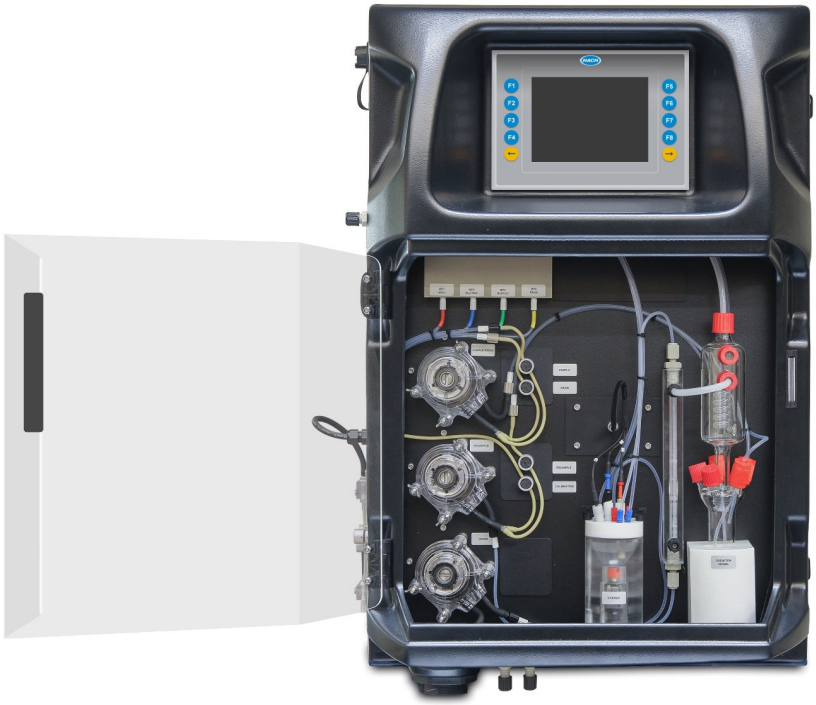
# EZ6000 SERIES

## On-line Trace Metal Analyzers

## Analysis of Copper

### 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 sublines 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

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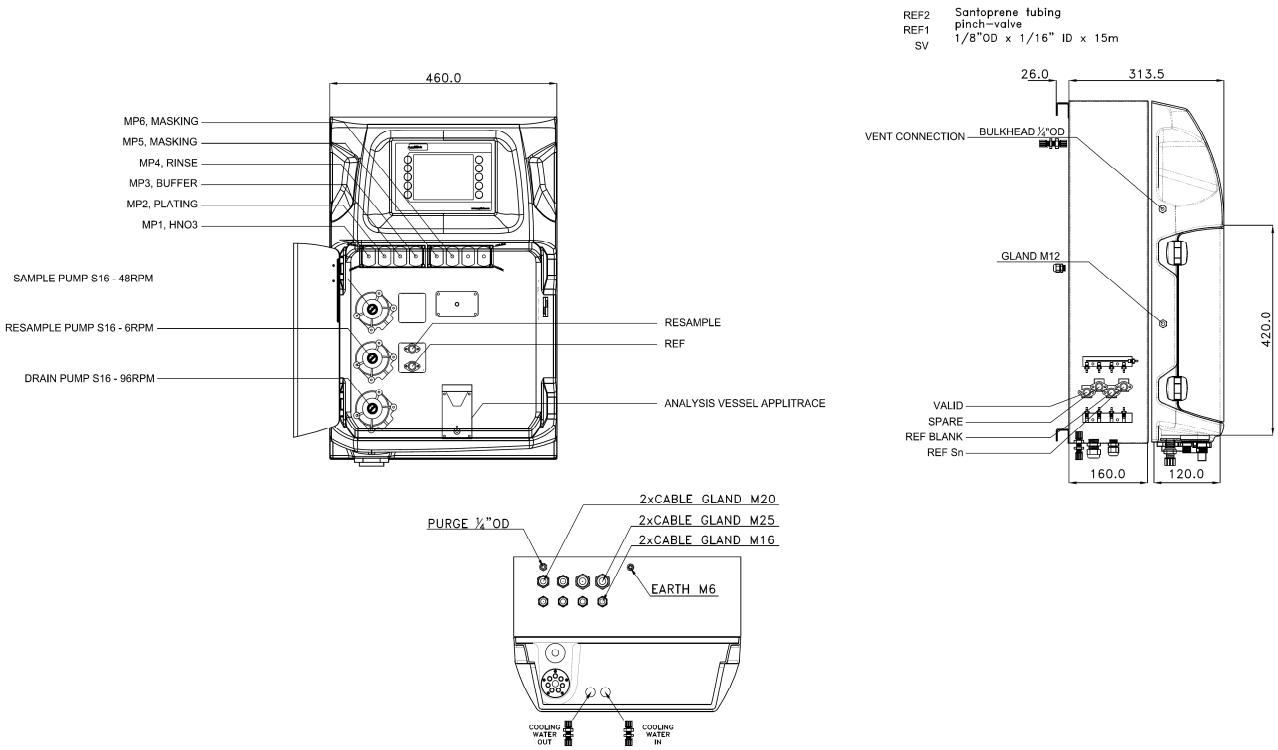
# Technical data*

| | |
|---|---|
| **Analysis method** | Stripping voltammetry using carbon electrode |
| **Parameter** | Cu(II) |
| **Measuring ranges** | 0 – 100 µg/L Cu(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** | Antimony (III), bismuth (III), 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-S7.0.01-1996 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 mm2 |
| **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

**EZ6004.99XXXXX** EZ6000 Series, Cu(II) 0 – 100 µg/L, without digestion
**EZ6103.99XXXXX** EZ6000 Series, Cu(II) 0 – 100 µg/L, Cd(II) 0 – 100 µg/L, without digestion
**EZ6105.99XXXXX** EZ6000 Series, Cu(II) 0 – 100 µg/L, Pb(II) 0 – 100 µg/L, without digestion
**EZ6108.99XXXXX** EZ6000 Series, Cu(II) 0 – 100 µg/L, Cd(II) 0 – 100 µg/L, Pb(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 adaptions required, to specify | **S** |