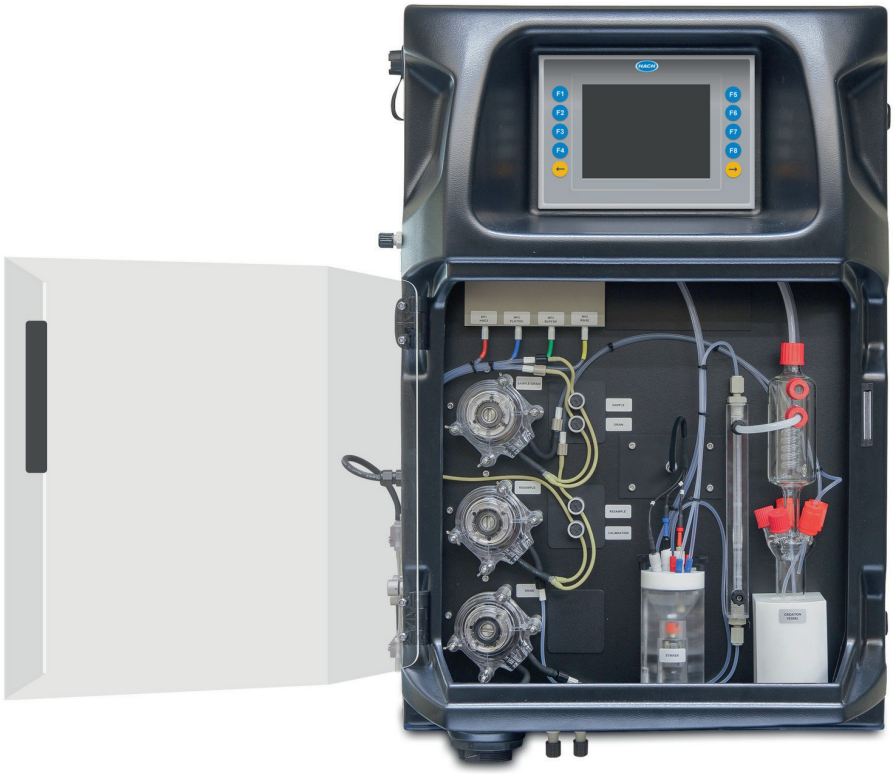
EZ6000 Series
Arsenic Trace Metal Analysers

Applications

- Drinking water
- Surface water
- Industrial effluent



Trace metal analysis of dissolved and total Arsenic in water by online voltammetry

About the EZ6000 Series

The EZ6000 Series of online Trace Metal Analysers are based on the technology of stripping voltammetry, a sensitive analytical technique that can be automated for the determination of trace levels of metals in water. For many metals the EZ6000 Series boasts limits of quantification in the low ppb range.

EZ6000 Analysers can be equipped with an add-on sample digestion unit that has been designed specifically for samples with higher organic contents, suspended particles and changing composition. The optional combination with an external filtration system allows for detection and measurement of trace metals in a wide range of water matrices.

The EZ6000 Series Analysers combine tried and tested voltammetry technology in an industrial mainframe with prime features:

- Excellent selectivity and sensitivity
- Standard measuring ranges with optional internal dilution
- Smart automatic features
- Control and communication via industrial panel PC
- Analogue and digital output options
- Multiple stream analysis

Options for the determination of Arsenic include: Arsenic, dissolved As(III), Arsenic, total dissolved As(III+V) and Arsenic, total after digestion. A combined analysis with Mercury is possible.

