

EZ1000 Series Online Colorimetric Copper Analyser

Applications

- Wastewater
- Drinking water
- Surface water



Single and multiple parameter water analysis for industrial and environmental applications

Since their introduction in 2009 the EZ1000 Series of Online Colorimetric Analysers have served in hundreds of industrial water, drinking water and municipal water applications. The flexible analyser mainframe allows a perfect online duplicate of any standard/laboratory wet-chemical method, with outstanding precision and accuracy.

The EZ1000 Series online analysers stem from many years of analytical expertise and application knowledge in colorimetry in an attractive, yet rugged mainframe with a compact footprint, harnessing the following features:

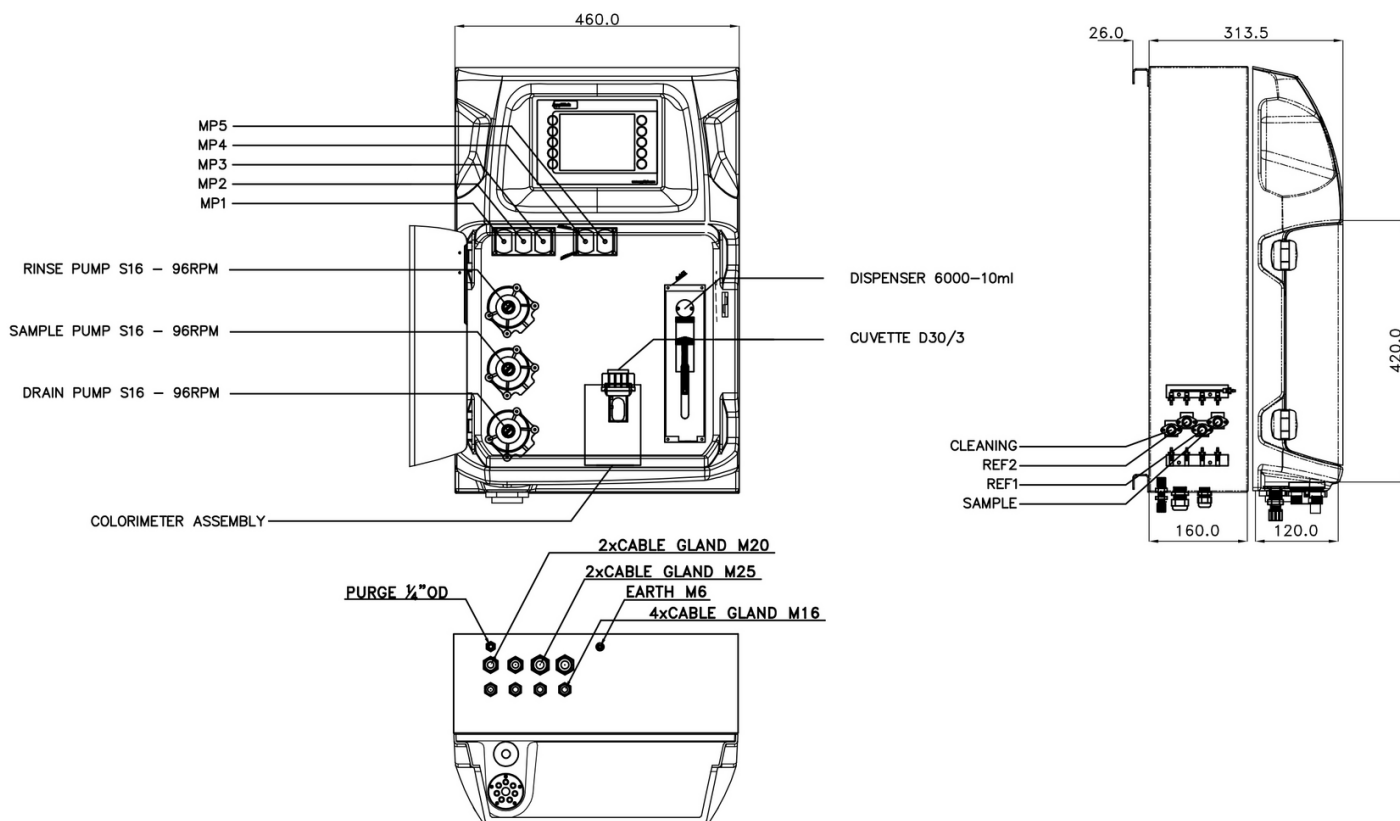
- Excellent analytical performance
- Smart automatic features
- Control and communication via industrial panel PC
- Standard 4 - 20 mA signal output with alarm processing
- Communication supporting Ethernet connectivity to Modbus TCP/IP
- Higher measuring ranges: internal sample dilution
- Multiple stream analysis

Technical Data*

Parameter	Copper Cu(II), dissolved
Measurement method	Colorimetric measurement at 546 nm using bicinchoninate method (range 0 - 3 mg/L) or at 480 nm using bathocuproine method (range 0 - 5 mg/L); conform respectively with Hach Method 8506 and standard method APHA 3500-Cu (C)
Measuring range	0 - 3 mg/L Cu(II) 0 - 5 mg/L Cu(II)
Precision	Better than 2% full scale range for standard test solutions
Detection limit	≤ 5 µg/L
Interferences	Acidity, metal ions like Aluminium (III) > 10 mg/L, Cyanide, Hardness, Iron (III) > 10 mg/L, Nickel (II) and Silver (II). Large amounts of colour and turbidity interfere. Fats, oil, proteins, surfactants and tar.
Cycle time	10 min (dilution + 5 min.)
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
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
Demineralised water	For rinsing and/or 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	Optional: RS232, Modbus (TCP/IP, 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



Be confident with Hach Service

Start-Up/Commissioning: Our service technicians visit your site and setup instrumentation, provide basic end-user training on operations and maintenance, and validate settings and performance to get you started.

Service Agreement: Hach provides on-site and in-factory repair, preventive maintenance, and calibration programs for your instruments to ensure reliability and instrument up-time. We have services to fit your specific needs.

Order Information - Part Number Configurator

Cu(II), 0 - 3 mg/L	EZ1010.99	X	X	X	X	X	2
Cu(II), 0 - 5 mg/L	EZ1011.99						
Measurement range settings / Dilution options							
10% of standard range	A						
25% of standard range	B						
50% of standard range	C						
Standard range	0						
Internal micropump dilution (factor 4)	1						
Internal micropump dilution (factor 8)	2						
Internal dispenser dilution (max. factor 100)	5						
Customised	Z						
Power supply							
Standard 110 - 240 VAC; 50/60 Hz	0						
Customised	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		
Customised / combined					Z		
Specials							
No adaption, standard version						0	
Customer specific adaptations required, to specify						S	