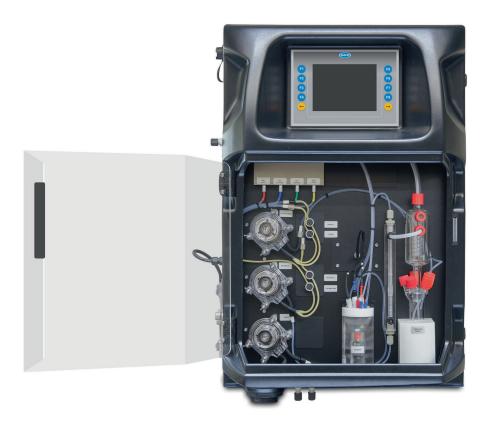
# EZ6000 Series Arsenic Trace Metal Analysers

#### **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.



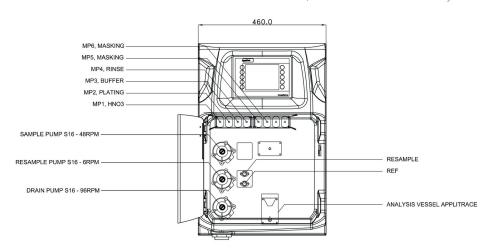
#### **Technical Data\***

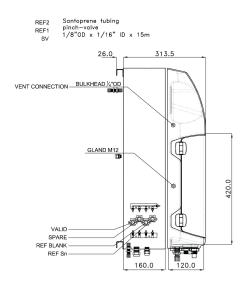
Model	EZ6000/6001/6100/6101	EZ6200/6300/6309				
Parameter	Arsenic, dissolved As(III) Arsenic, total dissolved As(III+V)	Arsenic, total after hot acid digestion Arsenic, total dissolved As(III+V) Arsenic, dissolved As(III)				
Measurement method	Stripping voltammetry using gold electrode	Stripping voltammetry 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	lodide, 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.	lodide, 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; freque	ency 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 <sup>2</sup>				
Analogue outputs	Active 4 - 20 mA max. 500 Ohm	load, standard 1, max. 8 (option)				
Digital outputs	Modbus, RS	S232, 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.

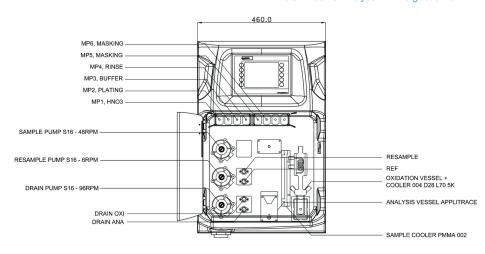
#### **Dimensions**

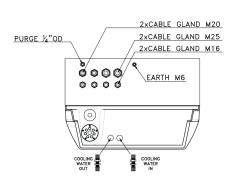
#### Arsenic, dissolved/total dissolved Analyser





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	х	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					Α		
Modbus TCP/IP					В		
Modbus RS485					С		
1x mA + Modbus RS485					Е		
2x mA + Modbus RS485					F		
3x mA + Modbus RS485					G		
4x mA + Modbus RS485					Н		
1x mA + Modbus TCP/IP					- 1		
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**

