



# EZ sc Series Copper Analyzers - EZ1010sc and EZ2710sc

## Applications

- Wastewater
- Drinking Water
- Power Generation
- Surface Water



## Reliable, Scalable Systems Designed for Peak Performance

The EZ sc Series of online analyzers delivers robust, efficient, and future-ready solutions for facilities striving to maximize operational uptime and meet evolving demands. Engineered with precision and backed by expert support, EZ sc systems integrate flexibility, providing durable performance, intuitive tools, and the ability to scale, all while minimizing downtime and maintenance requirements.

### Trusted Equipment for Critical Operations

The EZ sc Series combines robust engineering with high-quality materials to ensure reliability 24/7. Designed for long-term performance, EZ sc Series minimizes breakdowns and supports sustained operational success.

### Scalable Solutions for Growing Needs

Built to evolve alongside your needs, online analyzers from the EZ sc Series offer adaptable parameters and easier integration. They ensure your facility remains future proof without requiring expensive upgrades. Easily adjust parameter testing ranges and expand sample streams to accommodate innovation and growth.

### Real-Time Data for Faster Decisions

The EZ sc Series offers advanced connectivity and real-time monitoring, delivering immediate access to actionable insights. Facilities utilizing this technology benefit from improved reaction times, empowering more informed decision-making and quicker responses during critical situations.

### Simplified Troubleshooting with Expert Support

Built-in diagnostics combined with secure remote data access make the EZ sc Series simplify issue resolution. Supported by a highly responsive team of experts, it ensures uninterrupted functionality and minimizes operational downtime. By addressing and identifying issues early, EZ sc Series of online analyzers helps prevent costly disruptions and repairs while maintaining system efficiency.

### Clear Workflows for Predictable Outcomes

Standardized tools and guided workflows ensure consistent implementation and operation. The EZ sc Series minimizes miscommunication, sets clear expectations, and reduces process inconsistencies, driving greater efficiency.

