# EZ sc Series Iron Analyzers - EZ1024sc and EZ2724sc

**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.

### Smarter Monitoring, Simplified

The EZ sc Iron Analyzer provides cutting-edge online colorimetric analysis of total iron (Fe) and total dissolved iron (II + III) in water, ensuring optimal precision even at low µg/L levels. Designed for industrial and municipal facilities, this state-of-the-art analyzer delivers reliable performance in extreme conditions, streamlining operations and ensuring compliance with water quality regulations.

### Reliable Equipment for Critical Operations

The EZ sc provides precise measurements in the low µg/L range for both dissolved and total iron (0.005 mg/L). Built with high-quality materials and robust engineering, the EZ sc Series ensures 24/7 reliability and long-term performance, minimizing breakdowns and supporting sustained operational success. The advanced EZ sc Iron Analyzer includes a built-in digestion unit that efficiently handles non-soluble or complex metal species, offering a comprehensive view of iron-related challenges like corrosion and staining. It's ideal for reliable monitoring of drinking water, boiler systems, and wastewater.

### Smart Automation for Efficiency

The EZ sc features automated calibration, validation, priming, and cleaning, minimizing operator intervention while ensuring consistent performance in even the most demanding environments. This smart automation enhances efficiency and reduces downtime.

### Real-Time Monitoring and Connectivity

Stay connected with real-time monitoring, built-in diagnostics, and secure remote data access. These features deliver clear insights, fast problem-solving, and simple updates on system performance, ensuring smooth operation at all times.

### Cost-Effective and Scalable Monitoring

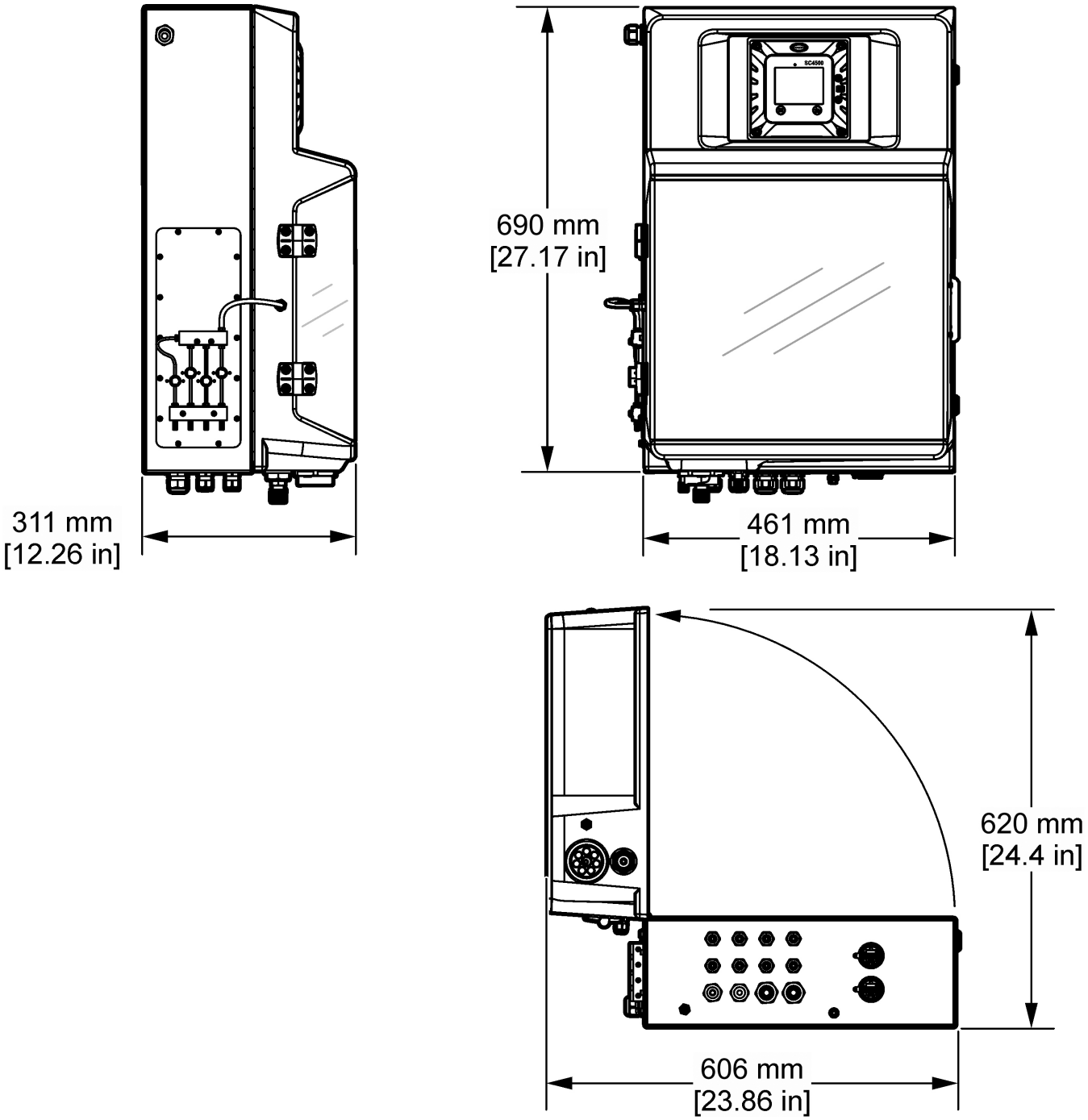
With support for up to 8 streams, the EZ sc Iron Analyzer reduces per-sampling-point costs while delivering comprehensive insights. Its flexible, scalable design adapts to your evolving monitoring needs, from basic to complex analysis.

