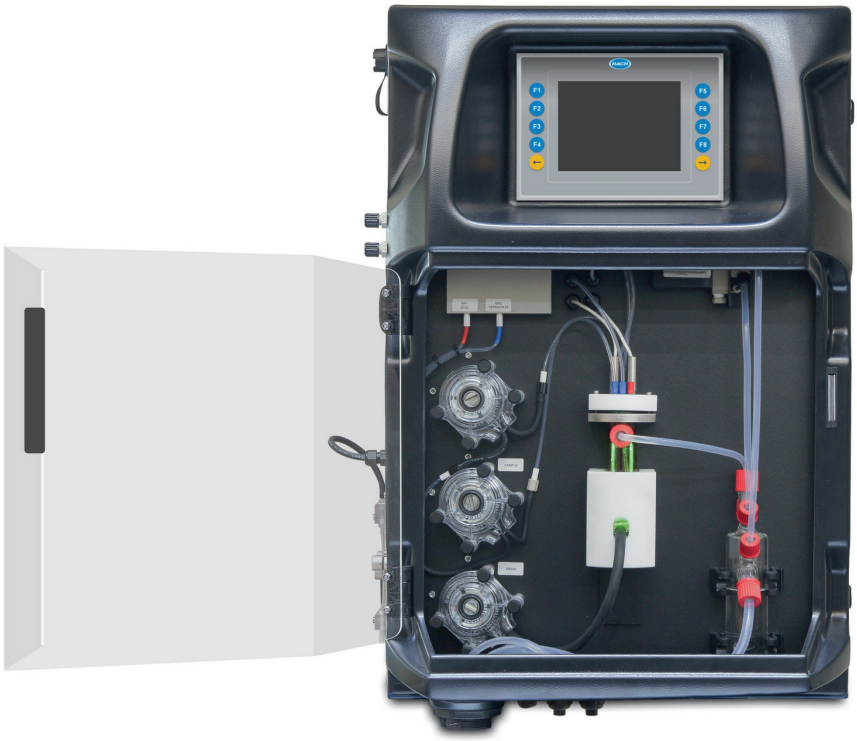
EZ7100 Series TOC & TC Analysers

Applications
- Wastewater
- Surface water



Online, automatic TOC or TC monitoring for wastewater and surface water applications

Proprietary discontinuous analysis

The EZ7100 Series Analysers are designed to run a discontinuous analysis on Total Organic Carbon or Total Carbon levels, reducing reagent consumption and overall maintenance costs. A rinsing or cleaning cycle can be introduced to eliminate cross-contamination and fouling.

Smart features and reduced calibration intervals

In the controller-database software, all necessary smart automatic features are already embedded: auto-calibration, auto-validation, auto-cleaning and auto-priming. In order to assure optimal analytical performance, it is recommended to calibrate the EZ7100 Series monthly or quarterly simply by starting the calibration sequence via the panel PC.

The mainframe of the EZ7100 Series is a compact and straight-forward design running a hot UV/persulphate destruction for determination of organic load in various water applications.