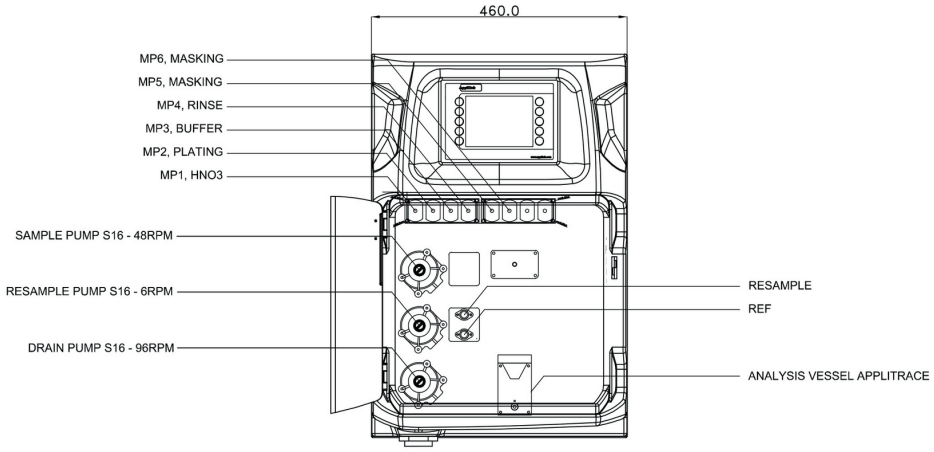
Technical Data*

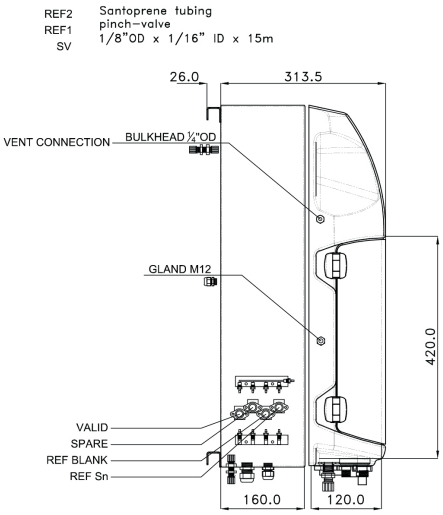
Model	EZ6000/6001/6100/6101	EZ6200/6300/6309
Parameter	Arsenic, dissolved As(III) Arsenic, total dissolved As(III+V)	Arsenic, total after hot acid digestion Arsenic, total dissolved As(III+V) Arsenic, dissolved As(III)
Measurement method	Stripping voltammetry using gold electrode	Stripping voltammetry using gold electrode
Measuring range	1 - 20 µg/L As	1 - 20 µg/L As Optional (only EZ6200): 5 - 80 µg/L (with internal dilution) 10 - 200 µg/L (with internal dilution) 20 - 400 µg/L (with internal dilution)
Precision	Better than 5% full scale range for standard test solutions	Better than 5% full scale range for standard test solutions
Detection limit	≤ 1 µg/L	≤ 1 µg/L
Cycle time	10 minutes (dilution + 5 min)	20 minutes (dilution + 5 min)
Interferences	Iodide, organic matter, copper Cu(II) > 30 µg/L, iron Fe(III) >20 mg/L, various metals in mg/L levels may interfere. Fats, oil, proteins, surfactants and tar.	Iodide, organic matter, copper Cu(II) > 30 µg/L, iron Fe(III) >20 mg/L, various metals in mg/L levels may interfere. Fats, oil, proteins, surfactants and tar.
Cooling water	Not required	Flow rate approx. 5 L/h; temperature max. 30 °C; pressure max. 0.5 bar
Power	100 - 240 VAC, 50/60 Hz Max. power consumption: 120 VA	230 VAC, 50/60 Hz, max. power consumption 440 VA 120 VAC version also available (see configurator)
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	
Sample pressure	By external overflow vessel	
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	
Instrument air	Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air	
Demineralised water	For rinsing / dilution	
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 mm^2	
Analogue outputs	Active 4 - 20 mA max. 500 Ohm load, standard 1, max. 8 (option)	
Digital outputs	Modbus, RS232, RS485	
Alarm	1 x malfunctioning, 4 x user-configurable, max. 24 VDC/0.5 A, potential free contacts	
Protection class	Analyser cabinet: IP55 / Panel PC: IP65	
Material	Hinged part: Thermoform ABS, door: plexiglass Wall section: Galvanised steel, powder coated	
Dimensions (H x W x D)	690 mm x 465 mm x 330 mm	
Weight	25 kg	
Certifications	CE compliant / UL certified	

