

# Fast Simultaneous Gas Analysis

Our instruments are built to ensure the safety of workers and protect production equipment from potential damage. They are equipped with advanced sensors that can accurately detect different gases, providing real-time monitoring and reliable results. Whether you're dealing with hazardous gases or volatile compounds, our instruments are designed to keep you safe. Analyze simultaneously several substances up to 20 seconds.

Portability is another standout feature of our instruments. They are designed to be lightweight and compact, allowing for easy transport and convenient use in different locations. Whether you're moving through tight spaces or navigating rugged terrain, our instruments will be your reliable companion.

To further enhance its capabilities, our product can be equipped with a high-temperature detector. This feature makes it suitable for applications where high temperatures are involved, ensuring accurate and efficient gas detection in extreme conditions.

When it comes to safety and reliability, our portable multi-gas detection instruments are the ultimate solution. Don't compromise on the well-being of your workers and the integrity of your operations. Choose our cutting-edge instruments and experience the peace of mind that comes with having superior gas detection technology at your fingertips.

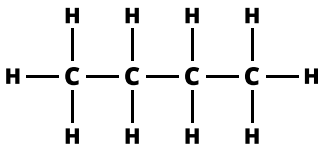


## Simultaneous analysis of gases. Detect up to 16 free combinations of gases.



### Proven sensitivity

Comprehensive qualitative information concerning the identity and chemical class of unknowns in a sample is gained. The method also gives reliable quantitative results. Designed for routine labs across various industry applications for optimum operational efficiency.



### Multi gas detection of specific compounds

With its high sensitivity, it is particularly suitable for tasks such as gas leakage rescue, underground pipelines, and mining operations. This powerful device ensures the safety of workers and protects production equipment from potential damage. Equipped with various sensors, it can detect different gases, offering a wide range of functions, user-friendly operation, portability, and excellent shock resistance.

The range of gases that can be detected is extensive, ranging from combustible gases like LEL and methane to harmful substances such as carbon monoxide, hydrogen sulfide, and chlorine. Each gas has its specific measuring range, allowing for precise monitoring of its concentration levels. Additionally, the availability of optional ranges for certain gases provides flexibility in customizing the detection capabilities based on specific requirements.

Resolution ratio is another important aspect in gas detection. It determines the smallest increment of change in gas concentration that the analyzer can detect accurately. The resolution ratio varies depending on the gas and its measuring range. For instance, gases like TVOC and ozone have resolution ratios of 0.1/1 PPM, indicating that they can detect even minute changes in concentration levels.

Response time is a critical factor in gas detection systems. It refers to the time taken by the analyzer to provide a reading after the gas sample is introduced. The response time varies for different gases and is typically kept within an acceptable range to enable swift decision-making and prompt action in case of any abnormal readings.

## Product Information

### The below gases are available

The system can be configured to detect different gases by utilizing different types of sensors. This versatility enables users to address specific gas detection needs based on the unique compounds present in their environment. Whether it is volatile organic compounds (VOCs), combustible gases, toxic gases, or other hazardous substances, the GC-UV INSCAN Series can be customized accordingly.

Gas Detected	Measuring Range	Optional Range	Resolution Ratio	Response Time
LEL - Combustible Gas	0-100% LEL	0-100% VOL (Infrared or Catalytic)	1% LEL / 1% VOL	≤10s
Carbon Monoxide	0-1000 PPM	0-500/2000/5000 PPM	0.1/1 PPM	≤10s
TVOC	0-100 PPM	0-100 PPM	0.1/1 PPM	≤15s
Hydrogen	0-100% LEL	0-1000 PPM	1% LEL / 1 PPM	≤15s
Natural Gas	0-100% LEL	0-100% LEL	1% LEL	≤10s
Oxygen (O2)	0-30% VOL	0-30%/0-100% VOL	0.1% VOL	≤10s
Ozone	0-10 PPM	0-20/100 PPM	0.01/0.1 PPM	≤15s
Hydrogen Sulfide (H2S)	0-100 PPM	0-50/200/1000 PPM	1/0.1 PPM	≤10s
Methane (CH4)	0-100% LEL	0-100% VOL	1% LEL / 1% VOL	≤10s
Fluorine	0-10 PPM	0-1/10 PPM	1/0.1 PPM	≤15s
Hydrogen Chloride	0-20 PPM	0-20/50/100 PPM	0.01/0.1 PPM	≤15s
Nitrogen (N2)	0-30% VOL	0-30%/100% VOL	0.1% LEL / 1 PPM	≤10s
Hydrogen	0-100% LEL	0-1000 PPM	1% LEL / 0.1 PPM	≤15s
Chlorine	0-20 PPM	0-10/100 PPM	0.1 PPM	≤15s
Ammonia Gas	0-100 PPM	0-50/500/1000 PPM	1/0.1 PPM	≤15s
Oxynitride	0-20 PPM	0-50/1000 PPM	0.1/1 PPM	
CO2	0-5000 PPM	Possible to customize	Ratio depends on range	≤20s
Ethylene Bromide	0-100 PPM	Possible to customize	Ratio depends on range	≤20s
NH3	0-100 PPM	Possible to customize	Ratio depends on range	≤20s
Formaldehyde	0-20 PPM	Possible to customize	Ratio depends on range	≤20s
Ethylene Oxide	0-100 PPM	Possible to customize	Ratio depends on range	≤20s
Benzene	0-20 PPM	Possible to customize	Ratio depends on range	≤20s
Toluene	0-20 PPM	Possible to customize	Ratio depends on range	≤20s
Acetaldehyde	0-100 PPM	Possible to customize	Ratio depends on range	≤20s
Xylene	0-20 PPM	Possible to customize	Ratio depends on range	≤20s
CH3Br (Methyl Bromide)	0-1000 PPM	Possible to customize	Ratio depends on range	≤20s
Styrene	0-100 PPM	Possible to customize	Ratio depends on range	≤20s
VOC	0-100 PPM	Possible to customize	Ratio depends on range	≤20s
CH4	0-100% VOL	Possible to customize	Ratio depends on range	≤20s