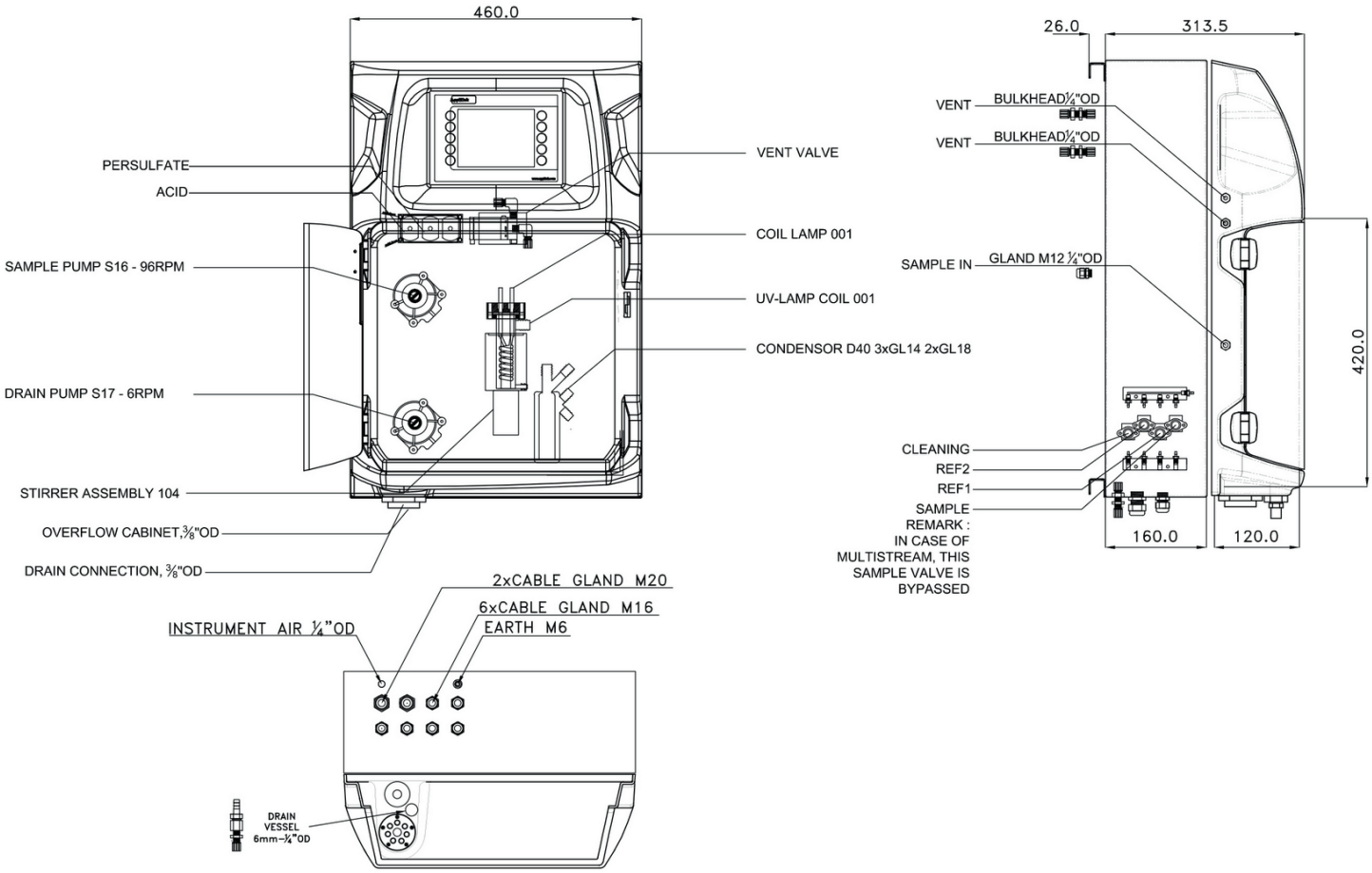
- Options for TOC or TC analysis
- Discontinuous analysis with programmable frequency
- Smart automatic features
- Control and communication via industrial panel PC
- Standard 4 - 20 mA signal output with alarm processing
- Communication ports supporting connectivity to Modbus
- Multiple stream analysis (up to 8 streams)

Technical Data*

Parameter	Total Organic Carbon (TOC), Total Carbon (TC)
Measurement method	Hot UV/persulphate method, conform with ISO 8245, USEPA 415.2, ASTM D4839-03 and DIN-EN 1484
Measuring range	0 - 20 mg/L C; 0 - 100 mg/L C; 0 - 500 mg/L C; 0 - 1,000 mg/L C; 0 - 5,000 mg/L C; 0 - 10,000 mg/L C
Precision	Better than 2% full scale range for standard test solutions
Detection limit	≤ 250 µg/L (range 0 - 10 mg/L C)
Interferences	Chloride >1 g/L affects oxidation efficiency. Volatile organic compounds evaporate in the TOC configuration. Fats, oil, proteins, surfactants and tar.
Cycle time	15 - 30 minutes, depending on range; frequency freely programmable
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: 440 VA Other voltages available on request
Instrument air	Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air
Demineralised water	For rinsing and calibration purposes
Drain	Atmospheric pressure, vented, min. Ø 64 mm
Cooling water	Flow rate approx. 5 L/h; temperature max. 30 °C; pressure max. 0.5 bar
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: 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 - Drawings



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

EZ7100.99XXXXX TOC, 0 - 20 mg/L	EZ7120.99XXXXX TC, 0 - 20 mg/L	EZ7140.99XXXXX TOC + TC, 0 - 20 mg/L
EZ7101.99XXXXX TOC, 0 - 100 mg/L	EZ7121.99XXXXX TC, 0 - 100 mg/L	EZ7141.99XXXXX TOC + TC, 0 - 100 mg/L
EZ7102.99XXXXX TOC, 0 - 500 mg/L	EZ7122.99XXXXX TC, 0 - 500 mg/L	EZ7142.99XXXXX TOC + TC, 0 - 500 mg/L
EZ7103.99XXXXX TOC, 0 - 1,000 mg/L	EZ7123.99XXXXX TC, 0 - 1,000 mg/L	EZ7143.99XXXXX TOC + TC, 0 - 1,000 mg/L
EZ7104.99XXXXX TOC, 0 - 5,000 mg/L	EZ7124.99XXXXX TC, 0 - 5,000 mg/L	EZ7144.99XXXXX TOC + TC, 0 - 5,000 mg/L
EZ7105.99XXXXX TOC, 0 - 10,000 mg/L	EZ7125.99XXXXX TC, 0 - 10,000 mg/L	EZ7145.99XXXXX TOC + TC, 0 - 10,000 mg/L

EZ71XX.99	X	X	X	X	X	2
Measurement range settings / Dilution options						
Standard range	0					
Customised	Z					
Power supply						
220 VAC / 50 Hz		A				
110 VAC / 60 Hz		B				
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 adaptions required, to specify					S	

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