HACH®
Be Right™

EZ1017sc Calcium Hardness Analyzer

Applications

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



Reliable Monitoring for Critical Water Quality

Protect water quality and scale-sensitive assets with reliable online calcium hardness monitoring. The Hach® EZ1017sc Calcium Hardness Analyzer provides reliable online calcium hardness monitoring to help protect water quality, control calcium-driven scaling risk, and reduce unplanned downtime. Designed for utilities, power plants, industrial processes, wastewater operations, and surface-water programs, the EZ1017sc combines colorimetric measurement, automated workflows, integrated quality assurance, and the familiar SC4500 interface for dependable performance across multiple water streams and sample matrices.

Maintain Stable, Repeatable Measurement

A heated photometric cell with Pt100 temperature control maintains stable 95 °F measurement conditions, helping stabilize calibration and improve repeatability. Automatic two-point calibration further supports consistent calcium hardness measurement across changing operating conditions with fewer routine operator adjustments.

Automate Quality Assurance for Confident Results

Programmable calibration, validation, cleaning, reagent priming workflows, and photometer checks help ensure consistent execution, reduce operator dependency, minimize avoidable errors, and protect overall result integrity.

Reduced Maintenance and Manual Effort

Reagent monitoring, trend visibility, guided workflows, and remote alerts enable proactive troubleshooting and planned maintenance, helping sustain measurement integrity while reducing routine manual checks.

Extend Calcium Insight Across Your Process

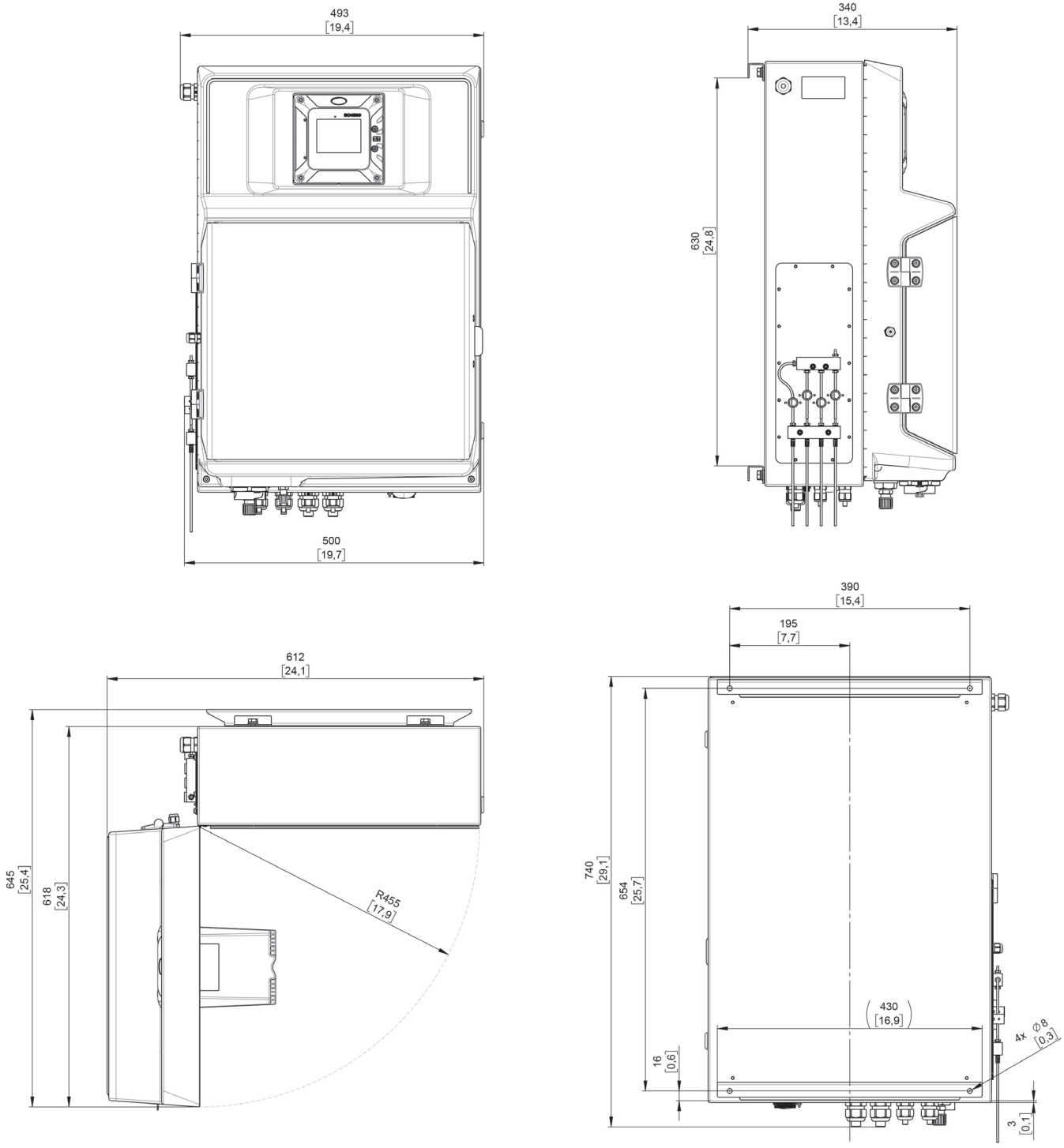
Real-time data and advanced connectivity response to calcium hardness changes enabling faster, more informed decisions. Integrate the EZ1017sc with your systems using configurable analogue or digital outputs for optimized performance.

