results the first time — without the need for additional injections or an autodilutor.

- In-line heating/ UV digestion programmable in 1 °C increments
- Automated injection valves minimize noise and pressure fluctuations
- Magnetic mixing tees – move them as best fits your configuration
- Unattended start-up and shut-down
- Leak detection (user definable action)

Analysis Module	1 or 2 chemical analysis channels per chassis
Analysis Module Dimensions	31 in. W x 17.5 in. D x 10.5 in. H 78.74 cm W x 44.45 cm D x 26.67 cm H
FS 3700 Dimensions with 180-position Autosampler	Approximately 44 in. (112 cm) W
FS 3700 Dimensions with 360-position Autosampler	Approximately 51.5 in. (131 cm) W
Injection Valve	8 or 10-port switching valve with chemically-inert wetted surfaces
Photometric Detector	420-880 nm, with PEEK path lengths of 5-, 10- or 20-mm
Amperometric Detector	Silver working electrode, silver/silver chloride reference, stainless steel counter electrode
In-line Heater	Included as needed, mounted underneath chemistry cartridge, user programmable in 1 ˚C increments
UV-digestion Module	Included as needed, mounted underneath chemistry cartridge
Peristaltic Pump	24-channel, fits on top of analysis module
Autosampler	3180 180-position autosampler 3360+ 360-position autosampler
Tubing	FEP Teflon® and EVA ethylene-vinyl acetate copolymer
Manifolds / Fittings	Polysulfone
Analysis Methods / Documentation	Validated chemistries for specific analytes/sample matrices with performance data
Operating Software	FlowView
Operating System	Windows® 7 and Windows® 10 Pro
Data Collection	6 channels per instance of software Multiple instances of software can be run on a single computer
PC to FS 3700 Communications	USB
Power Supply	24VDC universal switching power supply for operation with 90-250VAC 50/60Hz source
Power Requirements	110VAC/60 Hz or 230VAC/50 Hz
Weight (Analysis Module)	19.5 kg (43 lbs.), typical for analysis module and pump, two injection valves, chemistry cartridges, detector modules
Certifications	CE Safety EN 61010-1 EMC Immunity & Emissions EN 61326-1:2006

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