



EZ sc Series Chromium Analyzers - EZ1009sc and EZ2709sc

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.

Trusted Equipment for Critical Operations

The EZ sc Series combines robust engineering with high-quality materials to ensure reliability 24/7. Designed for long-term performance, EZ sc Series minimizes breakdowns and supports sustained operational success.

Scalable Solutions for Growing Needs

Built to evolve alongside your needs, online analyzers from the EZ sc Series offer adaptable parameters and easier integration. They ensure your facility remains future proof without requiring expensive upgrades. Easily adjust parameter testing ranges and expand sample streams to accommodate innovation and growth.

Real-Time Data for Faster Decisions

The EZ sc Series offers advanced connectivity and real-time monitoring, delivering immediate access to actionable insights. Facilities utilizing this technology benefit from improved reaction times, empowering more informed decision-making and quicker responses during critical situations.

Simplified Troubleshooting with Expert Support

Built-in diagnostics combined with secure remote data access make the EZ sc Series simplify issue resolution. Supported by a highly responsive team of experts, it ensures uninterrupted functionality and minimizes operational downtime. By addressing and identifying issues early, EZ sc Series of online analyzers helps prevent costly disruptions and repairs while maintaining system efficiency.

Clear Workflows for Predictable Outcomes

Standardized tools and guided workflows ensure consistent implementation and operation. The EZ sc Series minimizes miscommunication, sets clear expectations, and reduces process inconsistencies, driving greater efficiency.

Technical Data*

Model	EZ1009sc	
Parameter	Chromium	
Measurement method	Diphenylcarbazide colorimetric method	
Range	No Dilution 0.001 - 0.05 mg/L Cr 0.002 - 0.125 mg/L Cr 0.003 - 0.25 mg/L Cr 0.005 - 0.5 mg/L Cr	Internal Dilution 0.025 - 2.5 mg/L Cr 0.050 - 5 mg/L Cr 0.125 - 12.5 mg/L Cr 0.250 - 25 mg/L Cr 0.375 - 37.5 mg/L Cr 0.500 - 50 mg/L Cr
Lower Limit of Detection (LOD)	No Dilution 0.001 - 0.05 mg/L Cr: 0.001 mg/L 0.002 - 0.125 mg/L Cr: 0.002 mg/L 0.003 - 0.25 mg/L Cr: 0.003 mg/L 0.005 - 0.5 mg/L Cr: 0.005 mg/L	Internal Dilution 0.025 - 2.5 mg/L Cr: 0.025 mg/L 0.05 - 5 mg/L Cr: 0.05 mg/L 0.125 - 12.5 mg/L Cr: 0.125 mg/L 0.25 - 25 mg/L Cr: 0.25 mg/L 0.375 - 37.5 mg/L Cr: 0.375 mg/L 0.5 - 50 mg/L Cr: 0.5 mg/L
Cycle Time	No Dilution Default: 10 min. Continuous: 6 min.	Internal Dilution Default: 15 min. Continuous: 10 min.
Power	100 - 240 VAC, 50/60 Hz Max. power consumption: 120 VA	
Precision	Better than 2% full scale range for standard test solutions	
Reagent Requirements	Keep Color between 41 - 50 °F (5 - 10 °C), all other between 50 - 86 °F (10 - 30 °C)	
Sample Temperature	50 - 86 °F (10 - 30 °C)	
Sample Quality	Maximum particle size 100 µm, < 0.1 g/L; Turbidity < 50 NTU	
Interferences	Iron (III) (Fe ³⁺), mercury (Hg ²⁺) > 200 mg/L, molybdenum (Mo ²⁺) > 200 mg/L, vanadium (V ⁵⁺) > 5 mg/L. Large quantities of color and turbidity interfere. Fats, oil, proteins, surfactants and tar interfere.	
Demineralized Water	Internal dilution option: Rinse water & Dilution water	
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)	
Sample Pressure	By external overflow vessel (open to atmospheric pressure)	
Sample Flow Rate	100 - 300 mL/min	
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 environment. Min. 0.2 bar - Max. 0.5 bar	
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	
Outputs	Optional: Claros Ethernet connection and Modbus TCP/IP Ethernet connector; LAN version; 10/100 Mbps or Profinet or Ethernet IP	
Digital Outputs	Profibus DP or Modbus RTU	
Relays	5 contacts, not user configurable: Malfunction, maintenance, analysis ready, sample ready (EZ9150)	
Protection Class	IP44	
Material	Hinged part: Thermoform ABS, door: PMMA Wall section: Galvanized steel, powder coated	
Dimensions (H x W x D)	688 mm x 460 mm x 340 mm	
Weight	Max. 77 lb (35 kg)	
Certifications	CE, ETL certified to UL and CSA safety standards, UKCA	

