



# EZ sc Series Manganese Analyzers - EZ1025sc and EZ2725sc

## 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

High-quality materials and robust engineering come together in the EZ sc Series to provide 24/7 reliability. Designed for long-term performance, it reduces breakdowns and ensures consistent operational success. Equipped with advanced Manganese monitoring, the EZ sc Series accurately analyzes Dissolved Manganese to 0.002 mg/L and Total Manganese to 0.004 mg/L. This helps maintain compliance with drinking water standards and prevents issues like staining and corrosion.

### Real-Time Data for Faster Decisions

Advanced connectivity and real-time monitoring provide immediate access to actionable insights. Facilities equipped with EZ sc Series of online analyzers, experience improvement in reaction times, enabling better decision-making and quicker response during critical conditions. Additionally, comprehensive manganese analysis, including Mn(II), total manganese helps facilities monitor water quality at intake points and maintain efficiency as water conditions change seasonally.

### Simplified Troubleshooting with Expert Support

Built-in diagnostics and secure remote data access streamline and enhance issue resolution in the EZ sc Series. Backed by a highly responsive team of experts, it reduces operational downtime and ensures peak functionality. By identifying and resolving issues early, it helps maintain system efficiency and prevents costly downtime and repairs. It also proactively addresses industrial challenges such as corrosion and heat exchanger degradation caused by Manganese buildup.

### Clear Workflows for Predictable Outcomes

The EZ sc Series simplifies implementation and operation by using standardized tools and guided workflows to ensure consistency throughout. By reducing miscommunication and establishing clear expectations, it helps eliminate process inconsistencies, promoting greater efficiency and reliability.

**Technical Data\***

| Model                          | EZ1025sc                                                                                                                                                                                                                                                                                                                                | EZ2725sc                                                                                                                                                                                                 |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Parameter                      | Manganese Mn(II), dissolved                                                                                                                                                                                                                                                                                                             | Manganese, total                                                                                                                                                                                         |
| Range                          | 0.002 - 0.1 mg/L<br>0.005 - 0.25 mg/L<br>0.005 - 0.5 mg/L<br>0.01 - 1 mg/L<br>0.05 - 5 mg/L (with internal dilution)<br>0.1 - 10 mg/L (with internal dilution)<br>0.25 - 25 mg/L (with internal dilution)<br>0.5 - 50 mg/L (with internal dilution)<br>0.75 - 75 mg/L (with internal dilution)<br>1 - 100 mg/L (with internal dilution) | 0.02 - 1 mg/L Mn<br>0.004 - 0.1 mg/L<br>0.01 - 0.25 mg/L<br>0.01 - 0.5 mg/L<br>0.1 - 5 mg/L (with internal dilution)<br>0.2 - 10 mg/L (with internal dilution)<br>0.5 - 25 mg/L (with internal dilution) |
| Lower Limit of Detection (LOD) | ≤ 2 µg/L                                                                                                                                                                                                                                                                                                                                | ≤ 4 µg/L                                                                                                                                                                                                 |
| Cycle Time                     | 10 min (dilution + 5 min)                                                                                                                                                                                                                                                                                                               | 20 min Total Mn (dilution + 5 min)                                                                                                                                                                       |
| Measurement Method             | Colorimetric measurement at 465 nm, conform with standard method ASTM 2120 B                                                                                                                                                                                                                                                            | Colorimetric measurement using formaldoxime method at 450 nm                                                                                                                                             |
| Power                          | 100 - 240 VAC, 50/60 Hz<br>Max. power consumption: 120 VA                                                                                                                                                                                                                                                                               | 220 VAC, 50/60 Hz<br>120 VAC, 50/60 Hz<br>Max. power consumption: 240 VA                                                                                                                                 |
| 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

| EZ1025.97                               | X | X | X | X | X  |
|-----------------------------------------|---|---|---|---|----|
| <b>Measurement range</b>                |   |   |   |   |    |
| 0.002 - 0.1 mg/L                        | 0 |   |   |   |    |
| 0.005 - 0.25 mg/L                       |   |   |   |   |    |
| 0.005 - 0.5 mg/L                        |   |   |   |   |    |
| 0.01 - 1 mg/L                           |   |   |   |   |    |
| 0.05 - 5 mg/L (with internal dilution)  | V |   |   |   |    |
| 0.1 - 10 mg/L (with internal dilution)  |   |   |   |   |    |
| 0.25 - 25 mg/L (with internal dilution) |   |   |   |   |    |
| 0.5 - 50 mg/L (with internal dilution)  |   |   |   |   |    |
| 0.75 - 75 mg/L (with internal dilution) |   |   |   |   |    |
| 1 - 100 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

| EZ2725.97                              | X | X | X | X | X  |
|----------------------------------------|---|---|---|---|----|
|                                        |   |   |   |   |    |
| <b>Measurement range</b>               |   |   |   |   |    |
| 0.004 - 0.1 mg/L                       | 0 |   |   |   |    |
| 0.01 - 0.25 mg/L                       |   |   |   |   |    |
| 0.01 - 0.5 mg/L                        |   |   |   |   |    |
| 0.02 - 1 mg/L                          |   |   |   |   |    |
| 0.1 - 5 mg/L (with internal dilution)  | V |   |   |   |    |
| 0.2 - 10 mg/L (with internal dilution) |   |   |   |   |    |
| 0.5 - 25 mg/L (with internal dilution) |   |   |   |   |    |
|                                        |   |   |   |   |    |
| <b>Power supply</b>                    |   |   |   |   |    |
| 220 VAC, 50/60 Hz                      |   | A |   |   |    |
| 110 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

