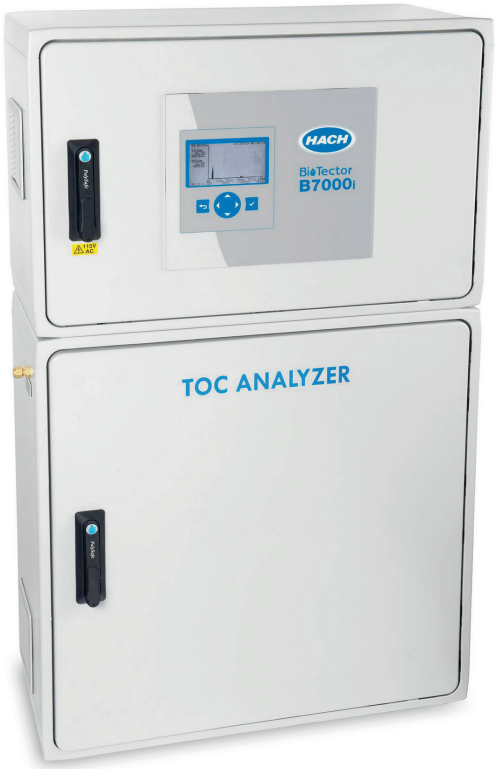
HACH BIOTECTOR B7000i ONLINE TOC ANALYZER



Applications

- Petrochemical Industry
- Oil & Gas
- Airport
- Pulp & Paper
- Pharmaceutical
- Wastewater Influent and Effluent
- Industrial Water
- Product Loss Control

The ideal online TOC Analyzer to achieve precise results even for your most challenging applications

A patented self-cleaning oxidation technology enables the B7000i analyzer to easily handle difficult samples and significantly reduce the maintenance schedule and costs associated with traditional on-line measurement. This TOC analzser eliminates build up issues from salts, particulates, fats, oils and greases that lead to drift and high maintenance.

With reliable, continuous environmental monitoring and real-time process control, BioTector analyzers allow plants to optimize processes and reduce product loss.

Worry-free TOC with smart design

The B7000i comes with a built in self-cleaning sample line and reactor. This enables the B7000i to deliver trustworthy results even if your water contains high levels of fats, oils, greases, sludge and particulates or has pH swings.

Easy handling

All B7000i come with unique oversized tubing which eliminated the need for filtration and you can be sure to have a fully representative sample. The special tubing also prevents clogging as well as sample contamination.

Superior reliability

Using BioTector's internationally proven and patented Two Stage Advanced Oxidation technology the B7000i delivers maximum reliability, accuracy and availability with a MCert certified uptime of 99.86%. In addition no calibration or maintenance is required between 6-month service intervals.

Flexible field of application

Depending on the type of application, the instrument can operate across a very wide measuring range. The B7000i analyzer also has multistreaming capabilities with up to 6 process streams possible. Additionally, it can be adapted for indoor or outdoor use.

Low cost of ownership

Installing a B7000i provides cost savings through optimizing processes by decreasing chemical dosing, waste reduction, reducing samples processes and lowering overall plant operation costs.

HACH®
Be Right™

Technical Data*

Parameters	TOC, TIC, TC, VOC, after correlation COD, BOD
Measurement Method	Infrared measurement of CO_2 after oxidation
Oxidation Method	Patented Two-Stage Advanced Oxidation Process using Hyroxyl Radicals.
Range	0 to 20000 mg/L C
Range Selection	Automatic or Manual Range Selection
Multi-Stream	Up to 6 streams
Repeatability	± 3 % of reading or ± 0.3 mg/L C, whichever is greater, with Automatic Range Selection
Cycle Time	From 6.5 minutes, depending on range and application
Permissible Chloride Range	Up to 30 %
Communication	Modbus, Profibus, Ethernet (when any of the Modbus, Profibus or Ethernet option is selected, the digital output signals are sent through the relevant device with its specific communication protocol)
Enclosure Rating	IP44; optional IP54 with air purge
EExp / Hazardous Location	Certification options are available to European Standards (ATEX for Zone 1 and Zone 2) and to North American Standards (Class I Division 1 and Class I Division 2). Other options, such as IECEx, are available on request.
Sample Inlet Temperature	2 to 60 °C (36 to 140°F)
Ambient Temperature	5 - 40 °C Air conditioning and heating options are available.
Humidity	5 % to 85 % (non-condensing)
Particle Size	Up to 2 mm, soft particulates
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 CFL backlight
Power Requirements (Voltage)	115 V AC / 230 V AC
Power Requirements (Hz)	50/60 Hz
Service Interval	6 months service intervals
Dimensions (H x W x D)	1250 mm x 750 mm x 320 mm
Dimensions: Weight	90 - 120 kg Enclosure weight may change depending on system optional features.

