

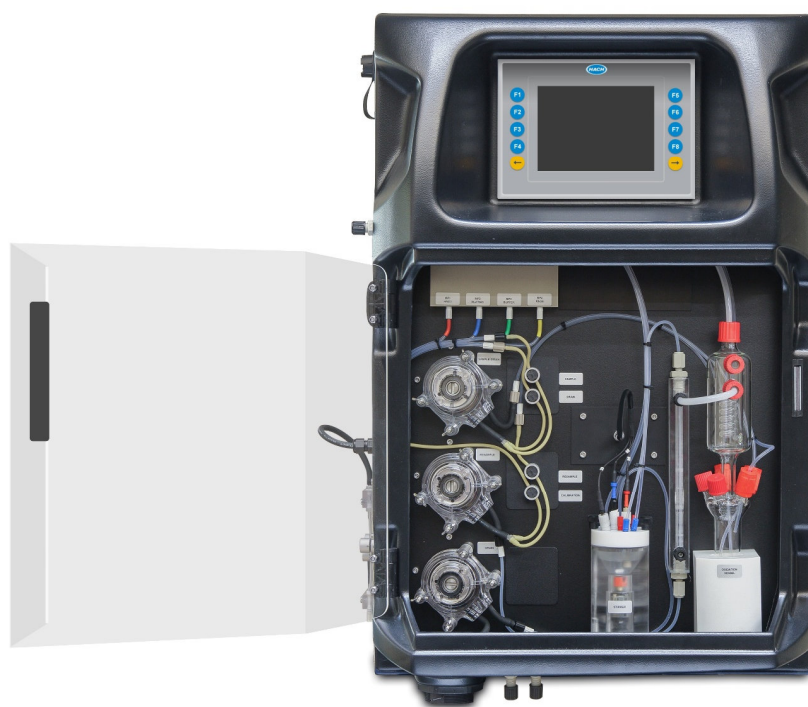
EZ6000 SERIES

On-line Trace Metal Analyzers

Analysis of Lead

Applications

- Drinking water
- Surface water
- Industrial effluent



Single and multiple parameter analysis of trace metals in water by on-line voltammetry

About the 6000 Series

The **EZ6000 Series** of On-line Trace Metal Analyzers are based on the technology of stripping voltammetry, a sensitive analytical technique that can be automated for the determination of trace levels of metals in water. For many metals the **EZ6000 Series** boasts limits of quantification in the low ppb range, comparing the technique favorably with AAS or ICP analysis.

Single, multiple and total parameter configurations

Several product sublimes with a wealth of combinations are available for determination of trace metals, including the standard single parameter and multi-parameter configurations without digestion. Measurement of complexed or adsorbed metals is possible by means of the configurations with built-in digester. Combinations of metals depend on the choice of working electrode and the priority metals for your application.

Advanced features

The **EZ6000 Series** build upon tried and tested voltammetry technology used in many clean water applications, in an industrial mainframe with the following prime features:

