



# EZ sc Series Iron Analysers - EZ1024sc and EZ2724sc

## Applications

- Wastewater
- Drinking Water
- Power Generation
- Surface Water



## Reliable, Scalable Systems Designed for Peak Performance

The EZ sc Series of online analysers delivers robust, efficient, and future-ready solutions for facilities striving to maximise 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 minimising downtime and maintenance requirements.

### Smarter Monitoring, Simplified

The EZ sc Iron Analyser provides cutting-edge online colorimetric analysis of total iron (Fe) and total dissolved iron (II + III) in water, ensuring optimal precision even at low  $\mu\text{g/L}$  levels. Designed for industrial and municipal facilities, this state-of-the-art analyser 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  $\mu\text{g/L}$  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, minimising breakdowns and supporting sustained operational success. The advanced EZ sc Iron Analyser 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, minimising 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

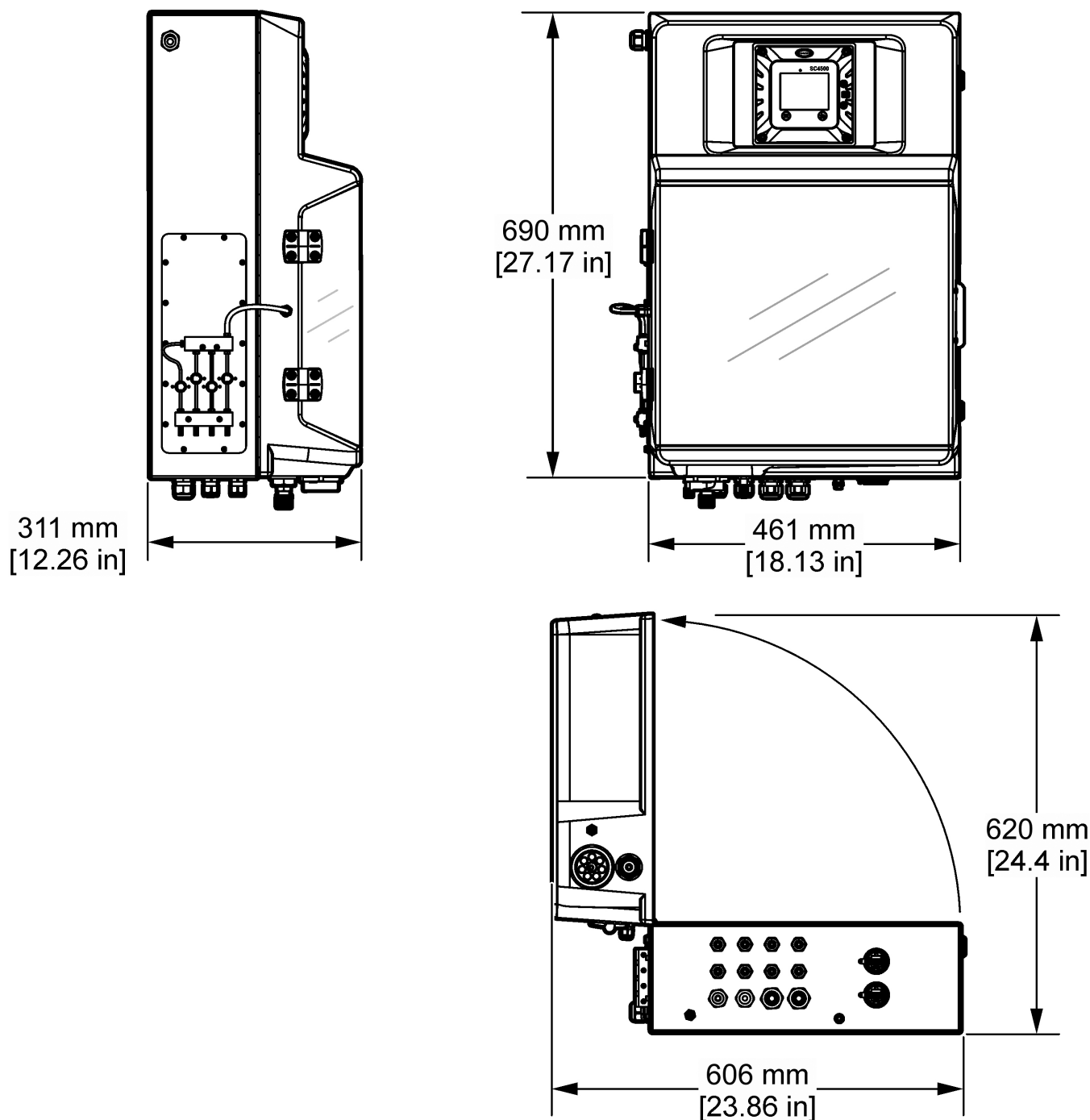
With support for up to 8 streams, the EZ sc Iron Analyser reduces per-sampling-point costs while delivering comprehensive insights. Its flexible, scalable design adapts to your evolving monitoring needs, from basic to complex analyses.

## Technical Data\*

Model	EZ1024sc	EZ2724sc
Parameter	Iron Fe(II+III), total dissolved	Iron, total
Measuring range	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) 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)	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) 0.1 - 10 mg/L (with internal dilution) 0.25 - 25 mg/L (with internal dilution)
Detection limit	≤ 2 µg/L	≤ 2 µg/L
Cycle time	10 min Fe (II), Fe total dissolved (dilution + 5 min.) 15 min all combined parameters	20 min Total Fe (dilution + 5 min) 30 min Total Fe & Fe (II); Fe (II+III) 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 colour solution, conform with APHA 3500-Fe (B)
Power	100 - 240 VAC, 50/60 Hz Max. power consumption: 120 VA	220 VAC 50/60 Hz 110 VAC 50/60 Hz Max. power consumption: 220 VA
Precision	Better than 2% full scale range for standard test solutions	
Interferences	Metal ions like Lead > 10 mg/L, Zinc > 2 mg/L, Nickel > 2 mg/L, Iron > 5 mg/L, Copper > 5 mg/L. Strong oxidising agents, Cyanide, Nitrite, Phosphate (polyphosphate more than orthophosphate), Chromium, Zinc in concentrations exceeding 10 times that of Iron. Bismuth, Cadmium, Mercury, Molybdate, and Silver precipitate Phenanthroline. Polyphosphate must be absent. Large amounts of colour 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 at 5 - 95% relative humidity (non-condensing)	
Reagent requirements	Keep between 5 - 20 °C in use	
Sample temperature	10 - 30 °C	
Sample pressure	By external overflow vessel	
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	
Demineralised 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>	
Analogue outputs	Active 4 - 20 mA max. 500 Ohm load, standard 4, max. 8 (option)	
Digital outputs	None 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 Wall section: Galvanised steel, powder coated	
Dimensions (H x W x D)	688 mm x 460 mm x 340 mm	
Weight	40 kg	
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 maximise instrument uptime, ensure data integrity, maintain operational stability, and reduce compliance risk.

## Order Information

EZ1024.98	X	X	X	X	X
<b>Measurement range</b>					
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)					
<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					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

EZ2724.98	X	X	X	X	X
<b>Measurement range</b>					
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)					
<b>Power supply</b>					
220 VAC / 50 Hz		A			
110 VAC / 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

