EZ1000sc Series Online Colorimetric Manganese Analyzer

Claros Enabled

Service Protected

Online colorimetric analysis of dissolved Manganese in water

Results you can rely on

EZ1000sc Manganese Analyzers achieve excellent precision and accuracy. At the heart of the colorimeter there is a compact photometer assembly developed especially for the EZ Series. Consumption of reagents is reduced by low volume analysis, yet high sensitivity is assured by a long optical path length. The limit of detection is in the low µg/L range.

Smart automatic features for calibration, validation, priming and cleaning are embedded in the controller software and contribute to analytical performance, maximized uptime and negligible operator invervention. The consumption of reagents is monitored through automatic counters, signalling the need of replacement. Precision micropumps dose all reagents. Sample lines and analysis vessel are cleaned with demineralized water to eliminate cross contamination between samples. Electronic and wet-chemical part of the analyzer are strictly separated. A transparent door allows for instant visual inspection of the wet part.

The EZ1000sc system has standard Claros connection enabled, which allows for remote monitoring, operating and troubleshooting.

Flexibility that meets your needs

EZ Series Manganese Analyzers come in an attractive, ergonomic mainframe with a compact footprint. All hardware is controlled by the integrated industrial panel PC. The modular build allows for the analyzer to match your application and operational needs.
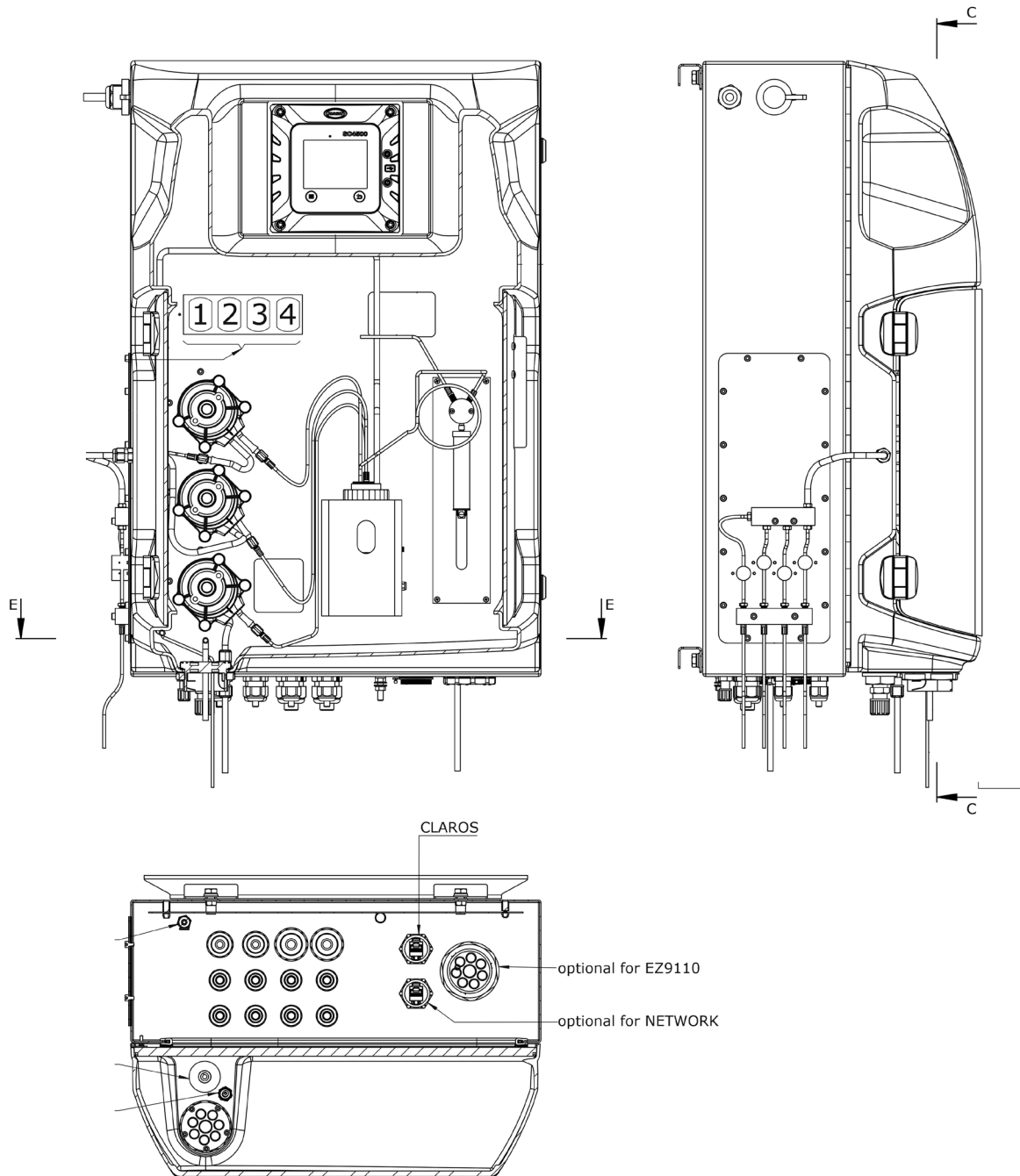
- The standard measuring range can be narrowed by a different calibration range or extended via internal dilution options.