Technical Data*

Model	EZ1017sc	
Parameter	Hardness, Calcium	
Measurement Method	Colorimetric	
Range	No Dilution 0.005 - 0.25 mg/L $CaCO_3$ 0.005 - 0.5 mg/L $CaCO_3$ 0.025 - 1 mg/L $CaCO_3$	Internal Dilution 0.125 - 5 mg/L $CaCO_3$ 0.25 - 10 mg/L $CaCO_3$ 0.625 - 25 mg/L $CaCO_3$ 1.25 - 50 mg/L $CaCO_3$ 1.875 - 75 mg/L $CaCO_3$ 2.5 - 100 mg/L $CaCO_3$
Lower Limit of Detection (LOD)	No Dilution 0.005 - 0.25 mg/L $CaCO_3$: 0.005 mg/L 0.005 - 0.5 mg/L $CaCO_3$: 0.005 mg/L 0.025 - 1 mg/L $CaCO_3$: 0.025 mg/L	Internal Dilution 0.125 - 5 mg/L $CaCO_3$: 0.125 mg/L 0.25 - 10 mg/L $CaCO_3$: 0.25 mg/L 0.625 - 25 mg/L $CaCO_3$: 0.625 mg/L 1.25 - 50 mg/L $CaCO_3$: 1.25 mg/L 1.875 - 75 mg/L $CaCO_3$: 1.875 mg/L 2.5 - 100 mg/L $CaCO_3$: 2.5 mg/L
Interferences	Some metal ions interfere by causing fading or indistinct end points or by stoichiometric consumption of EDTA. Suspended or colloidal organic matter can interfere with the end point. Large quantities of color and turbidity interfere. Fats, oil, proteins, surfactants and tar interfere.	
Digital Outputs	Optional: Modbus (TCP/IP, RTU), Profinet, Profibus DP, Ethernet IP	
Protection Class	IP44	
Precision	Better than 3% of full scale at: 0.005 - 0.25 mg/L $CaCO_3$ 0.005 - 0.5 mg/L $CaCO_3$; and better than 2% of full scale for standard test solutions.	
Cycle Time	No Dilution Default: 10 min. Continuous: 8 min. Internal Dilution: Default: 15 min. Continuous: 10 min.	
Automatic cleaning	Yes; Frequency freely programmable: 6 hours, 12 hours, daily, weekly	
Calibration	Automatic; 2-point; offset or slope; Frequency freely programmable: 6 hours, 12 hours, daily, weekly. Note: manufacturer recommends that a calibration is done when the reagents are replaced	
Validation	Automatic; Frequency freely programmable: 6 hours, 12 hours, daily, weekly	
Ambient Temperature	50 - 86°F (10 - 30 °C) ± 4 °C deviation at 5 - 95% relative humidity (non-condensing)	
Reagent Requirements	Keep between 50 - 86 °F (10 - 30 °C)	
Sample Pressure	By external overflow vessel (open to atmospheric pressure)	
Sample Flow Rate	100 - 300 mL/min	
Sample Temperature	50 - 86 °F (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. Used to flush the instrument in corrosive environement. Min. 0.2 bar - Max. 0.5 bar	
Demineralized Water	Internal dilution option: Rinse water & Dilution water	
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 0 - 20 mA (or 4 - 20 mA) max. 500 Ohm load, standard: 4, optional: 8	
Material	Hinged part: Thermoform ABS, door: PMMA Wall section: Galvanized steel, powder coated	
Dimensions (H x W x D)	740 mm x 500 mm x 340 mm	
Weight	Max. 77 lb (35 kg)	
Certifications	CE, ETL certified to UL and CSA safety standards, UKCA	

**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

APPAZ0080011 - Overflow Vessel 100 mL for EZ sc
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