



Discrete and Continuous Flow Analysers

PEOPLE
YOU
CAN
TRUST

Discrete Analysers

High-capacity automated platforms

The KPM **SmartChem® series** of discrete analysers embody innovation in the field of wet chemistry. By automating complex photometric and electrochemical analyses, these instruments enable unprecedented optimisation of laboratory processes. Reliability, reproducibility, and compliance with environmental standards make this technology an essential asset for a wide range of applications, from environmental analysis to industrial research.

Key features of the KPM SmartChem® range:

- **Full automation:** Reduced human handling with fully automated and programmable test sequences
- **Environmental efficiency:** Use of low reagent volumes to minimise waste and reduce costs
- **Versatility:** Suitable for various applications (water, soil, food, beverages, chemistry)
- **Reusable cuvettes:** Integrated washing system ensuring a low plastic footprint
- **Increased productivity:** Up to 800 tests/hour dependent on model
- **Ease of use:** Intuitive and unified software interface across all models
- **Complete traceability:** Results exportable to a LIMS system
- **Customisation options:** Specific modules for particular needs such as nitrates or ISE



The KPM range of discrete analysers



SmartChem® 210

- Throughput: Up to 300 tests/hour
- Sampling capacity: 60 positions
- Onboard reagents: Up to 32

Compact and ideal for low-volume laboratories.



SmartChem® 450

- Throughput: Up to 450 tests/hour
- Sampling capacity: 100 positions
- Onboard reagents: Up to 72
- Advanced options such as pH, conductivity, and redox

Versatile for medium to large laboratories.



SmartChem® 600

- Throughput: Up to 600 tests/hour
- Sampling capacity: 200 positions
- Onboard reagents: Up to 100

Optimised for high-throughput analyses with three independent sampling arms.



SmartChem® 800

- Throughput: Up to 600 tests/hour
- Sampling capacity: 800 positions
- Onboard reagents: Up to 100

Optimised for high-throughput analyses with three independent sampling arms.

SmartChem® analysers offer a complete and customisable solution to meet the demands of modern laboratories.

Discrete Analysers:

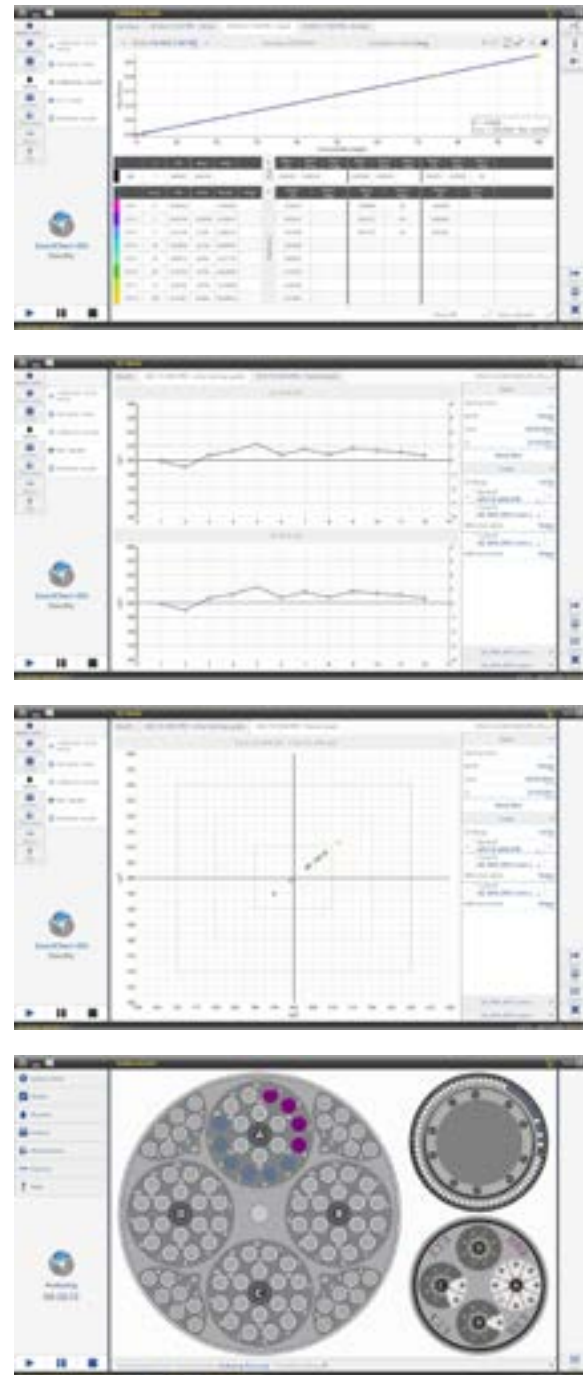
The software

The software for KPM SmartChem® analysers is designed to simplify and optimise the management of laboratory analyses. Thanks to an intuitive and standardised interface across all models, it allows for quick handling while ensuring complete control of analytical operations. Suitable for both novice and expert users, this software is a true ally for maximising efficiency and reliability of results.