## Technical Data\*

| Model                          | EZ1010sc                                                                                                                                                                                                                                                                                                                                 | EZ2710sc                                                                                                                                                                                                 |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Parameter                      | Copper, dissolved                                                                                                                                                                                                                                                                                                                        | Copper, total                                                                                                                                                                                            |
| Range                          | 0.003 - 0.3 mg/L<br>0.02 - 0.75 mg/L<br>0.02 - 1.5 mg/L<br>0.03 - 3 mg/L<br>0.15 - 15 mg/L (with internal dilution)<br>0.3 - 30 mg/L (with internal dilution)<br>0.75 - 75 mg/L (with internal dilution)<br>1.5 - 150 mg/L (with internal dilution)<br>2.25 - 225 mg/L (with internal dilution)<br>3 - 300 mg/L (with internal dilution) | 0.003 - 0.3 mg/L<br>0.02 - 0.75 mg/L<br>0.02 - 1.5 mg/L<br>0.03 - 3 mg/L<br>0.15 - 15 mg/L (with internal dilution)<br>0.3 - 30 mg/L (with internal dilution)<br>0.75 - 75 mg/L (with internal dilution) |
| Lower Limit of Detection (LOD) | ≤ 3 µg/L                                                                                                                                                                                                                                                                                                                                 | ≤ 3 µg/L                                                                                                                                                                                                 |
| Cycle Time                     | 10 min (dilution + 5 min)                                                                                                                                                                                                                                                                                                                | 20 minutes Total Cu (dilution + 5 min.)<br>30 minutes Total Cu & Cu(II)                                                                                                                                  |
| Measurement Method             | Colorimetric measurement at 546 nm using bicinchoninate method; conform respectively with USEPA Method 8506 and standard method APHA 3500-Cu (C)                                                                                                                                                                                         | Colorimetric measurement at 546 nm using bicinchoninate method, conform with USEPA Method 8506                                                                                                           |
| Power                          | 100 - 240 VAC, 50/60 Hz<br>Max. power consumption: 120 VA                                                                                                                                                                                                                                                                                | 220 VAC / 50 Hz                                                                                                                                                                                          |
| Precision                      | Better than 2% full scale range for standard test solutions                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                          |
| Interferences                  | Large amounts of color and turbidity interfere. Fats, oil, proteins, surfactants and tar.                                                                                                                                                                                                                                                |                                                                                                                                                                                                          |
| Automatic cleaning             | Yes                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                          |
| Calibration                    | Automatic, 2-point; frequency freely programmable                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                          |
| Validation                     | Automatic; frequency freely programmable                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                          |
| Ambient Temperature            | 10 - 30 °C ± 4 °C deviation (50 - 86 °F ± 7.2 °F deviation) at 5 - 95% relative humidity (non-condensing)                                                                                                                                                                                                                                |                                                                                                                                                                                                          |
| Reagent Requirements           | Keep between 5 - 20 °C (41 - 68 °F) in use                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                          |
| Sample Temperature             | 10 - 30 °C (50 - 86 °F)                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                          |
| Sample Pressure                | By external overflow vessel                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                          |
| Sample Flow Rate               | 100 - 300 mL/min                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                          |
| Sample Quality                 | Maximum particle size 100 µm, < 0.1 g/L; Turbidity < 50 NTU                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                          |
| Instrument Air                 | Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air                                                                                                                                                                                                                                                       |                                                                                                                                                                                                          |
| Demineralized Water            | When needed for rinsing / dilution                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                          |
| Drain                          | Atmospheric pressure, vented, min. Ø 32 mm                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                          |
| Earth Connection               | Dry and clean earth pole with low impedance (< 1 Ohm) using an earth cable of > 2.5 mm <sup>2</sup>                                                                                                                                                                                                                                      |                                                                                                                                                                                                          |
| Analog Outputs                 | Active 4 - 20 mA max. 500 Ohm load, standard 4, max. 8 (option)                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                          |
| Digital Outputs                | None<br>Optional: Modbus (TCP/IP, RTU), Profinet, Profibus DP, Ethernet IP                                                                                                                                                                                                                                                               |                                                                                                                                                                                                          |
| Alarm                          | 1 x malfunctioning, 4 x user-configurable, max. 24 VDC/0.5 A, potential free contacts                                                                                                                                                                                                                                                    |                                                                                                                                                                                                          |
| Protection Class               | IP44                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                          |
| Material                       | Hinged part: Thermoform ABS, door: PMMA<br>Wall section: galvanized steel, powder coated                                                                                                                                                                                                                                                 |                                                                                                                                                                                                          |
| Dimensions (H x W x D)         | 688 mm x 460 mm x 340 mm                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                          |
| Weight                         | 40 kg (88 lbs.)                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                          |
| Certifications                 | CE compliant / ETL certified                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                          |

\*Subject to change without notice.

## Dimensions



### Enable the Benefits of Smart Monitoring

This instrument connects to Claros, Hach's innovative Water Intelligence System. Claros allows you to seamlessly connect and manage instruments, data, and process – anywhere, anytime. The result is greater confidence in your data and improved efficiencies in your operations. To unlock the full potential of Claros, insist on Claros Enabled instruments.

### Hach Service Protects Your Investment

With Hach Service, you have a global partner who understands your needs and cares about delivering timely, high-quality service you can trust. Our Service Team brings unique expertise to help you maximize instrument uptime, ensure data integrity, maintain operational stability, and reduce compliance risk.

