

# NexaFlo™ Series

SMART SEGMENTED FLOW ANALYSIS PLATFORM



a KPM brand

## Next Generation Segmented Flow Analyzer Technology

Leveraging our decades of experience in wet chemistry analysis, the NexaFlo™ Series is the next-generation Segmented Flow Analyzer based on the popular AMS FUTURA platform. NexaFlo™ addresses the health and safety needs of today's modern laboratory with advanced capabilities developed from our decades of experience working with labs and understanding their daily challenges.

NexaFlo™ intelligent console features more sensors, a real-time LED instrument health status indicator, diagnostic tools, and improved hardware for better serviceability, giving users more confidence in their results and system performance.

### FULL AUTOMATION AND MODULARITY

NexaFlo™ can be integrated with our full automation module, allowing start-up and shutdown to be completed autonomously from a designated PC. This enables unattended testing without compromising reagent overuse.

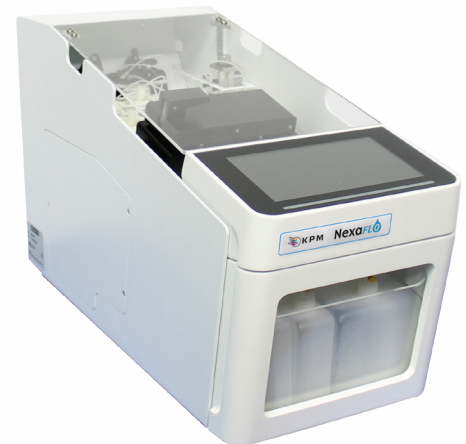
NexaFlo™ configurations can be built with up to 14 consoles (independent analytical channels), allowing for all levels of complexity to be managed for your laboratory.

NexaFlo™ has been designed to operate with high productivity and efficiency for all chemistries – from simple to the most complex analysis.

### APPLICATIONS

Laboratories use NexaFlo™ to perform tests on important parameters in water and soils (drinking, waste, surface, sea and ground water), tobacco, and beverages such as:

Drinking Water	Waste Water	Sea Water	Soil /Fertilizer	Tobacco	Wine	Dairy
Ammonia					Enzymatic sugars	Nitrate
Nitrates/Nitrite, TKN				Nitrite	Free Total SO <sub>2</sub>	Nitrite
Phosphate, TP, TN				Cyanide	Volatile acidity	Formaldehyde
MBAS	Silicates	Cr	Starch	Reducing sugars		
Phenol	Chloride	K	Sorbic Acid			



### NEXAFLO™ SERIES FEATURES

- Includes a unique reagent containment solution that prevents solvent vapor accumulation and reagent spillage
- LED instrument health status indicator improves usability and simplifies maintenance
- Method-dedicated analytical console approach
- Up to 14 consoles can be run simultaneously
- Integrated color touchscreen display to monitor and adjust your method and chemistries (available with the NexaFlo™ 450)
- Three-speed, high-precision pump
- Choice of macro and micro flow manifolds
- Optional dual probe on all autosamplers
- Physical and software driven debubbling
- Wide range of samplers and accessories
- Compliance with reference methods

## EFFICIENCY AND PRODUCTIVITY

Full automation of all chemistries is handled by in-line pre-treatment and 100% automation: dialysis, distillation, UV digestion, injection, dilution, mixing, incubation and liquid/liquid extraction

The automation of complex chemistries is facilitated by the «full auto» module (optional), which automatically handles the external modules and accessories. This operation is easy to run using NexaFlo™ software.

The fully automated process includes programmable start-up and shutdown, preparation of standard solutions, pre- and post-dilution of off-range samples, and automatic rinsing. NexaFlo™ combines automation and modularity for superior performance.



- New compact design. Improved accessibility for servicing.
- Bubbles rate sensor and management
- Touchscreen LED 7" display (NexaFlo™ 450 only)
- Manifold leak detector
- Multiple path length flow cells 10 to 50 mm (longer path lengths can be defined) for a wide variety of analytical ranges, which guarantees the best accuracy (according to the parameter).
- Digestion or in-line distillation modules for automatic sample preparation.
- 3 detectors available:
  - UV/Vis colorimeter (in standard)
  - Flame photometer for Potassium and Sodium analysis
  - Fluorimeter

## NexaFLO

High precision 3-speed peristaltic pump

Easy analytical manifold change over

Integrated color touchscreen display (NexaFlo™ 450 only)

Unique reagent containment system prevents spillage and solvent vapor accumulation



User-friendly & powerful dedicated analytical software

NexaFlo™ includes sensors to improve usability and servicability (reagent bottle level, bubble, leakage, and pump health monitor)

