

1 Instrument – 5 Technologies – 100+ Parameters

EZ Series Online Analyzers for industrial
and environmental water analysis



Colorimetric Analyzer



ISE Analyzer



Titrator



Voltammetric Trace Metal Analyzer



Chemiluminescence Analyzer

The Hach® EZ Series covers a unique range of parameters on a single analyzer platform. Five measurement technologies (colorimetry, titration, ion-selective electrode, voltammetry, and chemiluminescence) allow for a wide selection of measuring ranges and applications.

All instruments come in the same rugged mainframe with a compact footprint. Their common user interface on industrial panel PCs is easy to use and keeps training efforts low. Administrator access and activated/deactivated menu keys provide security. Various analog and digital communication

outputs support easy integration into your systems. Discontinuous analysis at programmable intervals assures low reagent consumption and eliminates cross-contamination.

EZ Series analyzers share wear and spare parts thus requesting less inventory. Similar maintenance steps again bring down training efforts. Optional Hach service agreements protect your investment and help ensure compliance.

The EZ Series Periodic Table of Elements

IA											
1 H 1.0079 Hydrogen		IIA									
3 Li 6.941 Lithium	4 Be 9.012 Beryllium										
11 Na 22.9898 Sodium	12 Mg 24.305 Magnesium	IIIB	IVB	VB	VIB	VII B	←	VIII B			
19 K 39.102 Potassium	20 Ca 40.08 Calcium	21 Sc 44.956 Scandium	22 Ti 47.88 Titanium	23 V 50.942 Vanadium	24 Cr 51.996 Chromium	25 Mn 54.938 Manganese	26 Fe 55.847 Iron	27 Co 58.933 Cobalt			
37 Rb 85.4678 Rubidium	38 Sr 87.6 Strontium	39 Y 88.906 Yttrium	40 Zr 91.22 Zirconium	41 Nb 92.906 Niobium	42 Mo 95.94 Molybdenum	43 Tc (98) Technetium	44 Ru 101.07 Ruthenium	45 Rh 102.906 Rhodium			
55 Cs 132.9054 Caesium	56 Ba 137.33 Barium	57 La 138.906 Lanthanum	72 Hf 178.49 Hafnium	73 Ta 180.948 Tantalum	74 W 183.85 Tungsten	75 Re 186.207 Rhenium	76 Os 190.2 Osmium	77 Ir 192.22 Iridium			
87 Fr (223) Francium	88 Ra 226.025 Radium	89 Ac 227.028 Actinium								Element name	
										Relative atomic mass	

Additional parameters

Microbial Load / ATP	Cyanide Total Cyanide	Volatile Fatty Acids (VFA) FOS/TAC	Chlorine, free Chlorine, total	Hydrogen Per
Toxicity	Thiocyanate SCN⁻	Urea	Formaldehyde	Glucose
Potassium hydroxide	Sodium hydroxide Sodium bisulfite	Sulphur dioxide	TMAH (Tetramethylammonium hydroxide)	Color Color Aurubis
Available on www.hach.com	Available on request			

										VIIIA
										2
										He
										4.003
										Helium
			III A	IV A	V A	VI A	VII A			
5	Boron	6	COD TOC, TC Phenol	7	Total N TKN Ammonium Nitrate Nitrite	8	Oxygen	9	Fluoride	10
B		C		N		O		F		Ne
10.811		12.011		14.007		15.999		18.998		20.179
Boron		Carbon		Nitrogen		Oxygen		Fluorine		Neon
13	Total Aluminium Al(III)	14	Silica	15	Total P Phosphate	16	Sulfate Sulfide	17	Chloride	18
Al		Si		P		S		Cl		Ar
26.982		28.086		30.974		32.06		35.453		39.948
Aluminium		Silicon		Phosphorus		Sulphur		Chlorine		Argon
28	Total Nickel Ni(II)	29	Total Copper Cu(II)	30	Total Zinc Zn(II)	31		32		33
Ni		Cu		Zn		Ga		Ge		As
58.71		63.546		65.38		69.72		72.59		74.922
Nickel		Copper		Zinc		Gallium		Germanium		Arsenic
34	Total Selenium	35		36		37		38		39
Se		Br		Kr		Sb		Te		Xe
78.96		79.904		83.80		121.75		127.60		131.29
Selenium		Bromine		Krypton		Antimony		Tellurium		Xenon
46		47	Total Silver Ag(I)	48	Total Cadmium Cd(II)	49		50	Total Tin Sn(II)	51
Pd		Ag		Cd		In		Sn		Sb
106.42		107.868		112.41		114.82		118.69		121.75
Palladium		Silver		Cadmium		Indium		Tin		Antimony
52		53	Iodine	54		81		82	Total Lead Pb(II)	83
Te		I		Xe		Tl		Pb		Bi
127.60		126.905		131.29		204.383		207.2		208.980
Tellurium		Iodine		Xenon		Thallium		Lead		Bismuth
84		85		86		87		88		89
Po		At		Rn		Fr		Ra		Ac
(209)		(210)		(222)						
Polonium		Astatine		Radon						

Atomic symbol

Atomic number

EZ Series Parameter

oxide H ₂ O ₂	Hydrazine N ₂ H ₄	DEHA (Diethylhydroxylamine)	Anionic charge Kationic charge Charge density	Thorium
	Acidity, free Acidity, total	Hydrofluoric Acid	Acetic Acid Lactic Acid Oxalic Acid	Hydrochloric Acid Phosphoric Acid Sulfuric Acid



Be Right™

Complete solutions for the complete water cycle

Risk mitigation, compliance, safety and instrument uptime: these are common requirements in water management, independent of the application. The EZ Series Analyzers provide a solution for continuously monitoring parameters that are critical to these concerns.

Application examples

- Monitoring of microbial ATP as the common denominator in bacterial and pathogen contamination, e.g. for prevention of biofouling in RO membranes
- Controlling of primary disinfection and disinfection by-products (DBPs)
- Detection of trace metals in source water, the distribution network or in your wastewater effluent post chemical precipitation and clarification
- Cost-effective determination of organic carbon in surface water intake
- Monitoring of corrosion, scaling and fouling indicators in your feed water
- Controlling of process efficiency and critical process parameters in anaerobic digestion
- Detection of acute and chronic toxicity in wastewater streams to protect your vulnerable microorganisms

EZ Series Overview

Thanks to the versatile instrument platform in many cases it will be possible to match the online analysis to the method you are using in your laboratory.

- EZ1000 Series: colorimetric analyzers
- EZ2000 Series: colorimetric analyzers with digestion
- EZ3000 Series: ion-selective analyzers
- EZ3500 Series: ion-selective analyzers with standard addition for complex matrices
- EZ4000 Series: single parameter titrators
- EZ5000 Series: multi parameter titrators
- EZ6000 Series: voltammetric trace metal analyzers
- EZ7000 Series: dedicated analyzers, e.g. for COD, TOC or Total Nitrogen + Total Phosphorus

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In the interest of improving and updating its equipment, Hach Company reserves the right to alter specifications to equipment at any time.

Sample Preconditioning

EZ Series Analyzers can be combined with sample preconditioning units for external dilution or filtration to meet the requirements of the individual application. All systems are designed for fully automatic operation and require virtually no human intervention.

The self-cleaning EZ9000 Series filtration systems are either equipped with a blow-back action by instrument air or a specific cleaning cycle to prevent the filter element, the sample tubing and the analyzer from blocking and blinding. This design principle allows for trouble-free sampling and contributes to high up-times.

Service Partnership

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

