



## Hach BioTector B7000 Online TOC/TN/TP Analyser, 0-10000 mg/L C, 1 stream, 115 V AC

Product #:

B4QKDF052AECAE2

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.

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### 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 - 10,000 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 <sub>2</sub> after oxidation
	TN: direct photometric analysis of Nitrate after oxidation
	TP: colorimetric analysis of Phosphate with standard Vanadomolybdophosphoricacid method after oxidation
Measuring range:	0 - 10000 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 <sub>2</sub> Filter & B7000 TOC/TN/TP User Manual

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## What's included?

B7000 TOC/TN/TP Analyser, Tubing, Fuses, Ferrules, Drain, Acid, Base & TN Dip Tubes, CO<sub>2</sub> Filter & B7000 TOC/TN/TP User Manual