Key features of the SmartChem® software:

- **Intuitive interface:** Complete graphical representation of the instrument for simplified configuration and use
- **Flexibility:** Adaptable to all user levels, from basic configuration to complex operations
- **Software uniformity:** Identical for all models (210, 450, 600), making version changes easy without additional training
- **Advanced analysis management:** Sequence planning, reflex repeats, and customisation of washing rules
- **Traceability and compliance:** Export of results to a LIMS system for rigorous tracking
- **Process automation:** Reduced human intervention thanks to fully programmed sequences
- **Comprehensive reports:** Generation of calibration curves and customised reports for immediate use
- **Method customisation:** Method configurator to meet the specific needs of laboratories

This software, the true brain of SmartChem® analysers, offers a perfect synergy between ease of use and analytical power, meeting the diverse needs of modern laboratories.



Discrete Analysers:

The advantages of the systems

Integrated cleaning: waste reduction and guaranteed performance

Integrated washing module:

- Allows the reuse of cuvettes, reducing plastic waste and associated costs (no disposable cuvettes)
- Compatible with technical polymer and optical glass cuvettes (on the SmartChem® 450 model)

Individual optical control of cuvettes (WBL):

- Ensures the absence of cross-contamination between samples
- Systematically checks the analytical performance of each cuvette before every analysis

Customisation of washing protocols:

- Allows the definition of specific cycles for particular methods (pH, conductivity, redox, etc.)

Ready-to-use reagents : simplicity and safety

Enzymatic and colorimetric reagents:

- Developed and validated to ensure optimal stability and reproducibility

Specific packaging:

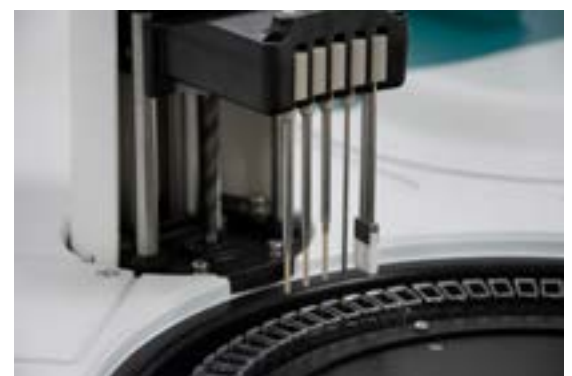
- Supplied in liquid form in bottles specially designed for SmartChem® analysers
- Simplify preparation and storage, while minimising handling

Suitable for various applications:

- Water and environment (nitrate, phosphate analyses, etc.)
- Soils, food, beverages (wine, beer)

Key advantages for laboratories

- **Reduction of consumables** thanks to the reuse of cuvettes
- **Optimisation of** operational costs and resources
- **Compliance with environmental standards** through the reduction of plastic waste
- **Increased analysis safety** thanks to ready-to-use reagents adapted to each application



Continuous flow analysers:

NexaFlo™

The NexaFlo™ range represents a major breakthrough in segmented flow analysis. As the successor to the FUTURA platform, this series of analysers combines automation, modularity, and safety to meet laboratory challenges. By integrating advanced technologies and new features, NexaFlo™ ensures increased productivity while meeting the most demanding standards for precision and reliability.

Key features of the NexaFlo™ range:

- **Full modularity:** Up to 14 independent consoles to handle simple or complex analyses
- **Advanced automation:** Programming of start-up, dilution, rinsing, and shutdown cycles without human intervention
- **Intuitive software:** Preparation of standards, quality control management, and direct export to LIMS
- **Enhanced safety:** Leak detectors, bubble management, and real-time system health indicators
- **Versatile technology:** Compatible with a wide range of parameters for water, soils, tobacco, and beverages
- **Eco-design:** Reagent containment system to prevent spills and vapors.
- **Inline pretreatment options:** Integrated modules for distillation, UV digestion, and liquid/liquid extraction



Continuous flow analysers:

Futura 3

The Futura 3 range redefines segmented flow analysis thanks to a unique combination of modularity, automation, and precision. Developed over decades of expertise in analytical chemistry, this platform offers a robust and flexible solution to meet the varied needs of laboratories. From the analysis of simple parameters to the most complex tests, Futura 3 is the essential ally to optimise your analytical processes.

