



## EZ7900 Toxicity Analyser

**Product #:** EZ7900.XXXXXXXXXX  
**ZAR Price:** Contact Hach



### Online, automatic respirometry for early warning of toxicity in wastewater treatment plants

Early Warning System against calamities

The EZ7900 Online Toxicity Analyser is able to detect and measure waste water streams that present an acute or chronic toxicity to the biomass of a water treatment plant. This allows operators to take corrective measures to protect the viability of the activated sludge.

Representative measurements on fresh sludge

Measurements are carried out on real sludge freshly sampled from the treatment plant by means of a self-cleaning sampling-filtration system (option). This unique approach has the following advantages: dynamic changes in biomass viability are immediately detected, while sample temperature and pH in the analysis vessel reflects those of the treatment plant.

The EZ7900 Series combine a unique, field-proven respirometric analyser design with a robust sampling-filtration system, assuring detection of toxic compounds or shock loads in an early stage:

- Detection of acute and chronic toxicity on activated sludge
- Measurement of the respiration rate by means of a single dissolved oxygen (DO) sensor
- Smart automatic features
- Standard 4 - 20 mA signal output with alarm processing
- Communication ports supporting connectivity to Modbus
- Multiple stream analysis

There are many additional options available. Please contact Hach for more details.

---

### Specifications

Alarm:	1 x malfunctioning, 4 x user-configurable, max. 24 VDC/0.5 A, potential free contacts
Ambient Temperature:	10 - 30 °C $\pm$ 4 °C deviation at 5 - 95% relative humidity (non-condensing)
Analogue Outputs:	Active 4 - 20 mA max. 500 Ohm load, standard 1, max. 8 (option)
Automatic cleaning:	Yes
Calibration:	Automatic; standard at every analysis cycle
Certifications:	CE compliant / ETL certified

Cycle Time:	10 - 15 minutes
Demineralised water:	N.A.
Digital outputs:	Optional: Modbus (TCP/IP, RS485)
Dimensions (H x W x D):	690 mm x 465 mm x 330 mm
Drain:	Atmospheric pressure, vented, min. Ø 32 mm
Earth connection:	Dry and clean earth pole with low impedance (< 1 Ohm) using an earth cable of > 2.5 mm <sup>2</sup>
Instrument air:	Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air
Interferences:	N.A.
Lower Limit of Detection (LOD):	N.A.
Material:	Hinged part: Thermoform ABS, door: PMMA  Wall section: Galvanised steel, powder coated
Measurement method:	Respirometry
Measuring range:	0 - 100 % inhibition
Number of sample streams:	1, 2, or 4
Parameter:	Toxicity; respiration rate
Power:	100 - 240 VAC, 50/60 Hz  Max. power consumption: 120 VA
Precision:	Better than 5% full scale range for standard test solutions
Protection Class:	Analyser cabinet: IP44 / Panel PC: IP65
Range:	0 - 100 % inhibition
Reagent requirements:	Keep between 10 - 30 °C
Sample Flow Rate:	100 - 300 mL/min
Sample Pressure:	By external overflow vessel
Sample Quality:	Maximum particle size 500 µm, < 0.1 g/L  Most applications require the use of a dual EZ9110 + EZ9120 sampling/filtration system.
Sample Temperature:	10 - 30 °C
Validation:	Automatic; frequency freely programmable
Warranty:	12 months
Weight:	25 kg
What's included?:	EZ7900 Toxicity Analyser, Instruction Manual, 1 x Double Bit Door Key, 1 x Mounting Brackets and empty Containers for Reagents with Fittings

---

## What's included?

EZ7900 Toxicity Analyser, Instruction Manual, 1 x Double Bit Door Key, 1 x Mounting Brackets and empty Containers for Reagents with Fittings