EZ7600 Series Online Analyser for Total Nitrogen and Total Phosphorus

Applications

- Wastewater
- Surface water

Service Protected

The power of the perfect pair: TN and TP

You spend a lot of time looking at your data and your process, so you never come close to any compliance issues while managing your environmental and regulatory goals. When you choose the new EZ Series Total Nitrogen and Total Phosphorus analyser from Hach, you'll get industry-leading technology with the power to measure both parameters in one analyser for an hour-by-hour picture of nutrient removal efficiency. Full process insight gives you the confidence to take action.

Stay in control

Be confident in your process. Measuring Total Nitrogen and Total Phosphorus can be a complicated array of processes, but you can be in control. Hach's new TN/TP analyser simplifies the process by helping you get both measurements, quickly and accurately, with one device. When you choose our TN/TP analyser, you'll get industry-leading technology and unparalleled Hach service and support. We are your partner in managing your environmental and regulatory goals, and we're here to help you optimise your work.

See the total picture

Get a complete picture of your nutrient removal process with the reliable data and insights you need to act quickly and with confidence. Total nutrient discharge permits evolve, and with Hach's new EZ Series Total Nitrogen and Total Phosphorus analyser you'll get actionable data every hour. You'll always see the total load of Nitrogen and Phosphorus in your water.

This isn't simple, but we'll help you simplify

Hach is monitoring wastewater in new and exciting ways. We know that monitoring Total Nitrogen and Total Phosphorus can be a complicated process. That's why our new TN/TP analyser gives you the power to simplify your process and get accurate readings. The new combined analyser will make your day easier with features that help you save hands-on time. You'll enjoy the autocalibration, self-cleaning and automatic validation this analyser provides.