**Subject to change without notice.*

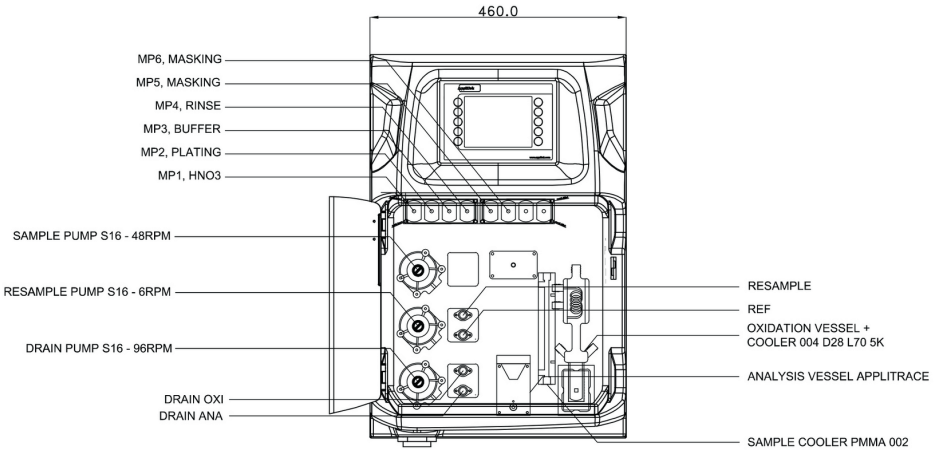
Dimensions

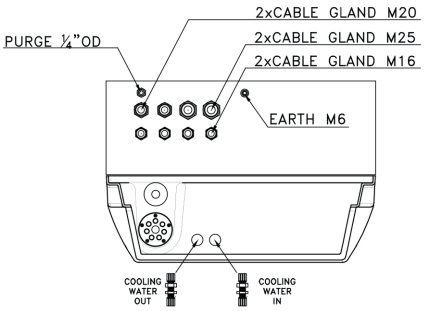
Arsenic, dissolved/total dissolved Analyser





Total Arsenic Analyser with digestion unit





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 maximise instrument uptime, ensure data integrity, maintain operational stability, and reduce compliance risk.

Order Information - Part Number Configurator

Arsenic, dissolved As(III), standard range 1-20 µg/L **Arsenic, total dissolved As(III+V), standard range 1-20 µg/L** **Arsenic, dissolved As(III) & Mercury, dissolved Hg(II), standard range 1-20 µg/L** **Arsenic, total dissolved As(III+V) & Mercury, dissolved Hg(II), standard range 1-20 µg/L**	**EZ6000.99** **EZ6001.99** **EZ6100.99** **EZ6101.99**	**X**	**X**	**X**	**X**	**X**	**2**
Measurement range settings / Dilution options							
Standard range		0					
Power supply							
Standard 100 - 240 VAC, 50/60 Hz			0				
Number of sample streams							
1 stream				1			
2 streams				2			
3 streams				3			
4 streams				4			
5 streams				5			
6 streams				6			
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		
No adaption, standard version						0	

Order Information - Part Number Configurator

Arsenic, total, standard range 1-20 µg/L	**EZ6200.99**						
Arsenic, total & Mercury, total, standard range 1-20 µg/L	**EZ6300.99**	**X**	**X**	**X**	**X**	**X**	**2**
Arsenic, total & Arsenic, total dissolved As(III+V) & Arsenic, dissolved As(III), standard range 1-20 µg/L	**EZ6309.99**						
Measurement range settings / Dilution options							
Standard range		0					
Internal micropump dilution (factor 4) (only EZ6200)		1					
Internal micropump dilution (factor 10) (only EZ6200)		3					
Internal micropump dilution (factor 20) (only EZ6200)		4					
Power supply							
230 VAC, 50/60 Hz			A				
120 VAC, 50/60 Hz			B				
Number of sample streams							
1 stream				1			
2 streams				2			
3 streams				3			
4 streams				4			
5 streams				5			
6 streams				6			
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		
No adaption, standard version						0	

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