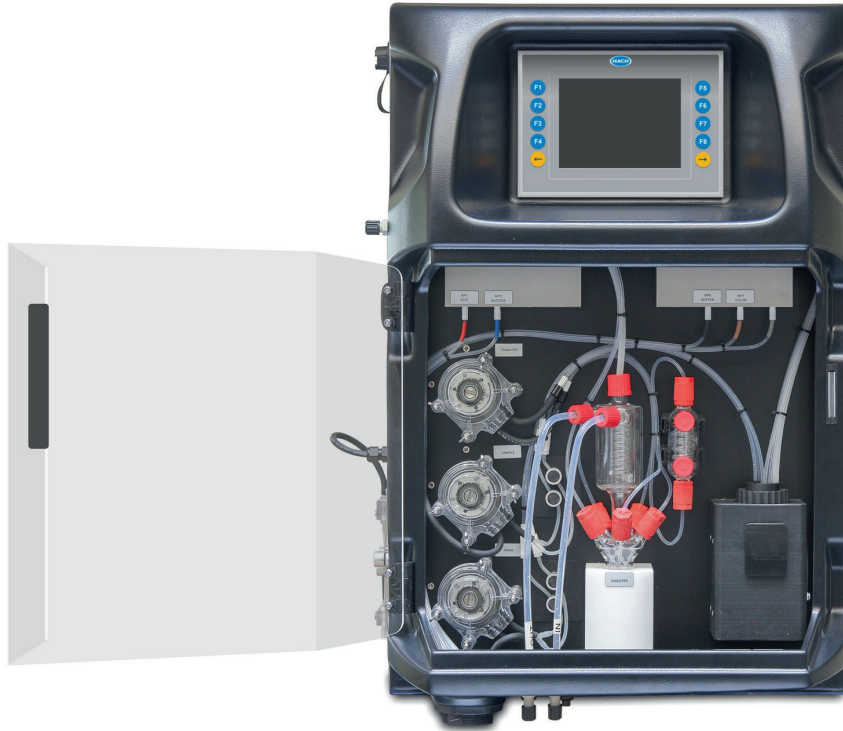


EZ2000 Series Online Colorimetric Analyser for Total Iron

Applications

- Wastewater
- Drinking water
- Power and steam generation
- Surface water



Single and multiple parameter water analysis for industrial and environmental applications

Since their introduction in 2009 the EZ2000 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.

Contrary to the EZ1000 Series, the EZ2000 has an internal sample digestion unit. This additional step prior to analysis allows to measure non-soluble or complexed metal species, a typical behavior of some metals in drinking water or natural waters.

The EZ2000 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:

