



EZ1017sc Calcium Hardness Analyzer

Applications

- Wastewater
- Drinking Water
- Power Generation
- Process/Production Water
- Surface Water



Reliable Monitoring for Critical Water Quality

The EZ1017sc Hardness Analyzer is your answer to maintaining water quality and protecting infrastructure with precision and efficiency. Designed for continuous monitoring of Calcium Hardness, this advanced solution provides crucial insights to prevent scaling and corrosion in your operations. With its robust features and scalable design, the EZ1017sc ensures reliable performance while detecting issues before they escalate which helps maintain system efficiency and avoid costly downtimes and repairs.

Performance in Challenging Environments

Designed to excel in tough conditions, the system features preconditioning solutions, including self-cleaning filtration panels that seamlessly integrate with EZ sc analyzers. These prefiltration panels ensure reliable, long-term performance while minimizing maintenance needs, making them ideal for demanding applications.

Cost-Effective and Scalable Monitoring

With support for up to 8 streams, the EZ1017sc reduces per-sampling-point costs while delivering comprehensive insights. Its flexible, scalable design adapts to your evolving monitoring needs, from basic to complex analysis.

Enhanced Operational Efficiency with Advanced Connectivity

Real-time data and advanced connectivity improve reaction times, enabling faster, more informed decisions. Integrate the EZ1017sc with your systems using configurable analogue or digital outputs for optimized performance.

Technical Data*

Model	EZ1017sc
Parameter	Calcium Hardness
Measurement Method	Total Hardness: colorimetric measurement at 610 nm using calmagite/EDTA Calcium Hardness: colorimetric measurement at 610 nm using hydroxynaphthol blue/EDTA
Range	0.005 - 0.25 mg/L CaCO ₃ 0.005 - 0.5 mg/L CaCO ₃ 0.025 - 1 mg/L CaCO ₃ 0.125 - 5 mg/L CaCO ₃ (with internal dilution) 0.25 - 10 mg/L CaCO ₃ (with internal dilution) 0.625 - 25 mg/L CaCO ₃ (with internal dilution) 1.25 - 50 mg/L CaCO ₃ (with internal dilution) 1.875 - 75 mg/L CaCO ₃ (with internal dilution) 2.5 - 100 mg/L CaCO ₃ (with internal dilution)
Interferences	Dissolved Copper Cu(II) > 2 mg/L, Iron Fe(II) > 20 mg/L, Manganese > 10 mg/L, Zinc > 5 mg/L, Lead > 5 mg/L, Aluminium > 5 mg/L and Tin Sn(IV) interfere. Orthophosphate precipitates Calcium at the pH of the test. Strontium and Barium give a positive interference and alkalinity in excess of 300 mg/L may cause an indistinct end point in hard waters. Large amounts of colour and turbidity interfere. Fats, oil, proteins, surfactants and tar.
Digital Outputs	Optional: Modbus (TCP/IP, RTU), Profinet, Profibus DP, Ethernet IP
Protection Class	IP44
Precision	Better than 2% full scale range for standard test solutions
Lower Limit of Detection (LOD)	≤ 2 µg/L
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 at 5 - 95% relative humidity (non-condensing)
Reagent Requirements	Keep between 5 - 20 °C in use
Sample Pressure	By external overflow vessel
Sample Flow Rate	100 - 300 mL/min
Sample Temperature	10 - 30 °C
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 4, max. 8 (option)
Alarm	Malfunction, maintenance, analyser busy
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	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

EZ1017.97*	X	X	X	X	X
Measurement range					
0.005 - 0.25 mg/L CaCO ₃	0				
0.005 - 0.5 mg/L CaCO ₃					
0.025 - 1 mg/L CaCO ₃					
0.125 - 5 mg/L CaCO ₃ (with internal dilution)	V				
0.25 - 10 mg/L CaCO ₃ (with internal dilution)					
0.625 - 25 mg/L CaCO ₃ (with internal dilution)					
1.25 - 50 mg/L CaCO ₃ (with internal dilution)					
1.875 - 75 mg/L CaCO ₃ (with internal dilution)					
2.5 - 100 mg/L CaCO ₃ (with internal dilution)					
Power Supply					
Standard 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