Key features of the Futura 3 range:

- **Total automation:** Programming of starts, stops, and complex steps such as distillation and UV digestion.
- **Advanced modularity:** Possible configuration with up to 14 consoles to meet simple or multiple analyses
- **Intuitive software:** Management of calibrations, quality controls, dilutions, and data export to a LIMS
- **Energy efficiency:** Three-speed peristaltic pumps for precise flow management
- **Safety and reliability:** Leak, bubble detectors, and real-time diagnostics via an integrated LCD screen
- **Wide range of applications:** Parameters covering water, soils, tobacco, fertilisers, wines, and much more
- **Eco-design:** Integrated reagent drawer to minimise spills and improve waste management



The NexaFlo™ range



NexaFlo™ 400:

- No integrated display
- Management via NexaFlo™ software on PC
- Integrated bubble and leak detection
- Compatibility with UV/Vis detectors, flame photometer, and fluorimeter



NexaFlo™ 450:

- 7-inch color touchscreen for real-time monitoring of analyses
- Software accessible on both PC and console
- Advanced features for maintenance and simplified diagnostics. Multiple detectors for various applications (Phenol Index, Cyanide, etc.)

The Futura range



Futura 3 – Standard:

- Advanced automation: Preparation of standards and management of out-of-range samples with the diluter (optional)
- Analytical versatility: Compatible with UV/Vis detectors, flame photometers, and fluorimeters
- Flow management: Flow cells from 5 to 50 mm for optimal precision



Futura 3 – Full Auto:

- In-line processing: Integrated distillation, UV digestion, and liquid/liquid extraction
- Sampling capacity: Up to more than 300 positions with suitable autosamplers
- Automatic control of the different pretreatment modules

Test parameters by segment:

	Drinking water	Wastewater	Environment	Soil and plants	Tobacco	Fertilisers	Wine	Beer	Fruit juice	Dairy products	Power supply*
Acetaldehyde		•					•	•	•		
Acetic acid							•	•	•		
Citric acid							•		•		
D-gluconic acid							•				
D-lactic acid							•	•	•		
Formic acid		•	•								
L-ascorbic acid							•		•		
L-lactic acid							•	•	•		
L-malic acid							•		•		
Pyruvic acid							•				
Sorbic acid					•		•				
Tartaric acid							•				
Total acidity							•				
Volatile acidity					•		•				
Alkalinity	•			•		•					
Alkalinity (BPB)		•	•								
Alkalinity (methyl orange)	•	•	•								
Total alkaloids (as nicotine)					•						
Aldehyde			•								
Aluminum		•	•	•							•
Bitterness								•			
Starch					•						•
Biogenic amines							•				
Ammonia	•	•	•	•	•						
Amylase											•
Anthocyanins							•				
Aroma											
Calcium arsenate III							•				
Alpha-amino nitrogen							•	•			
Ammoniacal nitrogen							•				
Total Kjeldahl nitrogen					•						
Total nitrogen	•										
Alpha-amminic nitrogen											
Boron	•	•	•	•		•					
Bromide		•									
Calcium		•	•	•		•		•			
Catechins							•				
Free chlorine		•	•								
Chloride	•	•	•	•	•	•		•			•
Chromium					•						
Chromium VI	•	•	•	•							•
Conductivity (EC module)	•	•	•	•		•					
Color							•	•			
Copper		•	•	•		•	•		•		
Cyanide	•	•	•		•						

* Human and animal nutrition

	Drinking water	Wastewater	Environment	Soil and plants	Tobacco	Fertilisers	Wine	Beer	Fruit juice	Dairy products	Power supply*
Fluoride	•	•	•	•							
Formaldehyde	•	•	•							•	
Fructose							•				
Soluble galactose											•
Total galactose											•
Glucose							•				
Glucose - fructose							•		•		
Soluble glucose											•
Total glucose											•
Glycerol							•				
Hydrazine		•	•								
Hydroxyproline											•
Color index	•		•								
Phenol index	•	•	•	•		•					
Magnesium	•	•	•			•	•	•	•		
Manganese	•	•	•	•		•					
MBAS	•	•	•	•							
Molybdenum		•	•	•							
Nicotine					•						
Nitrates				•	•					•	•
Nitrates (cadmium coil)	•	•	•	•		•					
Nitrates (hydrazine)	•	•	•	•							•
Nitrates (Vanadium)	•	•	•	•		•					
Salting nitrates											•
Nitrite	•	•	•	•	•	•				•	•
Formol number									•		
ORP (EC module)	•	•	•	•		•					
Oxidizability	•										
pH	•	•	•	•		•	•				
Phosphates	•	•	•	•	•	•		•			•
Phosphorus				•		•					
Total phosphorus	•			•		•					
Polyacrylamide		•	•								
Polyphenol								•			
Total polyphenols											
Potassium		•	•	•	•	•	•	•			
Proteins				•							
Sucrose							•		•		
Silicates	•	•	•	•		•					
Free SO2							•				
Total SO2							•	•			
Sodium		•	•	•		•		•			
Enzymatic sugar							•				
Reducing sugars								•			•
Total reducing sugars					•						
Total sugars							•				
Sulfates	•	•	•	•		•		•			
Sulfide	•	•	•	•							
TC/TN						•					
TKN		•	•	•		•				•	•
TN		•	•	•		•					
TP		•	•								
Urea	•	•	•	•		•	•				
Zinc		•	•	•		•					

* Human and animal nutrition



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