Measurement range settings / Dilution options         0           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         A           280 VAC, 50/60 Hz         A           210 VAC, 50/60 Hz         B           Number of sample streams         1           1 stream         1           2 streams         2           3 streams         4           4 streams         4           5 streams         6           6 streams         6           5 streams         6           5 streams         6           6 streams         6           6 streams         6           5 streams         6           6 streams         6           6 streams         6           5 streams         6           6 streams         6           5 streams         6           5 streams         6           6 streams         6           1x mA         1	Arsenic, total, standard range 1-20 μg/L Arsenic, total & Mercury, total, standard range 1-20 μg/L Arsenic, total & Arsenic, total dissolved As(III+V) & Arsenic, dissolved As(III), standard range 1-20 μg/L	EZ6200.99 EZ6300.99 EZ6309.99	x	x	x	x	x	2
Standard range								
Internal micropump dilution (factor 4) (only EZ6200) Internal micropump dilution (factor 10) (only EZ62000) Internal micropump dilution (factor 10) (only EZ62000) Internal micropump dilution (factor 20) (only EZ62000)  Power supply S	Measurement range settings / Dilution options							
Internal micropump dilution (factor 10) (only EZ6200) Internal micropump dilution (factor 20) (only EZ6200)  Power supply  230 VAC, 50/60 Hz  A  120 VAC, 50/60 Hz  B  Number of sample streams  1 stream  1 stream  2 streams  3 streams  4 streams  5 streams  5 streams  6 streams  7 mA  8 mA  9	Standard range		0					
Internal micropump dilution (factor 20) (only EZ6200)  Power supply 230 VAC, 50/60 Hz 20 VAC, 50/60 Hz 3	Internal micropump dilution (factor 4) (only EZ6200)		1					
Power supply	Internal micropump dilution (factor 10) (only EZ6200)		3					
Number of sample streams	Internal micropump dilution (factor 20) (only EZ6200)		4					
Number of sample streams	Power supply							
120 VAC, 50/60 Hz				Α				
1 stream       1         2 streams       2         3 streams       3         4 streams       4         5 streams       5         6 streams       6         Outputs         1 x mA       1         2x mA       2         3x mA       3         4x mA       4         5x mA       4         5x mA       5         6x mA       6         7x mA       7         8x mA       8         85232       A         Modbus TCP/IP       B         Modbus RS485       C         4x 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       K         3x mA + Modbus TCP/IP       K         3x mA + Modbus TCP/IP       K         4x mA + Modbus TCP/IP       K         3x mA + Modbus TCP/IP       K         4x mA + Modbus TCP/IP       K         4x mA + Modbus TCP/IP       K	120 VAC, 50/60 Hz							
1 stream       1         2 streams       2         3 streams       3         4 streams       4         5 streams       5         6 streams       6         Outputs         1 x mA       1         2x mA       2         3x mA       3         4x mA       4         5x mA       4         5x mA       5         6x mA       6         7x mA       7         8x mA       8         85232       A         Modbus TCP/IP       B         Modbus RS485       C         4x 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       K         3x mA + Modbus TCP/IP       K         3x mA + Modbus TCP/IP       K         4x mA + Modbus TCP/IP       K         3x mA + Modbus TCP/IP       K         4x mA + Modbus TCP/IP       K         4x mA + Modbus TCP/IP       K	Number of sample streams							
3 streams 3 4 streams 4 5 5 streams 5 6 5 5 6 5 streams 5 7 5 5 6 5 streams 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1 stream				1			
3 streams 3 4 streams 4 5 5 streams 5 6 5 5 6 5 streams 5 7 5 5 6 5 streams 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	2 streams				2			
4 streams 4 5 streams 5 6 streams 6 6 streams 7  Outputs  1x mA 1 2x mA 2 3x mA 3 4x mA 4 4x mA 4 5x mA 5 6x mA 6 6x mA 6 7x mA 7 8x mA 8 8x mA 9 8x m	3 streams							
5 streams 5 6 streams 6 6 5 6 streams 5 6 6 5 6 streams 5 6 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6	4 streams							
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       G         4x 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       K         4x mA + Modbus TCP/IP       K         4x mA + Modbus TCP/IP       L	5 streams				5			
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       G         4x 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       K         4x mA + Modbus TCP/IP       K         4x mA + Modbus TCP/IP       L	6 streams				6			
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7x mA								
88 mA RS232 A Modbus TCP/IP Modbus RS485 C 1x mA + Modbus RS485 E 2x mA + Modbus RS485 G 4x mA + Modbus RS485 H 1x mA + Modbus TCP/IP								
RS232       A         Modbus TCP/IP       B         Modbus RS485       C         1x mA + Modbus RS485       E         2x mA + Modbus RS485       F         3x 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       K         4x mA + Modbus TCP/IP       L								
Modbus TCP/IP  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  I 3x mA + Modbus TCP/IP  K MA + Modbus TCP/IP  K MA + Modbus TCP/IP  L L								
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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								
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3x mA + Modbus TCP/IP K 4x mA + Modbus TCP/IP L	1x mA + Modbus TCP/IP					I		
4x mA + Modbus TCP/IP L	2x mA + Modbus TCP/IP							
	3x mA + Modbus TCP/IP							
No adaption, standard version	4x mA + Modbus TCP/IP					L		
	No adaption, standard version						0	