## Order Information

| EZ1010.97                                | X | X | X | X | X  |
|------------------------------------------|---|---|---|---|----|
| <b>Measurement range</b>                 |   |   |   |   |    |
| 0.003 - 0.3 mg/L                         | 0 |   |   |   |    |
| 0.02 - 0.75 mg/L                         |   |   |   |   |    |
| 0.02 - 1.5 mg/L                          |   |   |   |   |    |
| 0.03 - 3 mg/L                            |   |   |   |   |    |
| 0.15 - 15 mg/L (with internal dilution)  | V |   |   |   |    |
| 0.3 - 30 mg/L (with internal dilution)   |   |   |   |   |    |
| 0.75 - 75 mg/L (with internal dilution)  |   |   |   |   |    |
| 1.5 - 150 mg/L (with internal dilution)  |   |   |   |   |    |
| 2.25 - 225 mg/L (with internal dilution) |   |   |   |   |    |
| 3 - 300 mg/L (with internal dilution)    |   |   |   |   |    |
| <b>Power supply</b>                      |   |   |   |   |    |
| 100 - 240 VAC, 50/60 Hz                  |   | 0 |   |   |    |
| <b>Number of sample streams</b>          |   |   |   |   |    |
| 1 stream                                 |   |   | 1 |   |    |
| <b>Outputs</b>                           |   |   |   |   |    |
| 4x mA                                    |   |   |   | 4 |    |
| 8x mA                                    |   |   |   | 8 |    |
| 4x mA + Modbus RTU                       |   |   |   | D |    |
| 8x mA + Modbus RTU                       |   |   |   | E |    |
| 4x mA + Modbus TCP/IP                    |   |   |   | I |    |
| 8x mA + Modbus TCP/IP                    |   |   |   | J |    |
| 4x mA + Profinet                         |   |   |   | N |    |
| 8x mA + Profinet                         |   |   |   | O |    |
| 4x mA + Profibus DP                      |   |   |   | S |    |
| 8x mA + Profibus DP                      |   |   |   | T |    |
| 4x mA + Ethernet/IP                      |   |   |   | X |    |
| 8x mA + Ethernet/IP                      |   |   |   | Y |    |
| No adaption, "SC4500" version            |   |   |   |   | OT |

## Accessories

APPAZ0080002 - Moduplex, 2 streams, Pinch Valve, 1/8" OD

APPAZ0080004 - Moduplex, 4 streams, Pinch Valve, 1/8" OD

APPAZ0080008 - Moduplex, 8 streams, Pinch Valve, 1/8" OD

## Order Information

| EZ2710.97                               | X | X | X | X | X  |
|-----------------------------------------|---|---|---|---|----|
|                                         |   |   |   |   |    |
| <b>Measurement range</b>                |   |   |   |   |    |
| 0.003 - 0.3 mg/L                        | 0 |   |   |   |    |
| 0.02 - 0.75 mg/L                        |   |   |   |   |    |
| 0.02 - 1.5 mg/L                         |   |   |   |   |    |
| 0.03 - 3 mg/L                           |   |   |   |   |    |
| 0.15 - 15 mg/L (with internal dilution) | V |   |   |   |    |
| 0.3 - 30 mg/L (with internal dilution)  |   |   |   |   |    |
| 0.75 - 75 mg/L (with internal dilution) |   |   |   |   |    |
|                                         |   |   |   |   |    |
| <b>Power supply</b>                     |   |   |   |   |    |
| 230 VAC, 50/60 Hz                       |   | A |   |   |    |
| 120 VAC, 50/60 Hz                       |   | B |   |   |    |
| Max. power consumption: 240 VA          |   |   |   |   |    |
|                                         |   |   |   |   |    |
| <b>Number of sample streams</b>         |   |   |   |   |    |
| 1 stream                                |   |   | 1 |   |    |
|                                         |   |   |   |   |    |
| <b>Outputs</b>                          |   |   |   |   |    |
| 4x mA                                   |   |   |   | 4 |    |
| 8x mA                                   |   |   |   | 8 |    |
| 4x mA + Modbus RTU                      |   |   |   | D |    |
| 8x mA + Modbus RTU                      |   |   |   | E |    |
| 4x mA + Modbus TCP/IP                   |   |   |   | I |    |
| 8x mA + Modbus TCP/IP                   |   |   |   | J |    |
| 4x mA + Profinet                        |   |   |   | N |    |
| 8x mA + Profinet                        |   |   |   | O |    |
| 4x mA + Profibus DP                     |   |   |   | S |    |
| 8x mA + Profibus DP                     |   |   |   | T |    |
| 4x mA + Ethernet/IP                     |   |   |   | X |    |
| 8x mA + Ethernet/IP                     |   |   |   | Y |    |
|                                         |   |   |   |   |    |
| No adaption, "SC4500" version           |   |   |   |   | OT |

## Accessories

APPAZ0080002 - Moduplex, 2 streams, Pinch Valve, 1/8" OD

APPAZ0080004 - Moduplex, 4 streams, Pinch Valve, 1/8" OD

APPAZ0080008 - Moduplex, 8 streams, Pinch Valve, 1/8" OD

