



# Hach BioTector B7000 Online TOC/TN/TP Analyser, 0-10,000 mg/L C, 1 stream, 230 VAC

Product #: B4RKDF052AECAE2

AED 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.

TOC: 0.6 mg/L C with Automatic Range Selection Detection limit:

TN: 0.4 mg/L N with Automatic Range Selection

TP: 0.4 mg/L P with Automatic Range Selection

Display: High contrast 40 character x 16 line backlit LCD with LED backlight

Drain: 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 waterproof rating: IP44; optional IP54 with air purge

0 - 10000 mg/L Expected Measuring Range:

Humidity: 5 - 85 % (non-condensing)

English Languages user interface:

Measurement method: TOC: NDIR measurement of CO, after oxidation

TN: direct photometric analysis of Nitrate after oxidation

TP: colorimetric analysis of Phosphate with standard Vanadomolybdophosphoricacid method after

oxidation

0 - 10000 mg/L C/N/P Measuring range:

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)

Output: 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%

50 Hz Power requirements (Hz):

Power requirements (Voltage): 230 V AC

Power supply: TIC/TOC & TN/TP - 230V

Range selection: Automatic or Manual Range Selection

Repeatability: TOC: ±3% of reading or ±0.3 mg/L C, whichever is greater

2 - 60 °C

TN: ±3% of reading or ±0.2 mg/L N, whichever is greater

TP:  $\pm 3\%$  of reading or  $\pm 0.2$  mg/L P, whichever is greater

Sample inlet temperature:

Up to 8.0 mL Sample volume:

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

# What's included?

B7000 TOC/TN/TP Analyser, Tubing, Fuses, Ferrules, Drain, Acid, Base & TN Dip Tubes, CO2 Filter & B7000 TOC/TN/TP User Manual