

2026 Titrolyzer

2029 Process Photometer



Powerful and compact single method online analyzers

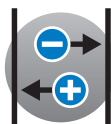
Metrohm Process Analytics: Your partner for chemical analysis



Titration



Photometry



Electrochemistry



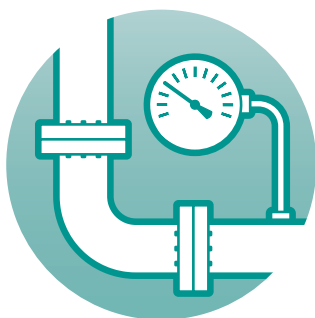
Spectroscopy



Ion Chromatography

Metrohm Process Analytics is the brandname representing the well-known Applikon wet chemistry process analyzers as well as the Metrohm NIRSystems instruments for process analysis. Under this brandname we offer analytical systems for **titration, spectroscopy, electrochemistry, photometry, ion chromatography**, as well as **ion-selective measurements**.

Manufactured in The Netherlands since 1978, our analyzers have a unique reputation for their reliability and robustness. With thousands of installations worldwide, we are a world leader in chemical process analysis.



Process solutions

The Metrohm process analyzers take the famous Metrohm laboratory solutions a step further. Fully automated, online customizable analyzers facilitate process monitoring across a wide array of applications.

Drawing on our core competencies in several areas, we leverage our applications knowledge to create reliable solutions for process analysis which in turn:

- Optimize process efficiency
- Decrease chemical consumption and rejects
- Create a safer work environment
- Protect company assets

World class after-sales support

With our expertise and experience we do not just offer process analyzers, but an **integrated solution** to the end user. This helps to optimize process efficiency while reducing operation cost. Real time analysis as an integrated part of process control and automation will help:

- Increase your yields and profit
- Improve production quality
- Decrease unscheduled downtime

Whether it is replacing an existing analyzer, developing a new analytical solution, or answering your technical questions, we are here for you. Our **local** presence with offices and subsidiaries in **over 50 countries** allow us to offer you fast and efficient service and support.



More value in a smaller footprint

Meet the newest additions to the Metrohm Process Analytics portfolio, the **2026 Titrolyzer** and the **2029 Process Photometer**. These versatile process analyzers are capable of measuring different analytes with either titration or photometric measurements in up to 2 sample streams.

Checking trend charts, reagent levels, alarms, and even adjusting the program are made even easier with the new graphical user interface.

Add **more value** to your plant and **increase your profitability** by optimizing your process efficiency with online process analysis.

03



2026 Titrolyzer:
configured for autocalibrated pH measurements

Features

- Compact footprint for constricted areas: 326 × 273 mm
- Analyzer housing rated IP 66, powder coated stainless steel for corrosion resistance
- Dual compartment enclosure: Ensures complete separation between the electronics and the wet part, therefore no leakages possible into the electronics part
- Graphical user interface with 7" Full Color Touchscreen
- Simplicity of the wet part layout makes maintenance easy
- High resolution dosing system for accurate and reproducible results
- Wall mount included. Optional: table stand, reagent cabinet, and purge cabinet.

2026 Titrolyzer

04

Analytical Method: Titration

Titration is one of the most frequently applied and proven analysis techniques. This can be explained by the fact that it uses an absolute analysis method to deliver the most accurate results you can depend on. This is also reflected in the following analysis modes available in the 2026 Titrolyzer:

- Titrations
- Ion selective measurement (ISE)
- pH direct measurement

When critical inline pH sensors fail

In harsh industrial processes in-situ pH sensors are prone to fouling without the capability for automatic cleaning schedules. Extreme effects of temperature, pressure changes, and presence of solids can reduce the lifetime of the electrode.

To overcome these everyday challenges, the 2026 Titrolyzer can perform pH measurements batchwise with **automatic cleaning and calibration**. The condition of the electrode is automatically monitored, reducing maintenance for plant operators.

The analyzer is also equipped with **automatic temperature compensation** based on the sample temperature, ensuring the highest accuracy of your results.



2026 Titrolyzer:
configured to monitor water hardness

Applications fitting several market needs

The 2026 Titrolyzer can be your partner to secure the safety of your water sources and be an integral part of improving your process.

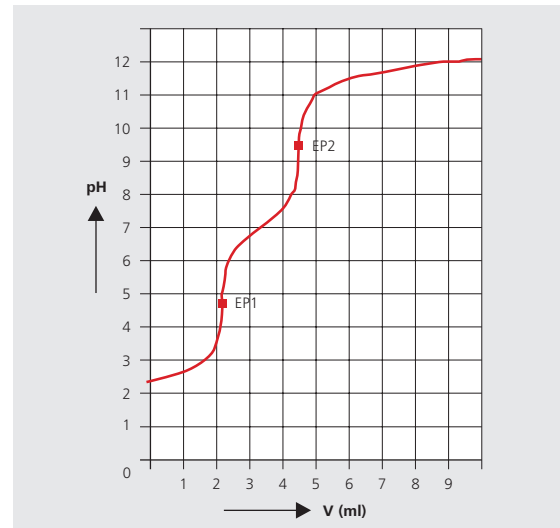
Many reliable applications are available for the 2026 Titrolyzer, giving you a **head start on analysis** with the help of our expert chemical knowledge:

- Sulfuric acid
- Chloride
- Hydrogen Peroxide
- Hardness [$\text{Ca}^{2+}/\text{Mg}^{2+}$]
- Caustic [NaOH] + Carbonate [CO_3^{2-}]
- Hydrochloric Acid
- Copper
- Online pH measurement
- Cyanide
- Hydrogen Fluoride
- and much more



Less maintenance, more uptime

The reaction vessel module has been improved even further. The stirrer assembly contains no motor or moving parts, ensuring a longer lifespan of the analyzer.