HACH®
Be Right™

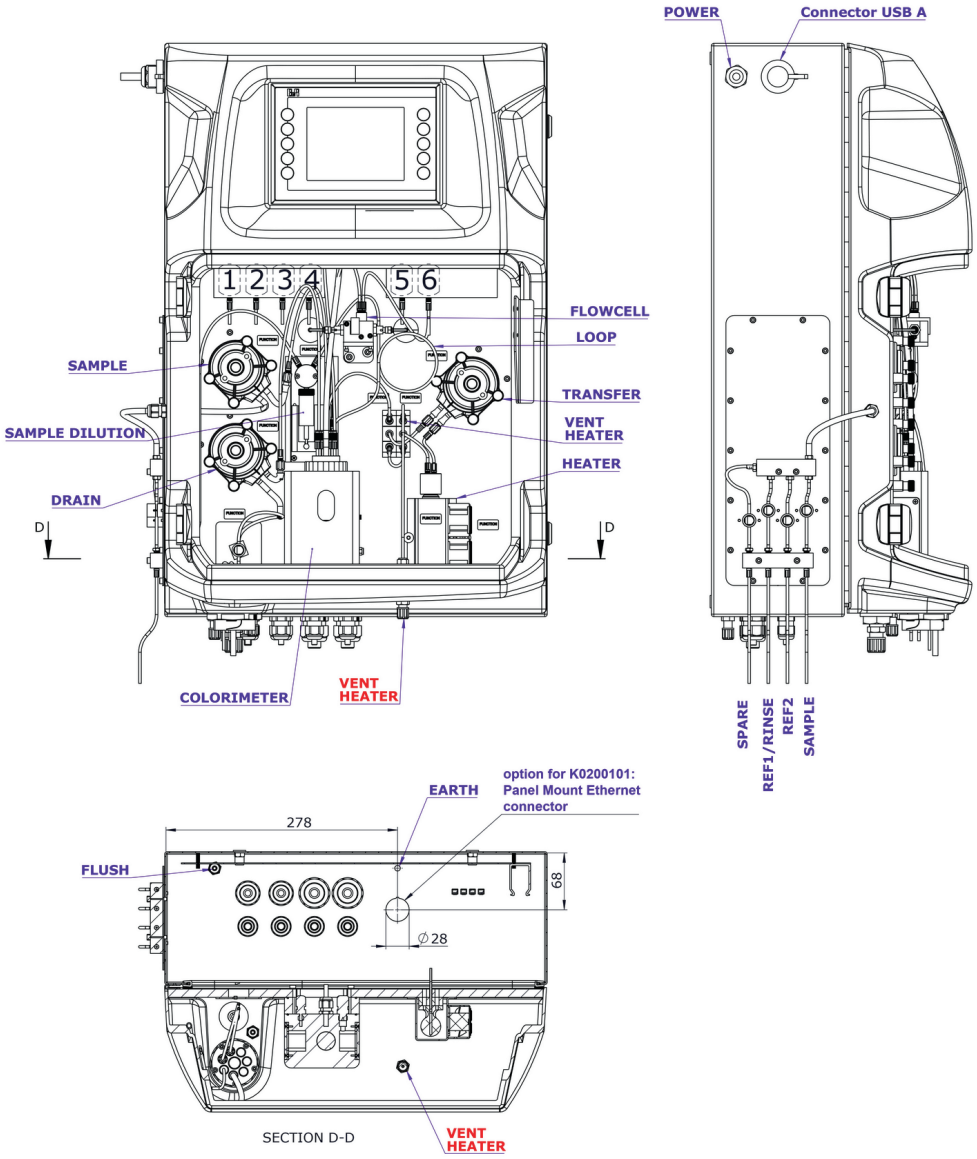
Technical Data*

Parameter	Total Nitrogen (TN) and Total Phosphorus (TP)
Measurement method	TN: UV photometric measurement at 220 nm after persulphate digestion in alkaline medium, based on APHA 4500-NO3 (B) TP: Colorimetric measurement at 700 nm using ascorbic acid reduction and molybdate colour solution after persulphate digestion in acidic medium, based on APHA 4500-P
Measuring range	Starting from 0.1 - 2 mg/L TN / 0.005 - 1 mg/L TP up to 10 - 200 mg/L TN / 0.5 - 50 mg/L TP (see page 4)
Precision	Better than 3% (TN) and 2% (TP) full scale range for standard test solutions
Detection limit	TN: ≤ 0.1 mg/L TP: ≤ 0.005 mg/L
Interferences	TN: The main interferences are Br^- and I^-. When the amount of I^- is 2.2 fold of the amount of TN, or the amount of Br^- is 3.4 fold of the amount of TN, this will interfere on the test results. Dissolved organic matter, surfactants and Chromium (VI) interfere. Various inorganic substances not normally found in natural water, such as Chlorite [ClO_2^-] and Chlorate [ClO_3^-], may interfere. TP: Arsenic (V), Chromium (VI), Copper (II) > 10 mg/L, Iron (III) > 10 mg/L, Sulphide > 2 mg/L, and Vanadium (V), Silica > 60 mg/L. Large amounts of colour and turbidity interfere. Fats, oil, proteins, surfactants and tar.
Cycle time	Standard measurement cycle time for both TN & TP: 60 minutes
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	230 VAC, 50/60 Hz 120 VAC, 50/60 Hz Max. power consumption: 440 VA
Instrument air	Dry and oil free according to ISA-S7.0.01-1996 quality standard for instrument air
Demineralised water	Consumption: 140 mL/analysis (hour)
Drain	Atmospheric pressure, vented, min. Ø 64 mm
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 (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 / ETL certified

**Subject to change without notice.*

Dimensions

No adaption, standard version



Order Information

Reagents

APPC76NP-01	Colour solution for EZ7600 Series TN/TP Analyser, 1 L
APPC76NP-02	Persulphate solution for EZ7600 Series TN/TP Analyser, 4 L
APPC76NP-03	NaOH solution for EZ7600 Series TN/TP Analyser, 1 L
APPC76NP-04	HCl solution for EZ7600 Series TN/TP Analyser, 1 L
APPC76NP-05	Reducing reagent for EZ7600 Series TN/TP Analyser, 2 x 0.5 L, 2 jars
APPC76NP-06	Reference 1 solution for EZ7600 Series TN/TP Analyser, 1 L
APPC76xx-07*	Reference 2 solution for EZ7600 Series TN/TP Analyser, 1 L

**Article number depending on EZ analyser model 76xx = 7621/7632/7641/7642/7652/7653/7654/7663/7664/7665/7675/7676/7685/7686*

Hach Service

With Hach Service, you have a global partner who understands your needs and cares about delivering timely, high-quality service you can trust. Our Service Team brings unique expertise to help you maximise instrument uptime, ensure data integrity, maintain operational stability, and reduce compliance risk.

Order Information - Part Number Configurator

Total Nitrogen 0.1 - 2 mg/L TN, Total Phosphorus 0.005 - 1 mg/L TP	**EZ7621.99**						
Total Nitrogen 0.25 - 5 mg/L TN, Total Phosphorus 0.010 - 2 mg/L TP	**EZ7632.99**						
Total Nitrogen 0.25 - 10 mg/L TN, Total Phosphorus 0.005 - 1 mg/L TP	**EZ7641.99**						
Total Nitrogen 0.25 - 10 mg/L TN, Total Phosphorus 0.010 - 2 mg/L TP	**EZ7642.99**						
Total Nitrogen 0.5 - 20 mg/L TN, Total Phosphorus 0.010 - 2 mg/L TP	**EZ7652.99**						
Total Nitrogen 0.5 - 20 mg/L TN, Total Phosphorus 0.025 - 5 mg/L TP	**EZ7653.99**						
Total Nitrogen 0.5 - 20 mg/L TN, Total Phosphorus 0.05 - 10 mg/L TP	**EZ7654.99**	**X**	**X**	**X**	**X**	**X**	**2**
Total Nitrogen 2 - 50 mg/L TN, Total Phosphorus 0.025 - 5 mg/LTP	**EZ7663.99**						
Total Nitrogen 2 - 50 mg/L TN, Total Phosphorus 0.05 - 10 mg/L TP	**EZ7664.99**						
Total Nitrogen 2 - 50 mg/L TN, Total Phosphorus 0.1 - 20 mg/L TP	**EZ7665.99**						
Total Nitrogen 4 - 100 mg/L TN, Total Phosphorus 0.1 - 20 mg/L TP	**EZ7675.99**						
Total Nitrogen 4 - 100 mg/L TN, Total Phosphorus 0.5 - 50 mg/L TP	**EZ7676.99**						
Total Nitrogen 10 - 200 mg/L TN, Total Phosphorus 0.1 - 20 mg/L TP	**EZ7685.99**						
Total Nitrogen 10 - 200 mg/L TN, Total Phosphorus 0.5 - 50 mg/L TP	**EZ7686.99**						
Measurement range settings / Dilution options							
Standard range		0					
Power supply							
230 VAC, 50/60 Hz			A				
120 VAC, 50/60 Hz			B				
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							
2x mA					2		
3x mA					3		
4x mA					4		
5x mA					5		
6x mA					6		
7x mA					7		
8x mA					8		
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		
**Combinations of up to 8x mA + Modbus are available.*							
No adaption, standard version						0	

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