

## FS 3700 Automated Chemistry Analyzer



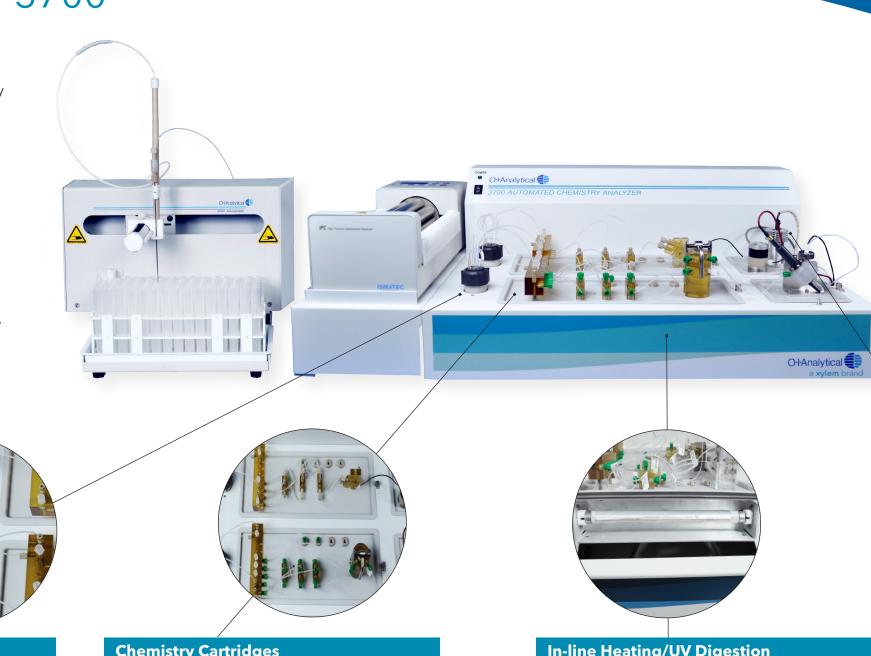
# Automating Wet Chemistry for Laboratory Productivity

### Flow Solution<sup>™</sup> 3700

The FS 3700 Automated Chemistry Analyzer is an advanced continuous flow analyzer designed to improve laboratory productivity by automating wet chemistry test procedures.

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.

Modular hardware allows FIA and/or SFA methods to be run interchangeably on the same unit. Multiple FS 3700 can be linked to provide additional channels of concurrent analysis.



An automated injection valve is installed in the analysis module chassis when required to run a flow injection analysis (FIA) method.

**Injection Valves** 

#### **Chemistry Cartridges**

Each chemistry cartridge is pre-assembled with all components needed to perform a validated analysis method - just attach the pump tubing and detector flow cell.

Ordering by 'channel' provides a convenient way to configure the 3700. Modular, flexible hardware provides a great platform for research, in-house or proprietary methods

#### In-line Heating/UV Digestion

In-line devices for reactions requiring heating or UV digestion are mounted on the underside of chemistry cartridges.

FlowView software provides user programmable control of the UV lamp and cartridge heater set points in 1 °C increments.



### FlowView Software

Designed for 32-bit or 64-bit Windows® operating systems, FlowView's improved user interface streamlines scheduling, operation and report generation from the FS 3700.

On-the-fly sample addition, quantitation by peak height or area, online data processing, multi-language support and new integration features are just a few of the user-suggested improvements we've incorporated into our next-generation software platform.

#### **Plug-in Detector Modules**

Photometric and amperometric detector modules plug-in to the FS 3700 to support methods employing colorimetric chemistries or amperometric measurements. Built-in A/D and ISE capability are standard in each chassis.

The Expanded Range<sup>™</sup> photometric detector and auto-scaling software virtually eliminate off-scale samples. A single calibration curve can range from low ppb to high ppm concentrations.

## FS 3700 Specifications

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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 90-position Autosampler	Approximately 44 in. (112 cm) W
FS 3700 Dimensions with 360-position Autosampler	Approximately 51.5 in. (131 cm) W
Injection Valve	10-port switching valve. chemically-inert wetted surfaces
Photometric Detector	420-880 nm, with path lengths of 5-mm, 10-mm 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	90-position, X-Y-Z (90 samples + 9 standards) 360-position, X-Y-Z (360 samples + 10 standards)
Tubing	FEP Teflon <sup>®</sup> 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 <sup>™</sup> 7, Windows <sup>™</sup> 8 and 8.1
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



151 Graham Road PO Box 9010 College Station, Texas 77842-9010

(979) 690-1711 (800) 653-1711 USA/Canada FAX (979) 690-0440

www.oico.com E-mail: oimail@oico.com

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