# Standard gases and their respective industry



Gas Detected	Industries
LEL - Combustible Gas	Oil and gas, chemical manufacturing, mining, refineries, petrochemicals
Carbon Monoxide	Oil and gas, chemical manufacturing, mining, refineries, pharmaceuticals, automotive, combustion processes, laboratories
TVOC	Indoor air quality monitoring, chemical manufacturing, laboratories, building ventilation systems
Hydrogen	Oil and gas, chemical manufacturing, fuel cell technology, hydrogen production and storage facilities, laboratories
Natural Gas	Oil and gas, energy production, residential and commercial heating and cooking, power generation
Oxygen (O2)	Medical facilities, laboratories, metal fabrication, aerospace, diving, wastewater treatment, combustion processes
Ozone	Environmental monitoring, air quality control, water treatment, ozone generators
Hydrogen Sulfide (H2S)	Oil and gas, mining, wastewater treatment, pulp and paper, agriculture, refineries, petrochemicals, laboratories
Methane (CH4)	Oil and gas, biogas production, anaerobic digestion, landfills, agriculture, wastewater treatment, laboratories
Fluorine	Semiconductor manufacturing, chemical manufacturing, electronics industry, glass production, refrigeration systems
Hydrogen Chloride	Chemical manufacturing, metal refining, waste incineration, PVC production, laboratories
Nitrogen (N2)	Food and beverage packaging, pharmaceuticals, metal fabrication, electronics manufacturing, inerting systems, laboratories
Chlorine	Water treatment, chemical manufacturing, disinfection processes, swimming pools, pulp and paper industry
Ammonia Gas	Fertilizer production, refrigeration systems, chemical manufacturing, food processing, water treatment, laboratories
Oxynitride	Semiconductor manufacturing, electronics industry, optical coatings
CO2	Greenhouse gas monitoring, environmental research, indoor air quality monitoring, carbon capture and storage, fermentation processes, laboratories
CO	Automotive emissions control, combustion processes, industrial safety, laboratories
Ethylene Bromide	Pesticide manufacturing, fumigation, fire suppression systems
NH3	Agriculture (fertilizer application, livestock management), refrigeration systems, chemical manufacturing, laboratories
Formaldehyde	Building materials, furniture manufacturing, adhesives, textiles, laboratories, indoor air quality monitoring
Ethylene Oxide	Sterilization processes (hospitals, pharmaceuticals), medical equipment manufacturing, laboratory equipment sterilization, fumigation
Benzene	Petroleum refining, chemical manufacturing, industrial solvents, gasoline production
Toluene	Paints and coatings, chemical manufacturing, printing industry, adhesives, laboratories
Acetaldehyde	Chemical manufacturing, plastics production, resins, solvents, laboratories
Xylene	Chemical manufacturing, paints and coatings, printing industry, laboratory reagents
CH3Br (Methyl Bromide)	Fumigation, agriculture (pest control), soil sterilization, laboratory applications
Styrene	Plastics and rubber manufacturing, composite materials, packaging, insulation, laboratory reagents
VOC	Indoor air quality monitoring, chemical manufacturing, paint and coatings, printing industry, laboratories, emissions control
CH4	Biogas production, anaerobic digestion, landfill gas monitoring, natural gas industry, laboratories



## Advantages of the GC-UV INSCAN Series

Labio introduces its new generation of GC/UV instruments and respective gas analyzers that revolutionize analytical chemistry. Designed to streamline workflows and enhance efficiency, these cutting-edge instruments significantly reduce instrument downtime and optimize run times, enabling maximum productivity in analytical labs.

### The new Gold Standard

The Labio GC/UV INSCAN Series incorporate state-of-the-art intelligent features that minimize downtime and ensure uninterrupted operation. This intelligent technology not only saves valuable time but also enhances instrument reliability and extends the lifespan of the system.

### Use outside laboratory environment

The instrumental constructions of the INSCAN series is relatively simple and compact giving possibilities for making analysis in close connection with the sampling site. This possibility is simplified by the low demand for a laboratory infrastructure. The simplicity also gives short start up time as well as relatively low instrumental cost.

### Worlds fastest GC measurement

The Labio GC/UV instruments offer optimized run times, allowing for faster analysis without compromising data quality. The intelligent algorithms and efficient sample handling mechanisms enable swift sample injection, precise separation, and rapid detection, resulting in shorter analytical cycles. By accelerating analysis times, labs can increase throughput, process more samples, and deliver results in a timely manner, thereby improving overall productivity.

### Worlds fastest Sensor Analysis

The Labio INSCAN 176 Portable, part of the GC-UV INSCAN Series offers fast air and gas analysis within 20 seconds.

Product Specification	Value
Sampling mode	Built-in pump suction type
Response time	≤30s
Indication error	≤3%FS
Work environment	Temperature: -10°C to 55°C
	Relative humidity: ≤93% (non-condensing)
Storage environment	Temperature: -10°C to 55°C
	Relative humidity: ≤93% (no condensation)
Preheating time	≤90s
Indication mode	LCD color touch LCD display
Charging time	Not less than 10 hours
Continuous working time	Not less than 15 hours
Battery specification	DC7.2v-26Ah lithium-ion rechargeable battery
Weight	About 4.75kg
Size	293x110x210(mm)

This information is subject to change without notice.