## Technical Data*

| Model | EZ1024sc | EZ2724sc |
|---|---|---|
| **Parameter** | Iron Fe(II+III), total dissolved | Iron, total |
| **Range** | 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>0.25 - 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) | 0.005 - 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) |
| **Lower Limit of Detection (LOD)** | ≤ 2 µg/L | ≤ 2 µg/L |
| **Cycle Time** | 10 min Fe (II), Fe total dissolved (dilution + 5 min.)<br>15 min all combined parameters | 20 min Total Fe (dilution + 5 min)<br>30 min Total Fe & Fe (II); Fe (II+III)<br>40 min Total Fe & Fe (II+III) & Fe (II) & Fe (III) |
| **Measurement Method** | Colorimetric measurement using TPTZ colour solution, conform with APHA 3500-Fe (B) | Colorimetric measurement using TPTZ color solution, conform with APHA 3500-Fe (B) |
| **Power** | 100 - 240 VAC, 50/60 Hz<br>Max. power consumption: 120 VA | 220 VAC 50/60 Hz<br>110 VAC 50/60 Hz<br>Max. power consumption: 220 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 $mm^2$ | |
| **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

| EZ1024.97 | X | X | X | X | X |
|---|---|---|---|---|---|
| **Measurement range** | | | | | |
| 0.005 - 0.25 mg/L | 0 | | | | |
| 0.005 - 0.5 mg/L | | | | | |
| 0.01 - 1 mg/L | | | | | |
| 0.05 - 5 mg/L (with internal dilution) | V | | | | |
| 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) | | | | | |
| **Power supply** | | | | | |
| 100 - 240 VAC, 50/60 Hz | | 0 | | | |
| **Number of sample streams** | | | | | |
| 1 stream | | | 1 | | |
| **Outputs** | | | | | |
| 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 | | | | | 0T |

## 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

| EZ2724.97 | X | X | X | X | X |
|---|---|---|---|---|---|
| **Measurement range** | | | | | |
| 0.005 - 0.25 mg/L | 0 | | | | |
| 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) | | | | | |
| **Power supply** | | | | | |
| 220 VAC / 50 Hz | | A | | | |
| 110 VAC / 60 Hz | | B | | | |
| Max. power consumption: 240 VA | | | | | |
| **Number of sample streams** | | | | | |
| 1 stream | | | 1 | | |
| **Outputs** | | | | | |
| 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 | | | | | 0T |

## 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