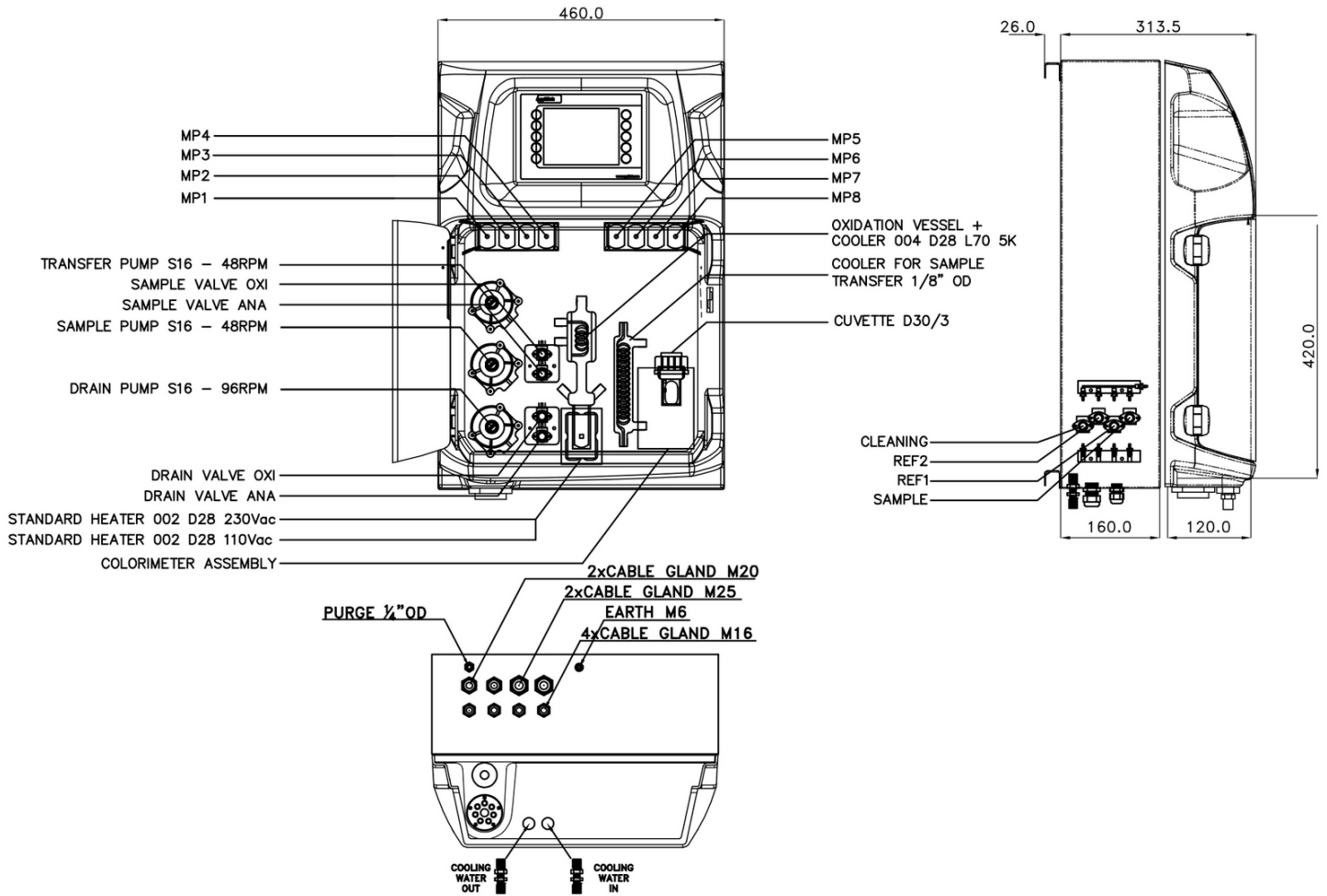
- Excellent analytical performance
- Built-in sample digestion unit
- Smart automatic features
- Control and communication via industrial panel PC
- Standard 4 - 20 mA signal output with alarm processing
- Communication supporting Ethernet connectivity to Modbus TCP/IP
- Higher measuring ranges: internal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

Technical Data*

Parameter	Total Iron Iron Fe(II), dissolved Iron Fe(III), dissolved
Measurement method	Colorimetric measurement using TPTZ colour solution
Measuring range	0 - 1 mg/L Fe
Precision	Better than 2% full scale range for standard test solutions
Detection limit	≤ 5 µg/L
Interferences	Metal ions like Lead > 10 mg/L, Zinc > 2 mg/L, Nickel > 2 mg/L, Iron > 5 mg/L, Copper > 5 mg/L. Strong oxidising agents, Cyanide, Nitrite, Phosphate (polyphosphate more than orthophosphate), Chromium, Zinc in concentrations exceeding 10 times that of Iron. Bismuth, Cadmium, Mercury, Molybdate, and Silver precipitate Phenanthroline. Polyphosphate must be absent. Large amounts of colour and turbidity interfere. Fats, oil, proteins, surfactants and tar.
Cycle time	20 min Total Fe (dilution + 5 min) 30 min Total Fe & Fe(II); Fe(II+III) 40 min Total Fe & Fe(II+III) & Fe(II) & Fe(III)
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	220 - 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/or dilution
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: 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

Total Fe, 0-1 mg/L	EZ2005.99						
Total Fe / Fe(II), 0-1 mg/L	EZ2305.99						
Total Fe / Fe(II+III), 0-1 mg/L	EZ2306.99	X	X	X	X	X	2
Total Fe / Fe(II+III) / Fe(II), 0-1 mg/L	EZ2307.99						
Total Fe / Fe(II+III) / Fe(II) / Fe(III), 0-1 mg/L	EZ2308.99						

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 10)	3
Internal micropump dilution (factor 20) (only EZ2005)	4
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 adaptations required, to specify	S