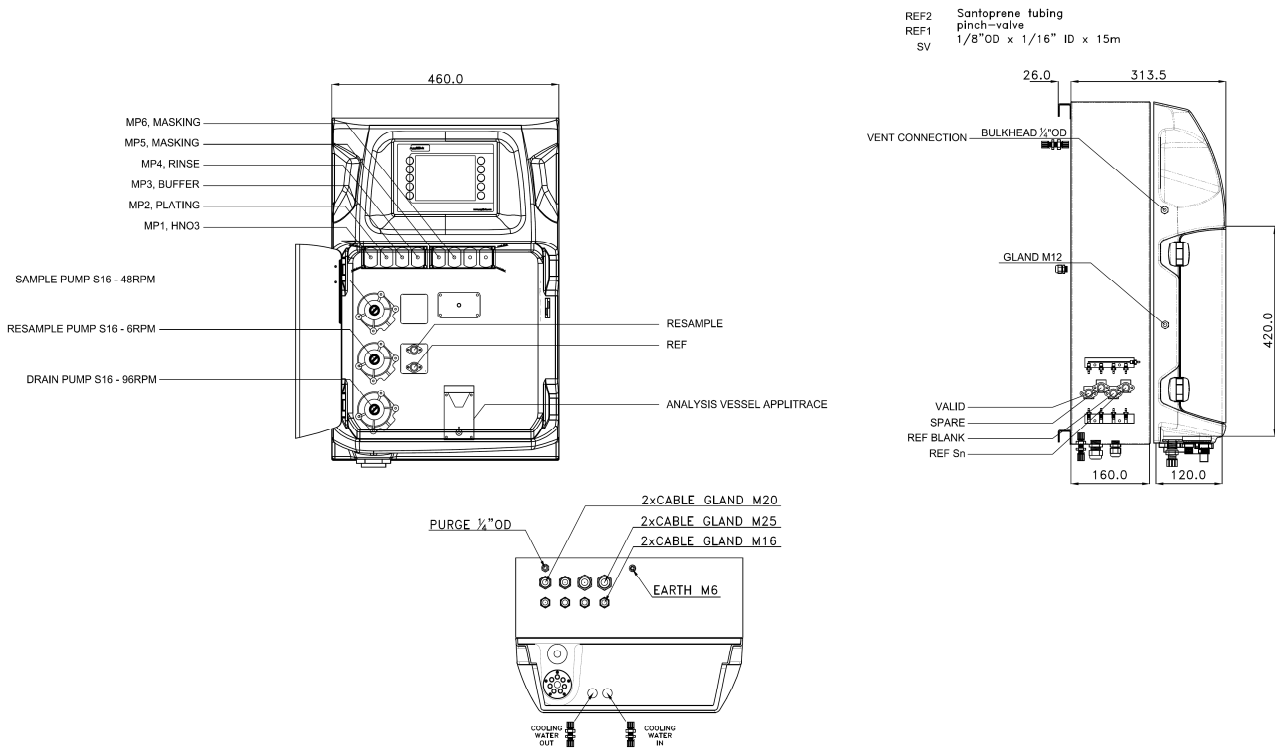
- Excellent selectivity and sensitivity
- Built-in sample digestion unit (hot acid or UV)
- Smart automatic features
- Standard 4 - 20 mA signal output with alarm processing
- Communication ports supporting connectivity to Modbus
- Higher measuring ranges: internal sample dilution
- Multiple stream analysis

Technical data*

| | |
|--------------------------------------|---|
| Analysis method | Stripping voltammetry using carbon electrode |
| Parameter | Pb(II) |
| Measuring ranges | 0 – 100 µg/L Pb(II) |
| Cycle time | 10 minutes (dilution +5 min.) |
| Limit of quantification (LOQ) | ≤ 1 µg/L |
| Precision/Repeatability | Better than 5% full scale range for standard test solutions |
| Cleaning | Automatic; frequency freely programmable |
| Calibration | Automatic, 2-point; frequency freely programmable |
| Validation | Automatic; frequency freely programmable |
| Interferences | Thallium (III), tin (VI), organic matter may interfere. Fats, oil, proteins, surfactants and tar. |
| Ambient operating conditions | 10 °C – 30 °C +/- 4 °C deviation (50 °F – 86 °F +/- 7.2 °F deviation) at 5 - 95% relative humidity non-condensing |
| Reagent temperature | Keep between 10 °C - 30 °C (50 °F - 86°F) |
| Sample pressure | By external overflow vessel |
| Sample flow rate | 100 - 300 ml per minute |
| Other sample requirements | Temperature: 10 °C – 30 °C (50 °F – 86 °F); Maximum size 100 µm, < 0.1 g/l; Turbidity < 50 NTU |
| Power | 220 - 240 VAC, 2 A, 50/60 Hz Max. power consumption: 150 VA; Other voltages available on request |
| Instrument air | Dry and oil free according to ISA-57.0.01-1996 quality standard for instrument air |
| Demineralized water | For rinsing and/or dilution |
| Drain | Atmospheric pressure, vented, min. Ø 64 mm |
| Earth connection | Dry and clean earth pole with low impedance (< 1 ohm) using an earth cable of > 2.5 mm ² |
| Analogue outputs | Active 4 - 20 mA max. 500 Ohm load, standard 1, max. 8 (option) |
| Digital outputs (option) | MODBUS, RS232, RS485 |
| Alarms | 1 x malfunctioning, 4 x user-configurable, max. 24 VDC/0.5 A, potential free contacts |
| Protection class | Analyzer cabinet: IP55 / Panel PC: IP65 |
| Materials, hinged part | Thermoform ABS, Door: plexiglass |
| Materials, wall section | Galvanized steel, powder coated |
| Dimensions (H X W X D) | 69 cm (27.2") x 46.5 cm (18.3") x 33 cm (13") |
| Total weight | 25 kg (55 lbs.) |
| Certification | CE compliant / UL certified |
| Warranty | 2 years |

* Subject to change without further notice.

