



EZ7300 Microbial Activity ATP Analyser

Product #: EZ7300.XXXXXXXXXX
AED Price: Contact Hach

Online monitoring of microbial activity in process water and drinking water applications

The first online microbiology analyser complying with standard method ASTM 4012-81

The EZ7300 Series monitor total bacterial and pathogen load in water by measuring portions of ATP (adenosine triphosphate) of any type of microbial microorganism present in the water sample i.e. bacteria (pathogenic and non-pathogenic), microalgae and protozoa. The analyser can be used as an Early Warning System in various applications with focus on water safety, when high ATP values indicate a potential risk in surpassing a threshold value of microorganisms in the past or in the near future.

Determination of total, intracellular and free ATP levels

Contrary to commonly available manual or semi-automated methods, the EZ7300 Series guarantees complete ATP recovery by quantifying different ATP portions in the sample. Operators now can access data on both extracellular (free) and intracellular ATP values, in order to differentiate living biomass from the non-living.

Advanced features

The EZ7300 Online Microbiology Analyser provides results within minutes and an objective, measurable basis for actions against sudden changes in microbial levels in your process:

- Complying with ASTM D4012-81
- Complete ATP recovery
- No bias from the composition of the growth medium such as with plate counting
- Low cost of analysis relative to a large number of results
- Smart automatic features
- Low maintenance, easy replaceable reagent kit
- 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:	7 - 23 °C ±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)
Calibration:	Automatic, 2-point; frequency freely programmable
Certifications:	CE compliant / UL certified
Cycle Time:	7 - 10 minutes incl. sample lysis
Demineralised water:	For rinsing
Detection limit:	≤ 0.05 pg/mL (0.1 pM) ATP
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 mm²
Flow rate:	100 - 300 mL/min
Instrument air:	Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air
Interferences:	High concentrations of Hg ²⁺ , Cu ²⁺ , Zn ²⁺ , Cd ²⁺ , Fe ²⁺ . Total salt concentrations higher than 1 g/L. pH lower than 5.5 and higher than 8.
Material:	Hinged part: Thermoform ABS, door: PMMA
	Wall section: Galvanised steel, powder coated
Measurement method:	Determination of adenosine triphosphate (ATP) by means of chemiluminescent reaction using luciferin and luciferase, conform with standard method ASTM D4012-81
Measuring range:	0.5 - 200 pg/mL
Model:	EZ7300
Number of sample streams:	1, 2, 4, or 8
Parameter:	ATP
Power:	100 - 240 VAC, 50/60 Hz
	Max. power consumption: 120 VA
Power supply:	100 - 240 VAC, 50/60 Hz
Precision:	Better than 4% full scale range for standard test solutions
Protection class:	Analyser cabinet: IP44 / Panel PC: IP65
Reagent Requirements:	Keep between 4 - 8 °C during operation, shielded from light. For prolonged storage, store at -20 °C in a dark environment.
Sample pressure:	Maximum 3 bar for direct injection or by external overflow vessel via the grab sample pump
Sample temperature:	5 - 30 °C
Validation:	Automatic; frequency freely programmable
Warranty:	24 months
Weight:	30 kg
What's included?:	EZ7300 ATP Analyser, Instruction Manual, 1 x Double Bit Door Key, 1 x Mounting Brackets, 2 x empty 5L Reagent Container with Fittings (NaOH & HCl Solution) and 3 x Screwcap/Fittings/Reference1/Reference2

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