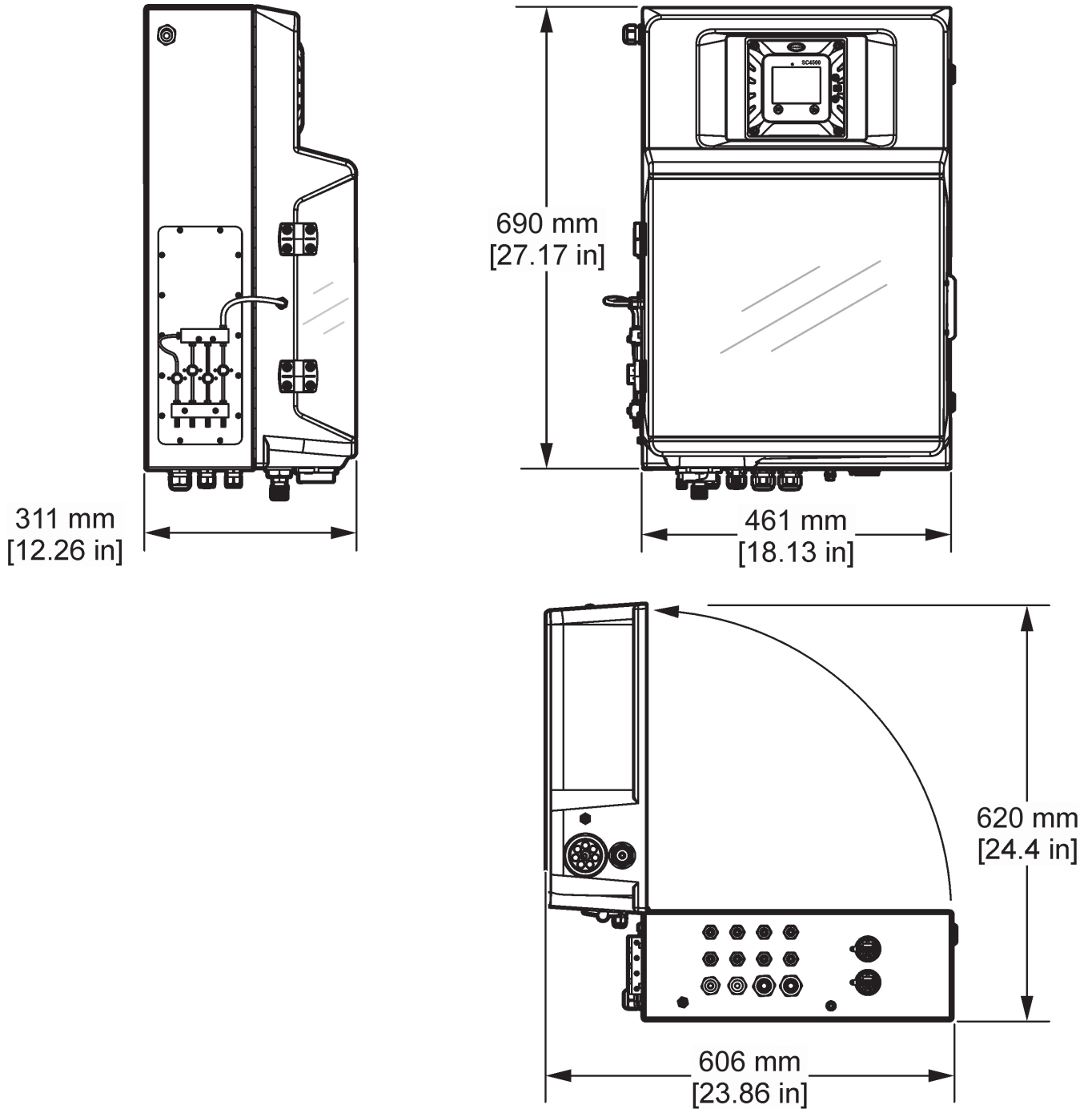
*Subject to change without notice.

