



Hach BioTector B7000 Online TOC/TN/TP Analyser, 0-100 mg/L C, 1 stream, 115 V AC

Product #:

B4QFDF052AECAE2

ZAR Price:

Contact Hach

A single analyser for Carbon contamination and Nitrogen/Phosphorus nutrient levels in water

Contamination levels in water impact treatment and re-use decisions. With data on contamination plus nutrient levels water managers can make the most efficient and cost-effective decisions for treatment and reuse of important water supplies.

- Improve treatment and re-use decisions with accurate and complete water quality
- Reduce costs on nutrient dosing while protecting critical treatment facilities with accurate C:N:P ratios
- Spend more time managing the plant and less time collecting data with a robust, industrially designed online analyser to monitor TOC, TN, and TP parameters
- Detect product loss quickly to save valuable product, and minimise risk of noncompliance by preventing excessive contamination releases to the wastewater treatment plant

The Hach TOC analyser completes a full breakdown of each process sample to deliver trusted results.

Improve wastewater treatment process

Capture changes in water quality with a direct analysis of Total Organic Carbon (contamination), Total Nitrogen and Total Phosphorus in the most challenging samples.

Reduce the environmental footprint

Comprehensive information about your incoming sample composition enables improved process control. Knowing TOC + TN and TP allows you to decrease utilities usage and related costs. Optimised processes will reduce effluent environmental impact and minimise the risks of fines and reputation damage.

Protect your WWTP and WWRP

TOC is commonly used as a fast, reliable water analysis metric for water quality. TOC levels are often correlated to lagging water quality metrics such as Chemical Oxygen Demand (COD) and Biochemical Oxygen Demand (BOD).

Superior reliability

With a certified 99.86% uptime critical process information is available when you need it most. Maintenance in most applications is done 2x per year.

Specifications

Ambient Temperature:

5 - 40 °C

Communication: digital:

Modbus RTU, Modbus TCP/IP & Profibus

	(when the Profibus option is selected, the digital output signals are sent through the Profibus converter with its specific communication protocol)
Cycle Time:	From 10 minutes, depending on range and application
Data storage:	Previous 9999 analysis data on screen in the microcontroller memory and storage of data archive for the lifetime of the analyser in the SD/MMC card.
	Previous 99 fault data on screen in the microcontroller memory and storage of fault data archive for the lifetime of the analyser in the SD/MMC card.
Display:	High contrast 40 character x 16 line backlit LCD with LED backlight
Drain Pressure:	Typically ambient (for applications with high drain pressure, optional systems are available)
EExp / Hazardous Location:	Certification options are available to European Standards (ATEX Zone 2 - maximum T3 for TP analyser) and North American Standards (Class I Division 2)
Enclosure rating:	IP44; optional IP54 with air purge
Expected Measuring Range:	0 - 100 mg/L
Humidity:	5 - 85 % (non-condensing)
Languages user interface:	English
Lower Limit of Detection (LOD):	TOC: 0.6 mg/L C with Automatic Range Selection
	TN: 0.4 mg/L N with Automatic Range Selection
	TP: 0.4 mg/L P with Automatic Range Selection
Measurement method:	TOC: NDIR measurement of CO ₂ after oxidation
	TN: direct photometric analysis of Nitrate after oxidation
	TP: colorimetric analysis of Phosphate with standard Vanadomolybdophosphoricacid method after oxidation
Measuring range:	0 - 100 mg/L C/N/P
Multi-Stream:	Valves for up to 3 streams with up to six 4-20 mA signals
	The number of available outputs depends on the manual stream configuration.
Number of Channels:	1 Channel (One 4-20mA output is included as standard)
Outputs:	One programmable 4-20 mA analogue output signal (typically for TOC)
	Maximum impedance: 500 ohms
	For systems requiring more than six 4-20 mA standard outputs, 4-20 mA Output Multiplex option is implemented to provide 4-20 mA data for up to 35 output signals
Oxidation Method:	Innovative Two-Stage Advanced Oxidation Process (TSAO) using Hydroxyl Radicals
Parameter:	Direct measurement of TOC, TIC, TC, TN, TP; COD, BOD via correlation; VOC via calculation
Particle Size:	Up to 2 mm, soft particulates
Permissible Chloride range:	Up to 30%
Power requirements (Hz):	60 Hz
Power requirements (Voltage):	115 VAC
Power supply:	TIC/TOC & TN/TP - 115V
Range selection:	Automatic or Manual Range Selection
Repeatability:	TOC: ±3% of reading or ±0.3 mg/L C, whichever is greater
	TN: ±3% of reading or ±0.2 mg/L N, whichever is greater
	TP: ±3% of reading or ±0.2 mg/L P, whichever is greater
Sample Inlet Temperature:	2 - 60 °C
Sample Volume:	Up to 8.0 mL

Service Interval:	6 months service intervals
User Interface:	Microcontroller with membrane keyboard
Warranty:	12 months
Weight:	90 - 120 kg
	Enclosure weight may change depending on system optional features.
What's included?:	B7000 TOC/TN/TP Analyser, Tubing, Fuses, Ferrules, Drain, Acid, Base & TN Dip Tubes, CO ₂ Filter & B7000 TOC/TN/TP User Manual

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