## NEXAFLO™ SOFTWARE

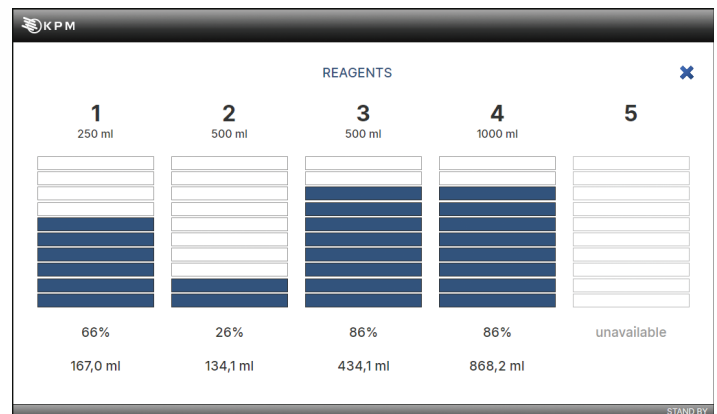
The NexaFlo™ analytical software is dedicated to Segmented Flow Analysis, a subsegment of Continuous Flow Analysis (CFA) technology. It prepares calibration standards, runs samples and quality controls, dilutes any out-of-range samples, prints reports and QC charts, exports data to LIMS, washes out the manifold and manages shutdown operations.

The software is user-friendly, efficient and powerful, designed to simplify your day-to-day operations. It runs the analysis of all parameters on each channel (up to 14 channels) and drives auto-samplers and accessories for automatic sample preparation. A simplified version of the NexaFlo™ software is run on NexaFlo™ 450 with a color display for easier diagnostics, maintenance, device setup, significantly improving the user experience.

During analysis, the software monitors all performance details (heating bath temperature, voltages, detector outputs) and alerts the user of any problems.

KPM		Network	AMMONIA
HOME	Reagents	Reagent bottle #1	250 ml
COMMANDS	Service	Reagent bottle #2	500 ml
SYSTEM		Reagent bottle #3	500 ml
		Reagent bottle #4	1000 ml
		Reagent bottle #5	No bottle
OD	0,0000		
Pump position	Reagent		
Pump speed	Macroflux		
Lamp status	ON		
Aux 1	ON		
Aux 2	OFF		

Reagent Configuration



Reagent Levels



Workplan Results

## AUTOSAMPLERS

	Number of positions	Dual probes	Dilutor	Ultrasonic processor
104	104	Optional <sup>1</sup>	Optional	Optional
XYZ	240/360 for 10mL tubes	Optional <sup>2</sup>	Optional	-

<sup>1</sup> Up to 4 probes    <sup>2</sup> Up to 3 probes

## ACCESSORIES

In-line digestion by Temperature or UV

Distillation module with integrated temperature regulation, for single and double in-line distillation. For use in applications such as cyanides, phenols index, volatile acidity and SO<sub>2</sub>.

## DETECTORS

<b>UV - Vis Colorimeter</b>	Standard	
<b>Flame Photometer</b>	Optional	Na and K analysis
<b>Fluorimeter</b>	Optional	

## MEASUREMENT

<b>Analytical Manifold</b>	Injection, Dilution, Mixing, Incubation, Distillation, Dialysis, UV Digestion, Liquid/Liquid Extraction
<b>Colorimeter</b>	Standard Range: 340 - 1100 nm Type: Monochromatic or dichromatic Analog/Digital Converter Resolution: 24 bits (16.8 Million Points) Optical Path: From 10 to 50 mm (longer path lengths can be defined) Linearity: From 0 to 2.5 Absorbance Units Debubbling: Mechanical or electronic control; built-in bubble detector

## SPECIFICATIONS

	<b>NexaFlo™ 400</b>	<b>NexaFlo™ 450</b>
<b>Local display</b>	None	7 in. color touchscreen
<b>Software</b>	NexaFlo™ Software (PC)	NexaFlo™ Software (PC and Console)
<b>LED system health</b>		Yes
<b>Leakage detector</b>		Yes
<b>Bubble detector</b>		Yes
<b>PC Operating system</b>		Windows 11
<b>Reagent drawer</b>		Up to 5 reagents
<b>Main pump</b>		3-Speed
<b>Integrated heating bath</b>		Optional
<b>Detector type</b>	UV/VIS colorimeter (default), flame photometer, fluorimeter	
<b>Flow cell</b>	10 mm to 50 mm path length (longer path lengths can be defined)	
<b>Networking</b>	LIMS compatible, Ethernet	
<b>Temperature</b>	0 - 35 °C (32 - 95 °F)	
<b>Humidity</b>	0 - 95% non-condensing	
<b>Weight</b>	15 kg (33 lbs)	
<b>Dimensions</b>	Optional	
<b>Power</b>	110-220V, 50/60 Hz	

### KPM Analytics

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