Technical Data*

Model	EZ2709sc	
Parameter	Chromium, total	
Measurement method	Diphenylcarbazide colorimetric method	
Range	No Dilution 0.005 - 0.5 mg/L Cr(T)	Internal Dilution 0.025 - 2.5 mg/L Cr(T)
Lower Limit of Detection (LOD)	No Dilution 0.005 - 0.5 mg/L Cr(T): 0.005 mg/L	Internal Dilution 0.025 - 2.5 mg/L Cr(T): 0.025 mg/L
Cycle Time	No Dilution Default: 45 min. Continuous: 34 min.	Internal Dilution Default: 45 min. Continuous: 38 min.
Power	230 VAC, 50/60 Hz 120 VAC, 50/60 Hz Max. power consumption: 240 VA	
Precision	Better than 2% full scale range for standard test solutions	
Reagent Requirements	Keep Color between 41 - 50 °F (5 - 10 °C), all other between 50 - 86 °F (10 - 30 °C)	
Sample Temperature	50 - 86 °F (10 - 30 °C)	
Sample Quality	Maximum particle size 100 µm, < 0.1 g/L; Turbidity < 50 NTU	
Interferences	Iron (III) [(Fe) ³⁺], mercury [(Hg) ²⁺] > 200 mg/L, molybdenum [(Mo) ²⁺] > 200 mg/L, vanadium (V) [(V) ⁵⁺] > 5 mg/L, Alkalinity (CaCO ₃) > 1000 mg/L, COD (O ₂) > 500 mg/L. Large amounts of color and turbidity interfere. Fats, oil, proteins, surfactants and tar.	
Demineralized Water	Internal dilution option: Rinse water & Dilution water	
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)	
Sample Pressure	By external overflow vessel (open to atmospheric pressure)	
Sample Flow Rate	100 - 300 mL/min	
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 environment. Min. 0.2 bar - Max. 0.5 bar	
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	
Outputs	Optional: Claros Ethernet connection and Modbus TCP/IP Ethernet connector; LAN version; 10/100 Mbps or Profinet or Ethernet IP	
Digital Outputs	Profibus DP or Modbus RTU	
Relays	5 contacts, not user configurable: Malfunction, maintenance, analysis ready, sample ready (EZ9150)	
Protection Class	IP44	
Material	Hinged part: Thermoform ABS, door: PMMA Wall section: Galvanized steel, powder coated	
Dimensions (H x W x D)	688 mm x 460 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

EZ1009.97	X	X	X	X	X
Measurement range					
No Dilution	0				
0.001 - 0.05 mg/L Cr: 0.001 mg/L					
0.002 - 0.125 mg/L Cr: 0.002 mg/L					
0.003 - 0.25 mg/L Cr: 0.003 mg/L					
0.005 - 0.5 mg/L Cr: 0.005 mg/L					
Internal Dilution	V				
0.025 - 2.5 mg/L Cr: 0.025 mg/L					
0.05 - 5 mg/L Cr: 0.05 mg/L					
0.125 - 12.5 mg/L Cr: 0.125 mg/L					
0.25 - 25 mg/L Cr: 0.25 mg/L					
0.375 - 37.5 mg/L Cr: 0.375 mg/L					
0.5 - 50 mg/L Cr: 0.5 mg/L"					
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					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

Order Information

EZ2709.97	X	X	X	X	X
Measurement range					
No Dilution 0.005 - 0.5 mg/L Cr(T): 0.005 mg/L	0				
Internal Dilution 0.025 - 2.5 mg/L Cr(T): 0.025 mg/L	V				
Power supply					
230 VAC, 50/60 Hz		A			
120 VAC, 50/60 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 + Profinet DP				S	
8x mA + Profinet 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