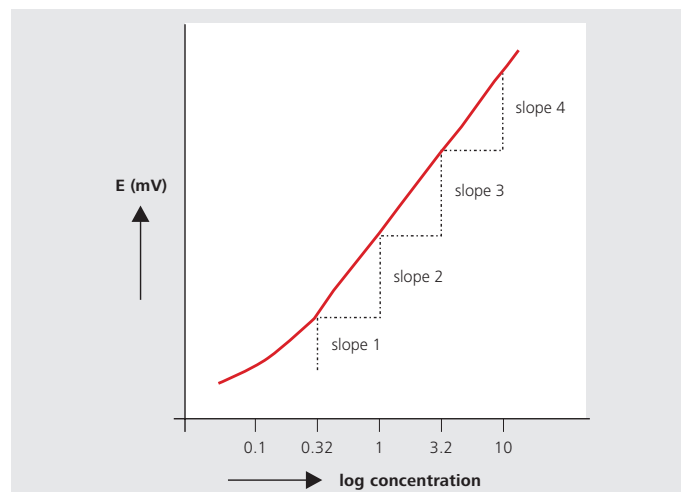


Titration curve with two inflection points

High precision burette for ion measurement

The 2026 Titrolyzer includes a high precision burette to perform dynamic standard addition measurements and calibrations.

The burette is fitted with a viewing window, enabling visual inspection of the contents to determine the presence of the reagent.



Higher precision due to multi-slope calibration and accurate dosing system.

2029 Process Photometer

06

Analytical Method: Photometry

The 2029 Process Photometer performs photometric absorption measurements in the visible light range.

- Photometric measurements
- Differential absorbance measurements

Differential absorbance photometry automatically detects the color development stabilization within an optimum time interval while eliminating the background sample color that could interfere with the measurement. Both features ensure a robust system and accurate results for process control.

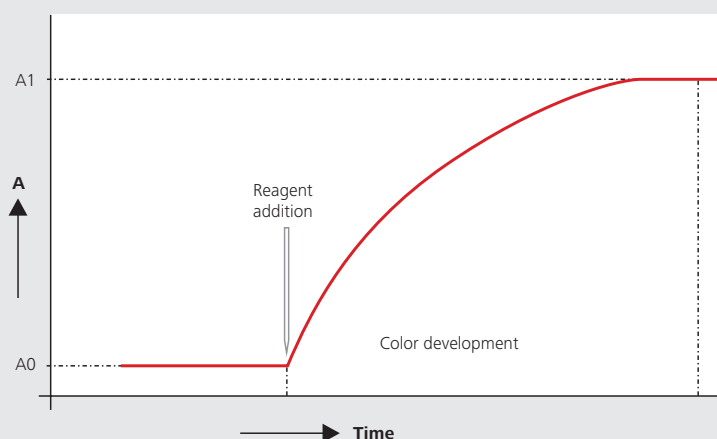
- Thermostated cuvette with 3 cm light path, insensitive to sample temperature variations
- Insensitive to cuvette fouling, background sample color or aging of light source
- High accuracy and repeatability
- High sensitivity, typically in the low $\mu\text{g/L}$
- Processes linear as well as curved calibration lines, offering wide measuring ranges

Easily move to online measurement

Photometric laboratory methods can be easily transferred to the 2029 Process Photometer, eliminating any bias in results for improved process validation.



2029 Process Photometer:
configured for iron measurements



(L) Thermostated cuvette module at the heart of the 2029 Process Photometer. (R) Drift-controlled measured value acceptance.

Photometric applications

The 2029 Process Photometer is suitable for a wide variety of photometric applications in water and wastewater.

- Phosphate, Silica, Chlorine
- Cyanide
- Iron, Nickel, Zinc
- Ammonia, Nitrate, Nitrite
- Copper, Chromium
- Calcium and Magnesium
- and more

Technical specifications

Dimensions (W × H × D):	326 × 572 × 273 mm
Weight:	21 kg
Ingress Protection:	IP66
Number of Sample Streams:	1–2

Process Communication Protocols

Connectivity options offered for the 2026 Titrolyzer and 2029 Process Photometer include:

- **USB:** for portable memory media (Memory stick)
- **Ethernet:** for remote operation
- **Modbus TCP/IP:** for data communication

Preconditioning Units and Shelters

Customized to your needs

Metrohm Applikon can engineer and supply virtually any configuration.

Contact us for more details.

info@metrohm-applikon.com



Preconditioning panel, custom built by engineers at our facility in Schiedam, The Netherlands.

www.metrohm.com