Dimensions - Drawings



Service packages

Start-Up/Commissioning:

Our service technicians visit your site and setup instrumentation, provide basic end-user training on operations and maintenance, and validate settings and performance to get you started.

Service Agreement:

Hach provides on-site and in-factory repair, preventive maintenance, and calibration programs for your instruments to ensure reliability and instrument up-time. We have services to fit your specific needs.

Contact us to learn about what Hach Service option is right for you.

Order information

| | |
|-----------------------|---|
| EZ6005.99XXXXX | EZ6000 Series, Pb(II) 0 – 100 µg/L, without digestion |
| EZ6102.99XXXXX | EZ6000 Series, Pb(II) 0 – 100 µg/L, Cd(II) 0 – 100 µg/L, without digestion |
| EZ6105.99XXXXX | EZ6000 Series, Pb(II) 0 – 100 µg/L, Cu(II) 0 – 100 µg/L, without digestion |
| EZ6106.99XXXXX | EZ6000 Series, Pb(II) 0 – 100 µg/L, Zn(II) 0 – 100 µg/L, without digestion |
| EZ6108.99XXXXX | EZ6000 Series, Pb(II) 0 – 100 µg/L, Cu(II) 0 – 100 µg/L, Cd(II) 0 – 100 µg/L, without digestion |
| EZ6109.99XXXXX | EZ6000 Series, Pb(II) 0 – 100 µg/L, Zn(II) 0 – 100 µg/L, Cd(II) 0 – 100 µg/L, without digestion |

All options (see Configurator)

| | | | | | | | | | | | | | | |
|--|----------|----------|----------|----------|----------|---|----------|----------|----------|----------|----------|----------|----------|----------|
| E | Z | 6 | X | X | X | . | 9 | 9 | X | X | X | X | X | 2 |
| Measurement range settings / Dilution options | | | | | | | | | | | | | | |
| standard range | | | | | | | | 0 | | | | | | |
| internal MP dilution (factor 4) | | | | | | | | 1 | | | | | | |
| customized | | | | | | | | Z | | | | | | |
| power supply | | | | | | | | | | | | | | |
| Standard 110 - 220 VAC ; 50/60 Hz | | | | | | | | 0 | | | | | | |
| Customized | | | | | | | | Z | | | | | | |
| number of sample streams | | | | | | | | | | | | | | |
| 1 stream | | | | | | | | 1 | | | | | | |
| 2 streams | | | | | | | | 2 | | | | | | |
| 3 streams | | | | | | | | 3 | | | | | | |
| 4 streams | | | | | | | | 4 | | | | | | |
| 5 streams | | | | | | | | 5 | | | | | | |
| 6 streams | | | | | | | | 6 | | | | | | |
| Outputs | | | | | | | | | | | | | | |
| 1x mA | | | | | | | | 1 | | | | | | |
| 2x mA | | | | | | | | 2 | | | | | | |
| 3x mA | | | | | | | | 3 | | | | | | |
| 4x mA | | | | | | | | 4 | | | | | | |
| 5x mA | | | | | | | | 5 | | | | | | |
| 6x mA | | | | | | | | 6 | | | | | | |
| 7x mA | | | | | | | | 7 | | | | | | |
| 8x mA | | | | | | | | 8 | | | | | | |
| RS232 | | | | | | | | A | | | | | | |
| Modbus TCP/IP | | | | | | | | B | | | | | | |
| Modbus RS485 | | | | | | | | C | | | | | | |
| AnaCommDa | | | | | | | | D | | | | | | |
| 1x mA + Modbus RS485 | | | | | | | | E | | | | | | |
| 2x mA + Modbus RS485 | | | | | | | | F | | | | | | |
| 3x mA + Modbus RS485 | | | | | | | | G | | | | | | |
| 4x mA + Modbus RS485 | | | | | | | | H | | | | | | |
| 1x mA + Modbus TCP/IP | | | | | | | | I | | | | | | |
| 2x mA + Modbus TCP/IP | | | | | | | | J | | | | | | |
| 3x mA + Modbus TCP/IP | | | | | | | | K | | | | | | |
| 4x mA + Modbus TCP/IP | | | | | | | | L | | | | | | |
| Customized / combined | | | | | | | | Z | | | | | | |
| Specials | | | | | | | | | | | | | | |
| no adaption, standard version | | | | | | | | 0 | | | | | | |
| customer specific adaptations required, to specify | | | | | | | | S | | | | | | |