

Gas Analyzer



# 5.0 H2 Purity ANALYZER

Ensuring Quality and safety,  
in the renewable energy market

Purity Grade: **99.999 %**

Pollution Sensitivity: **10 ppm**

Small, Fast, Online: **<10 sec.**

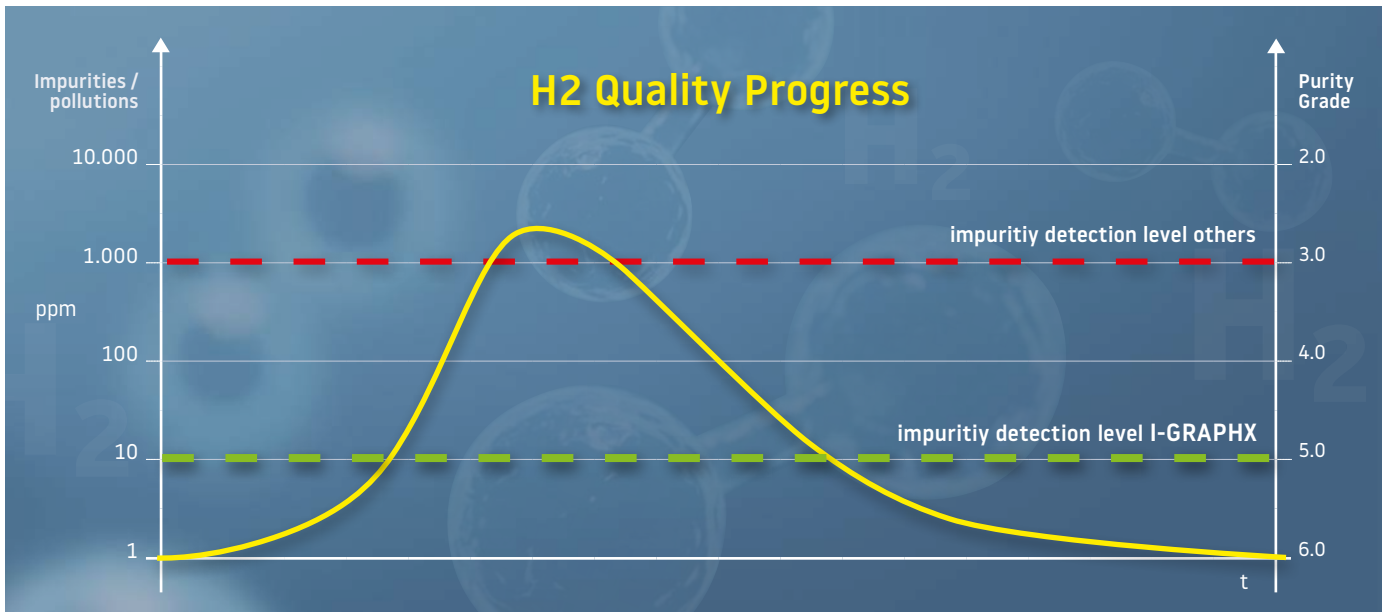
Data exchange: **MODBUS, 20 mA**

More Products: Micro gas chromatography | H2 analyzers | Micro dosing | Electronic pressure control units | Accesories

***Biomass / Renewable Energy / Storage / Electrolysis /  
Pyrolysis / FuelCell / Carbon capturing / Syngas /  
Synthesis / E-Fuels / Methanol***



We reserve the right to make changes to technical data, dimensions, weights, construction and products. The illustrations are non-binding and show any special equipment.



### Hydrogen purity measurement – measuring the smallest impurities very easily

The **PA Purity Analyzer** measures hydrogen contamination in ppm-Range quickly and easily up to a gas purity of **99.999% (Grade 5.0)**.

On the way to greenhouse gas neutrality, the energy source H<sub>2</sub> will play an important role in the future. The exact determination of the hydrogen quality therefore plays a major role in many areas of industry as many machines, engines and industrial applications require a high degree of purity of the sustainable energy carrier H<sub>2</sub>. So far, **precise online measurement of hydrogen purity** has only been possible with highly complex analytical methods, or time-consuming samples have to be sent to laboratories for analysis. An economical, fast, precise and comprehensive recording of the H<sub>2</sub> quality was not possible until now.

Our **Purity Analyzer PA**, which can be used universally in all production processes, transfer and filling stations related to hydrogen makes affordable precise **H<sub>2</sub> online Analyzing** possible by now. The measuring section used in the PA is an in-house development of **I-GRAPHX GmbH**. Like all our analysis systems, it is manufactured using **MEMS technology**. This special structure enables fast and high-precision continuous measurement of the H<sub>2</sub> quality. The miniaturization and use of the analytical connection technology enable the problem-free use of the PA Analyzer for the very volatile hydrogen.

Optionally, the **PA Analyzer** can also be used for other high-purity gases such as **He, Ar, N<sub>2</sub>, CO<sub>2</sub>**, etc. in order to carry out quick measurements of the total contamination.

#### Properties:

- Accurate and long-term stable analysis
- Monitoring of continuous processes
- Very fast H<sub>2</sub> detection
- low operating costs, minimal maintenance

#### Technical data:

- Electronic pressure regulation
- Measurement range: 10 ppm to 100 %
- Measurement results: Vol % resolution 1 ppm
- Power supply: 24 VDC, 0.5 A
- Ambient temperature: -5 °C to +50 °C
- Accuracy: < 0.1 % v.M

#### Connections:

- Media: 1/16" or 1/8" Swagelok tube fitting (others on request)
- RS232, RS485 (optional)
- Monitoring: MODBUS RTU, Webserver via HMI (optional)
- Analog OUT: 4-20 mA (optional)

#### Unit size:

- W x H x D: 220 x 120 x 80 mm
- Weight: ca. 2.2 kg

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