EZ3500 Series Fluoride Analyzers
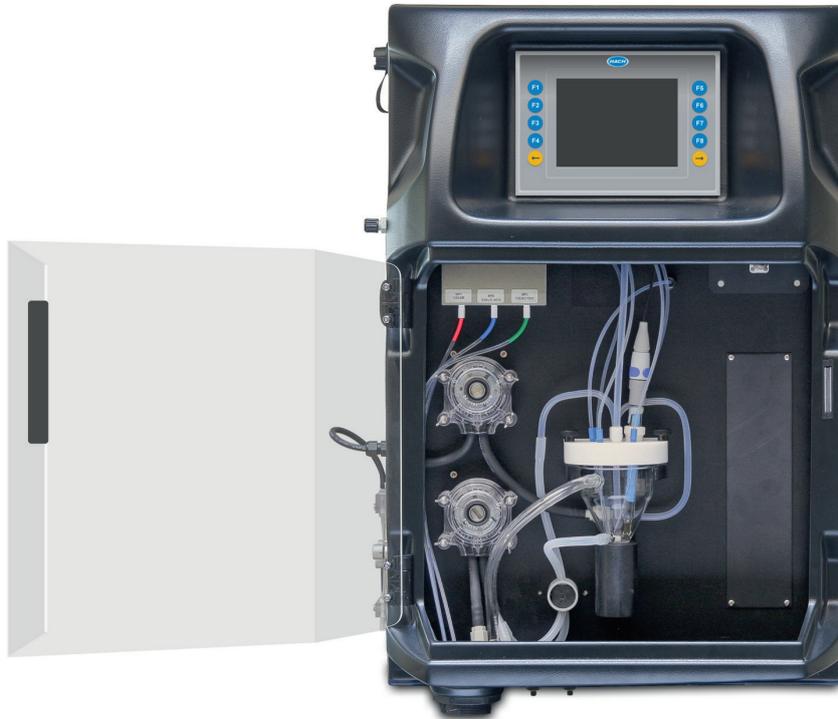
Online ion-selective Fluoride measurements with standard addition for industrial applications

ISE technology for complex water matrices

The EZ3500 Series are used for water monitoring applications where ion-selective electrodes are the preferred analytical technique, but the water matrix is complex. Standard addition helps minimize matrix interferences that otherwise might contribute to the output signal of the electrode.

Discontinuous, automatic standard addition

The EZ3500 Series run discontinuous measurements with careful addition of a known standard in an analysis vessel. Discontinuous ISE analysis enhances control over the potentiometry, eliminates cross-contamination between cycles and reduces overall reagent consumption.

The EZ3500 Series combine unique technology with a set of analysis, control and communication features in an industrial analyzer mainframe designed for the highest performance:

- Smart automatic features
- Control and communication via industrial panel PC
- Analog and digital output options
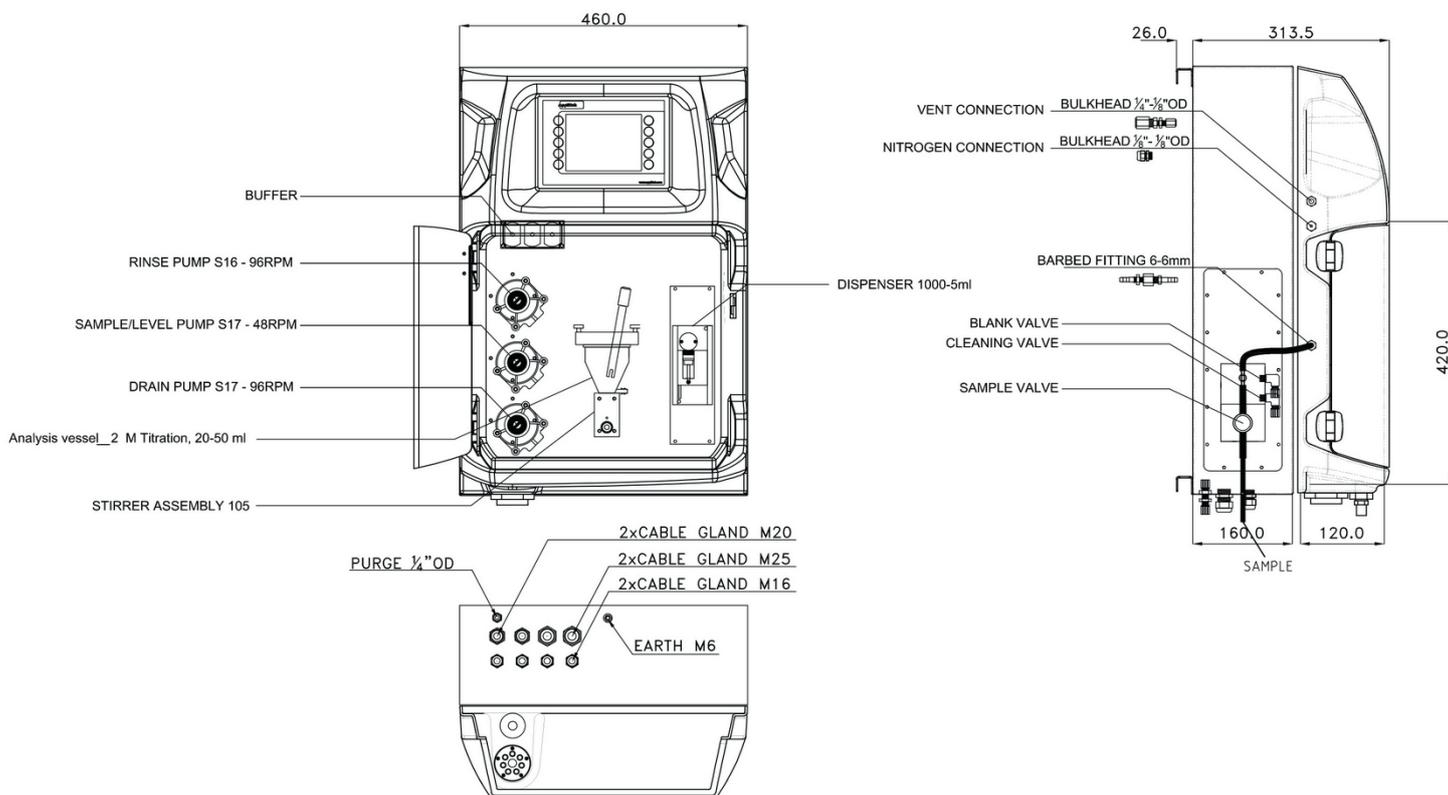- Multiple stream analysis (up to 8 streams)

