

2026 Hydrogen Peroxide Analyzer

From Metrohm Process Analytics

Hydrogen peroxide (H_2O_2) is a strong oxidizing agent and a bactericide. Its decomposition does not form any harmful disinfection byproducts (DBPs), but rather water and oxygen. This property makes it an attractive chemical replacement for other oxidizing agents, such as chlorine (Cl_2), which is an irritant and can cause health problems like asthma via long-term exposure. Some of the main uses of H_2O_2 are in the production of organic peroxides (e.g. propylene oxide), as a bleaching agent especially in the pulp & paper sector, and as a disinfectant in the food & beverage industry.

Because of its role in many different (production) processes, it is of vital importance to closely monitor the concentration. The **2026 Hydrogen Peroxide process analyzer** from Metrohm Process Analytics is the most straightforward and easy-to-use tool to do so online.

About the Hydrogen Peroxide application

H_2O_2 is determined via potassium permanganate titration. The detection is performed with a Metrohm platinum electrode. The analyzer is able to handle a wide range of H_2O_2 concentrations, from **mg/L to g/L**.



Benefits for online analysis

- Protect expensive company assets by monitoring your processes
- Process data available at your fingertips 24/7 means no waiting for slow, manual laboratory methods
- Increased safety for employees – no manual sampling necessary, no exposure to hazardous environments
- Save money by reducing downtime: analyzer sends alarms for out-of-specification values which inform the operator sooner

Applications for H_2O_2

- ... in CMP slurries / (semiconductors/PCB)
- ... in production of detergents / (chem./personal care)
- ... as a disinfectant / (food & beverage/cooling towers)
- ... as an oxidant in process / (chemical)
- ... in cosmetics (toothpaste, hair dye) / (personal care)
- ... in wastewater treatment processes / (wastewater)
- ... in the Chemical Dilution System / (semiconductors)

H_2O_2 analysis performed safely online

- Hydrogen peroxide (H_2O_2) can be measured in 1 or 2 sample streams
- Compact footprint for tight industrial spaces: 326 x 273 mm
- Safe, rugged enclosure designed to IP66 specifications is ideal for process environments
- A 7" full color touchscreen shows trend graphs and allows action modifications
- Remote access and control via Ethernet and Modbus TCP/IP, with USB for data export
- Easy maintenance due to simplicity of the layout
- Automatic data and/or alarm transfer to a DCS system

