HACH
Be Right™

# EZ3508sc Online ISE Fluoride Analyzer with Standard Addition

**Applications**
- Wastewater
- Process/Production Water


## Reliable Fluoride Measurement in Complex Water Matrices

Matrix interferences, such as calcium, frequently distort fluoride measurements and compromise data quality. The EZ3508sc Fluoride Analyzer equipped with dual modes, discontinuous and standard addition to actively compensate for matrix effects during each analysis cycle. This method ensures accurate, repeatable results in complex water matrices while eliminating cross-contamination and reducing reagent consumption. Gain confidence in your process monitoring with less maintenance and greater stability.

### Consistent Results in Challenging Conditions

Fluctuating water quality often compromises conventional monitoring, leading to unstable readings. The EZ3508sc uses discontinuous and standard addition modes to compensate for these matrix interferences. You get accurate, continuous fluoride data for stable process control, even as conditions change.

### Reduced Maintenance and Manual Effort

Gel-filled ion selective electrodes eliminate electrolyte refilling, while automated cleaning and calibration reduce routine service needs. Discontinuous standard addition method optimizes buffer and reagent consumption; lowering site visits, operating costs, and overall maintenance effort.

### Seamless Integration and Connectivity

Isolated data makes process control and reporting difficult. The integrated controller platform supports standard digital communication protocols for easy connection to your existing network. You gain immediate access to critical insights, supporting faster decision-making and remote troubleshooting.

### Streamlined Operation and Usability

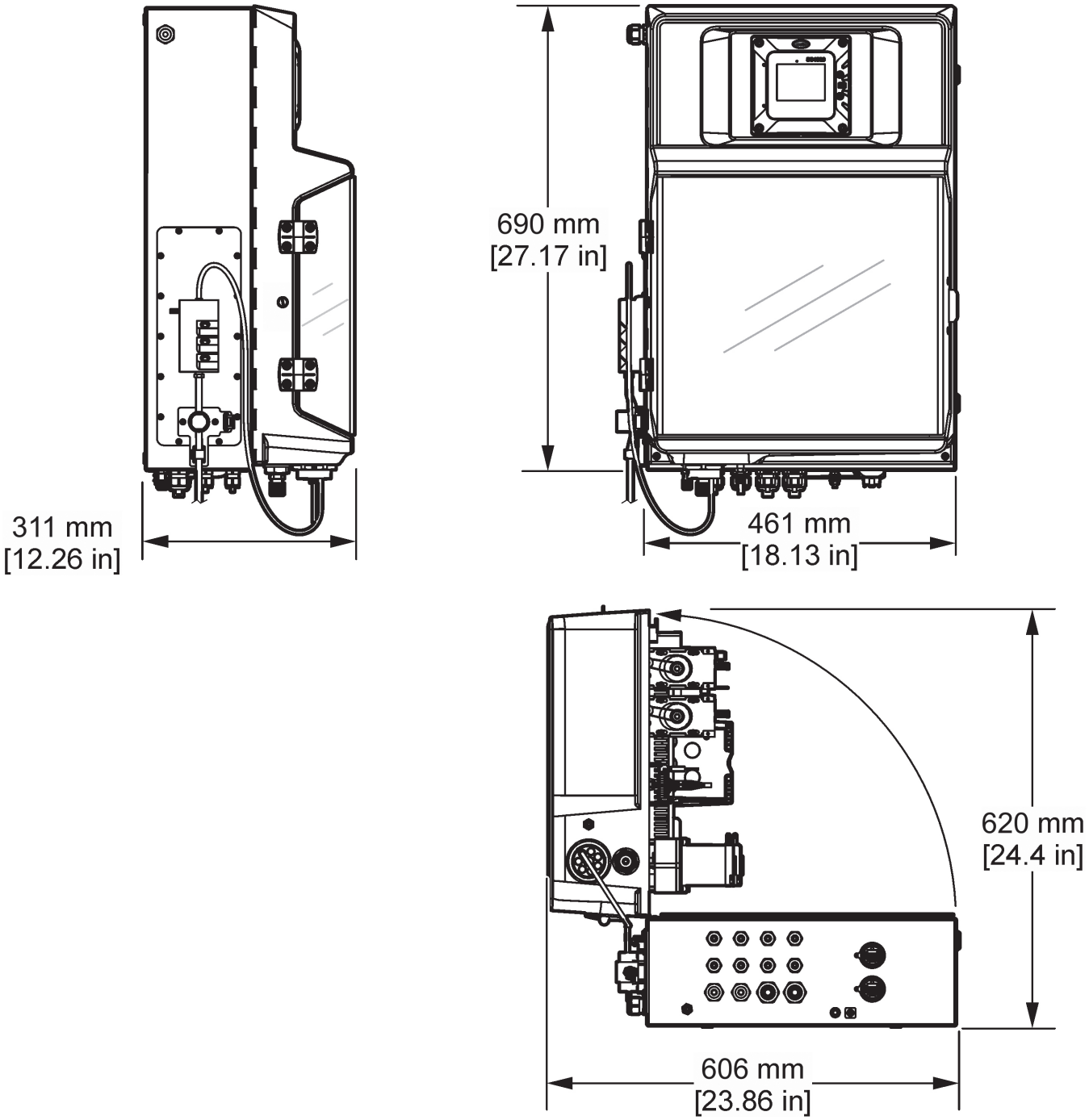
Complex instrumentation often leads to training bottlenecks and operational errors. The unified controller interface simplifies setup and daily interaction. Operators of any experience level can easily manage the system, reducing training requirements and preventing errors during routine checks.