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Technical Data*

Model	EZ3507	EZ3508
Parameter	Fluoride	Fluoride
Range	0.5 - 10 mg/L F⁻ Optional: 0.1 - 2.5 mg/L F⁻ 0.25 - 5 mg/L F⁻	5 - 100 mg/L F⁻ Optional: 1 - 25 mg/L F⁻ 2.5 - 50 mg/L F⁻
Lower Limit of Detection (LOD)	≤ 0.1 mg/L	≤ 1 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	
Interferences	Metal ions like aluminium > 72 mg/L, calcium > 108 mg/L and iron > 150 mg/L. Fats, oil, proteins, surfactants and tar.	
Cycle Time	8 minutes	
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 10 - 30 °C (50 - 86 °F)	
Sample Pressure	By external overflow vessel	
Sample Flow Rate	100 - 300 mL/min	
Sample Temperature	10 - 30 °C (50 - 86 °F)	
Sample Quality	Maximum particle size 100 μm, < 0.1 g/L; Turbidity < 50 NTU	
Power	110 - 240 VAC, 4 A, 50/60 Hz Max. power consumption: 150 VA	
Instrument Air	Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air	
Demineralized Water	For rinsing	
Drain	Atmospheric pressure, vented, min. Ø 64 mm	
Earth Connection	Dry and clean earth pole with low impedance (< 1 Ohm) using an earth cable of > 2.5 mm²	
Analog Outputs	Active 4 - 20 mA max. 500 Ohm load, standard 1, max. 8 (option)	
Digital Outputs	Optional: RS232, Modbus (TCP/IP, RS485)	
Alarm	1x malfunctioning, 4x user-configurable, max. 24 VDC/0.5 A, potential free contacts	
Protection Class	Analyzer cabinet: IP55 / Panel PC: IP65	
Material	Hinged part: Thermoform ABS, door: plexiglass 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 / UL certified	

Subject to change without notice.

Dimensions

460.0

BUFFER

RINSE PUMP S16 - 96RPM

SAMPLE/LEVEL PUMP S17 - 48RPM

DRAIN PUMP S17 - 96RPM

Analysis vessel_2 M Titration, 20-50 ml

STIRRER ASSEMBLY 105

DISPENSER 1000-5ml

26.0   313.5

VENT CONNECTION — BULKHEAD ¼"-⅛"OD

NITROGEN CONNECTION — BULKHEAD ⅛"-⅛"OD

BARBED FITTING 6-6mm

BLANK VALVE
CLEANING VALVE

SAMPLE VALVE

420.0

160.0   120.0

SAMPLE

PURGE ¼"OD

2xCABLE GLAND M20
2xCABLE GLAND M25
2xCABLE GLAND M16

EARTH M6

Hach Service

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 - Part Number Configurator

Standard range, 0.5-10 mg/L F⁻	EZ3507.99	X	X	X	X	X	2
Standard range, 5-100 mg/L F⁻	EZ3508.99						

Measurement range settings / Dilution options

25% of standard range	B
50% of standard range	C
Standard range	0
Customized	Z

Power supply

Standard 110 - 240 VAC; 50/60 Hz	0
Customized	Z

Number of sample streams

1 stream	1
2 streams	2
3 streams	3
4 streams	4
5 streams	5
6 streams	6
7 streams	7
8 streams	8

Outputs

1x mA	1
2x mA	2
3x mA	3
4x mA	4
5x mA	5
6x mA	6
7x mA	7
8x mA	8
RS232	A
Modbus TCP/IP	B
Modbus RS485	C
1x mA + Modbus RS485	E
2x mA + Modbus RS485	F
3x mA + Modbus RS485	G
4x mA + Modbus RS485	H
1x mA + Modbus TCP/IP	I
2x mA + Modbus TCP/IP	J
3x mA + Modbus TCP/IP	K
4x mA + Modbus TCP/IP	L
Customized / combined	Z

Specials

No adaption, standard version	0
Customer specific adaptions required, to specify	S

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