- Analog and digital output options

- Multiple stream analysis for up to 8 sample streams

Technical Data*

Parameter	Manganese Mn(II), dissolved
Measurement Method	Colorimetric measurement using formaldoxime method at 450 nm
Range	0.01 - 1 mg/L Mn(II) Optional: 0.002 - 0.1 mg/L Mn(II) 0.005 - 0.25 mg/L Mn(II) 0.005 - 0.5 mg/L Mn(II) 0.1 - 10 mg/L Mn(II) 0.25 - 25 mg/L Mn(II) 0.5- 50 mg/L Mn(II) 0.75 - 75 mg/L Mn(II) 1 - 100 mg/L Mn(II) (with internal dilution)
Precision	Better than 2% full scale range for standard test solutions
Lower Limit of Detection (LOD)	≤ 2 µg/L
Interferences	Large amounts of color and turbidity interfere. Fats, oil, proteins, surfactants and tar.
Cycle Time	10 min (dilution + 5 min)
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 10 - 30 °C (50 - 86 °F)
Sample Pressure	By external overflow vessel
Sample Flow Rate	100 - 300 mL/min
Sample Temperature	5 - 30 °C (41 - 86 °F)
Sample Quality	Maximum particle size 100 µm, < 0.1 g/L; Turbidity < 50 NTU
Power	100 - 240 VAC, 50/60 Hz Max. power consumption: 120 VA
Instrument Air	Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air
Demineralized Water	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 1, max. 8 (option)
Digital Outputs	Optional: Modbus (TCP/IP, RTU/RS485), Profinet, Profibus DP, Ethernet/IP
Alarm	Malfunction, maintenance, analyzer busy
Protection Class	IP44
Material	Hinged part: Thermoform ABS, door: PMMA Wall section: Galvanized steel, powder coated
Dimensions (H x W x D)	690 mm x 465 mm x 330 mm
Weight	25 kg (55 lbs.)
Certifications	CE compliant / ETL certified

Subject to change without notice.

Dimensions

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.

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 - Part Number Configurator

Mn(II), 0.01-1 mg/L	EZ1025.99*	X	X	X	X	X	X
Measurement range settings / Dilution options							
10% of standard range		A					
25% of standard range		B					
50% of standard range		C					
Standard range		0					
Internal dispenser dilution (factor 10)		W					
Internal dispenser dilution (factor 25)		X					
Internal dispenser dilution (factor 50)		Y					
Internal dispenser dilution (factor 75)		Z					
Internal dispenser dilution (factor 100)		5					
Power supply							
Standard 100 - 240 VAC, 50/60 Hz			0				
Number of sample streams							
1 stream				1			
2 streams				2			
4 streams				4			
8 streams				8			
1 stream + Adaption for EZ9110				A			
2 streams + Adaption for EZ9110				B			
4 streams + Adaption for EZ9110				D			
Outputs							
1x mA					1		
2x mA					2		
4x mA					3		
8x mA					4		
1x mA + Modbus RTU/RS485					B		
2x mA + Modbus RTU/RS485					C		
4x mA + Modbus RTU/RS485					D		
8x mA + Modbus RTU/RS485					E		
1x mA + Modbus TCP/IP					G		
2x mA + Modbus TCP/IP					H		
4x mA + Modbus TCP/IP					I		
8x mA + Modbus TCP/IP					J		
1x mA + Profinet					L		
2x mA + Profinet					M		
4x mA + Profinet					N		
8x mA + Profinet					O		
1x mA + Profibus DP					Q		
2x mA + Profibus DP					R		
4x mA + Profibus DP					S		
8x mA + Profibus DP					T		
1x mA + Ethernet/IP					V		
2x mA + Ethernet/IP					W		
4x mA + Ethernet/IP					X		
8x mA + Ethernet/IP					Y		
No adaption, standard version						0	
With SC4500 controller + Claros enabled							T

Part numbers may vary by country.