## Technical Data*

| Model | EZ3508sc |
|---|---|
| **Parameter** | Fluoride |
| **Range** | No dilution<br>0.2 - 10 mg/L $F^-$<br>0.5 - 25 mg/L $F^-$<br>1 -50 mg/L $F^-$<br>2 - 100 mg/L $F^-$<br><br>Internal dilution<br>10 - 500 mg/L $F^-$<br>20 - 1000 mg/L $F^-$ |
| **Lower Limit of Detection (LOD)** | No dilution<br>0.2 - 10 mg/L $F^-$: 0.2 mg/L<br>0.5 - 25 mg/L $F^-$: 0.5 mg/L<br>1 -50 mg/L $F^-$: 1 mg/L<br>2 - 100 mg/L $F^-$: 2 mg/L<br><br>Internal dilution<br>10 - 500 mg/L $F^-$: 10 mg/L<br>20 - 1000 mg/L $F^-$: 20 mg/L |
| **Precision** | Better than 2% full scale range for standard test solutions |
| **Measurement Method** | Discontinuous measurement by combined Ion-Selective Electrode with standard addition |
| **Cycle Time** | No dilution<br>Default: 5 minutes<br>Continuous: 5 minutes<br><br>Internal dilution<br>Default: 10 minutes<br>Continuous: 8 minutes |
| **Sample Temperature** | 50 - 86 °F (10 - 30 °C) |
| **Sample Quality** | Maximum particle size 100 µm, < 0.1 g/L; Turbidity < 50 NTU |
| **Interferences** | Metal ions like aluminium $[(Al)^{3}+]$ > 72 mg/L, calcium $[(Ca)^{2}+]$ > 108 mg/L and iron $[(Fe)^{2}+/(Fe)^{3}+]$ > 150 mg/L. Fats, oil, proteins, surfactants and tar. |
| **Reagent Requirements** | Keep between 50 - 86 °F (10 - 30 °C) |
| **Demineralized Water** | Internal dilution option: Rinse water and 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 |
| **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 |
| **Drain** | Atmospheric pressure, vented, min. Ø 32 mm |
| **Earth Connection** | 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 |
| **Digital Outputs** | Relays: 5 contacts, not user configurable: Malfuntion, maintenance, analysis ready, sample ready, sample ready (EZ9150)<br><br>Ethernet Connections: Optional: Claros Ethernet connection and Modbus TCP/IP Ethernet connector; LAN version; 10/100 Mbps or Profinet or Ethernet IP<br><br>RS485 communication: Profibus DP or Modbus RTU |
| **Protection Class** | IP44 |
| **Material** | Hinged part: Thermoform ABS, Door: PMMA<br>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

| EZ3508.97 | X | X | X | X | X |
|---|---|---|---|---|---|
| **Measurement range, no dilution** | | | | | |
| 0.2 - 10 mg/L $F^-$ | 0 | | | | |
| 0.5 - 25 mg/L $F^-$ | | | | | |
| 1 - 50 mg/L $F^-$ | | | | | |
| 2 - 100 mg/L $F^-$ | | | | | |
| **Internal dilution** | | | | | |
| 10 - 500 mg/L $F^-$ | | | | | |
| 20 - 1000 mg/L $F^-$ | V | | | | |
| **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 | | | | | 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