



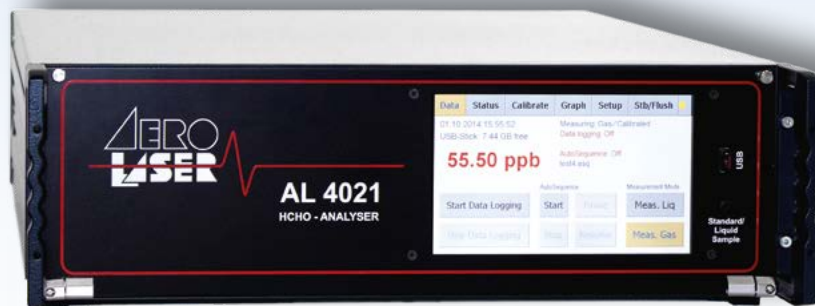
# AL 4021

CONTINUOUS FORMALDEHYDE MONITOR  
FOR AIR AND WATER SAMPLES IN PPB RANGE

# AL4021 HCHO ANALYZER

## PRECISION IN EVERY MOLECULE

In the quest for safer environments and superior product quality, the AL4021 formaldehyde analyzer emerges as a vital tool. Designed to meet the rigorous demands of modern industries, health and safety and environmental monitoring, this advanced analyzer combines unparalleled sensitivity and precision with ease of use, offering an unmatched solution for monitoring formaldehyde emissions and concentrations in both gases and liquids.



### Transforming operations - guarding air quality

The AL4021 goes beyond mere measurement; it is a tool for process optimization and control, directly contributing to the superior quality of your products. Its traceability feature ensures that every measurement can be tracked and verified, providing a solid foundation for quality assurance and regulatory compliance.

By providing precise, real-time measurements of formaldehyde levels, it plays a crucial role in identifying and mitigating airborne contaminants, monitoring and safeguarding indoor air quality, directly contributing to health and safety standards. In settings ranging from industrial workplaces to residential areas, the AL4021 ensures that the air we breathe is monitored and maintained within safe limits, protecting well-being and enhancing quality of life.

Its ability to detect even minute concentrations of formaldehyde makes it an indispensable asset in the continuous effort to create healthier, safer environments for everyone.

### Technical excellence - unmatched performance

The AL4021 is engineered with cutting-edge technology to offer the highest sensitivity and resolution in the detection of formaldehyde. Accurately capturing even the most subtle variations, it is suitable for a wide range of applications in both liquid and gas phases.

- ▶ Highest sensitivity and resolution
- ▶ Applications in both liquid and gas phases
- ▶ Continuous online measurements
- ▶ Automated calibration guarantees consistent and reliable results
- ▶ Parallel measurement using up to 16 sample chambers
- ▶ Integration and stand-alone use
- ▶ Remote control and data storage
- ▶ Robust design = reliable performance even in harsh environments

### Simplifying solutions - unparalleled customer value

Simplicity is key with the AL4021. Its fully automated operation and intuitive design ensure that it can be easily used by anyone in your team, eliminating the need for specialized training.

- ▶ Fully automated operation
- ▶ Intuitive design – no need for specialized training
- ▶ Reduced the workload – ease of use and parallel measurement applications in both liquid and gas phases
- ▶ Low maintenance requirements



## Empowering industries - cleaner, safer environments for all

In modern industry and daily life, creating safe and clean environments is absolutely essential! This goal unites diverse sectors, transcending boundaries with ease. The AL4021 formaldehyde analyzer is a reliable solution that perfectly fulfills the requirements of a wide range of applications.

Example: Furniture made from wood products like chipboard or MDF is a potential source of formaldehyde emission. The AL4021 helps furniture manufacturers and testing institutes to assess and minimize this risk, ensuring the safety of furniture used in homes, offices, and public spaces.

- ▶ Emission control
- ▶ Process control
- ▶ Indoor air quality measurement
- ▶ Health and safety
- ▶ Environmental / climate / atmospheric monitoring
- ▶ Wood panel manufacturing
- ▶ Chemical industry
- ▶ Textiles and fabrics production
- ▶ Building and construction materials
- ▶ Automotive interiors
- ▶ Testing institutes, research institutes





## Advancing safety, shaping tomorrow

The AL4021 formaldehyde analyzer is not just an instrument; it's a cornerstone of innovation and trust in industries where accuracy is of high significance. Delivering precise, dependable measurements, it empowers sectors to surpass the benchmarks of safety, quality, and environmental stewardship. Beyond addressing current requirements, the AL4021 paves the way for a future, where enhanced well-being and sustainability are within reach for every industry it serves.

Opt for the AL4021, where each measurement contributes to a healthier, more sustainable, and safer environment.

## Specifications

Detection technique:	Continuous, using fluorimetric reaction (acetyl-acetone)
Detection limit:	<100ppt (gaseous), <150ng/liter eq. $<2 \times 10^{-9}$ molar (liquid)
Linear range:	0.1ppb to 3000ppb (gaseous), 150ng/liter - 5mg/liter (liquid)
Noise:	2% full scale
Time resolution:	~90sec (10/90)
Sample:	Liquid and gas ( $>0^{\circ}\text{C}$ to $+120^{\circ}\text{C}$ )
Calibration:	Automatic, using liquid standard
Integration:	RS232 and LAN interface, data logging software available
Operation data visualization:	Graphic user interface (7" touch panel) and remote via RS232/LAN
Data storage:	USB drive and internal data backup
Weight and dimension:	15kg, fit for 19" rack (whd: 45cm $\times$ 15cm $\times$ 56cm)
Power requirements:	110VAC / 220VAC, 110W, 24VDC on request

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