

FIAstar™ 5000 Analyzer



FIAstar™ 5000 Analyzer. “Plug and Analyze” for ultimate ease of use in wet chemical analysis.

Unmatched simplicity – with the ‘Plug & Analyze’ concept

- Plug-in method cassettes, ready for use
- Software Method Applications – just calibrate and analyse your samples

Low detection limits and accurate results

- Dual-Wavelength detector for improved analytical performance
- Approved and validated analytical applications
- Analytical range from 5 ppb

Cost-efficient automation – even with smaller series of samples

- Ready for analysis in 10 min after start-up
- Up to 3 parameters can be analysed simultaneously
- Analysis time 40-70 seconds
- One single sample or up to hundreds per day

System description

The FIAstar™ 5000 is a fully automated system for the determination of Ammonium, Nitrate/Nitrite, Total Nitrogen, Phosphate, Total Phosphorus and other parameters, using latest ISO approved methods.

Each Analyzer Module comes with a built-in DDW detector, thermostat, injection valve and pump. The entire system is controlled by the FIAstar 5000 software SoFIA.

Method Cassettes

Pre-configured Method Cassettes are inserted and/or exchanged all in one grip and automatically connected/disconnected. Starting up and closing down the system is a matter of minutes.

SoFIA software

Predefined methods and speed buttons for frequently used functions allow for the quick and easy run of samples.

QC routines and GLP routine for detection of analytical errors contribute to accurate results.

System description*:

- FIAstar™ 5000 Analyzer Module, with injection valve, pump, and DDW detector
- FIAstar 5000 software SoFIA Windows™ XP, Service Pack 3
- Sampler 5027 for 120 samples, 12 ml cups and side tray for standards/QC or 64 samples / 30 ml cups

Method Cassettes, complete

- Method Cassette Nitrate/Nitrite and Total Nitrogen
- Method Cassette Dialysis Nitrate/Nitrite
- Method Cassette Ammonium
- Method Cassette Phosphate/Total Phosphorus
- Method Cassette TKN (Total Kjeldahl Nitrogen)

Additional Method Cassettes, filters have to be ordered separately:

Aluminium Method Cassette
 Boron Method Cassette
 Chloride Method Cassette
 Calcium Method Cassette
 Cyanide Method Cassette
 Iron Method Cassette
 Silica Method Cassette
 Blank Method Cassette, with set of pump tubes and mixing coils.

Performance data :**FIAstar™ 5000 Analyzer**

Principle: Flow Injection Analysis (FIA)
 Injector: 6 port variable volume rotary injector
 Sample size: 20 - 400 µl
 Pump: Peristaltic pump with stand-by feature
 Thermostat: Built in thermostat, 35°C – 120°C, ± 1°
 Method Cassette: Reagent consumption 0.3 - 2 ml/sample
 Detector: Digital Dual Wavelength photometer with automatic background correction
 Flow cell: 10 mm path length; 18 µl volume
 Wavelength range: 400 – 1 000 nm plug-in filters
 Absorbance interval: 0 – 2,5 AU
 Resolution: 0,001 mAU
 Reproducibility: Better than 1 % r.s.d.

SoFIA software

Calibration points: Up to 10 standards
 Calibration curve fit: Linear or second order ISO 8466
 QC&GLP routines: Check samples; multiple sample and standard runs; automatic recalibration; out of reagent, out of sample, and out of range warnings. Password protected user levels

Sampler 5027

Principle: Circular
 Sample trays: For 64 or 120 samples
 Cups/volume: 64 cups, 30 ml or 120 cups, 12 ml
 Side tray: 10 positions for standards and QC

Installation Requirements**FIAstar™ 5000 Analyzer**

Power supply: 100 – 240 V AC, 50 – 60 Hz (24 V DC)
 Dimensions
 W × D × H: 625 × 310 × 145 mm
 Weight: 8,7 kg
 Power consumption: 70 W
 Connection to PC: USB (Universal Serial Bus)

1,44 MB floppy or CD drive
 One USB port for each connected FIA module
 One RS 232 port for communication with 5027 Sampler
 Additional RS 232 port for data transfer to LIMS

PC specifications:

PC with Windows™ XP, Service Pack 3 installed
 At least 32 MB RAM
 40 MB available space on hard disc drive

5027 Sampler

Power Supply: 100/115/130/200/240 V, 50 – 60 Hz
 Dimensions W×D×H: 625 × 400 × 260 mm
 Weight : 14 kg
 Power consumption: 20 W

* Ordering information: See separate price-list

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