**Subject to change without notice.*

Principle of Operation

TIC

Acid is added to lower the pH so that inorganic carbon is sparged off as CO_2. This is also measured to ensure the Total Inorganic Carbon (TIC) in not carried over into the TOC.

Oxidation

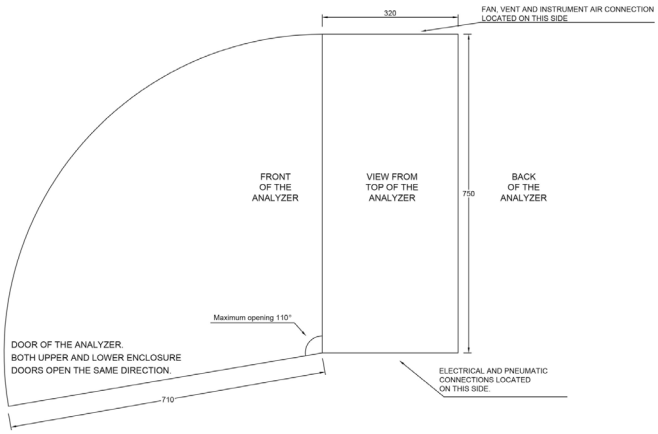
BioTectors's patented oxidation method (TSAO) efficiently oxidizes the organic carbon in the sample to CO_2. TSAO utilizes hydroxyl radicals generated within the analyzer by combining oxygen, which passes through the ozone generator, with sodium hydroxide.

TOC

To remove CO_2 from the oxidized sample, the pH of the sample is lowered again. The CO_2 is sparged and measured by the specially developed NDIR CO_2 analyzer. The result is displayed as Total Organic Carbon (TOC).

Dimensions

Access requirements

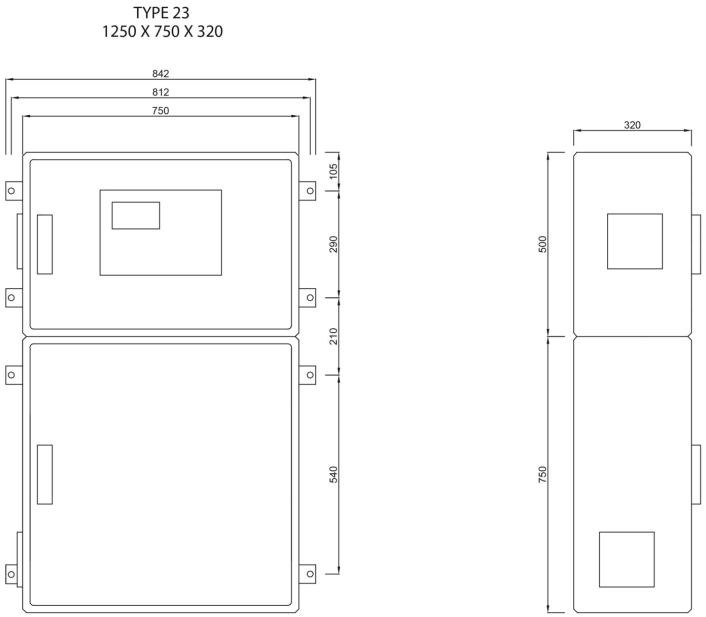


It is recommended that a clear space of 300mm is allowed around the BioTector in all directions.

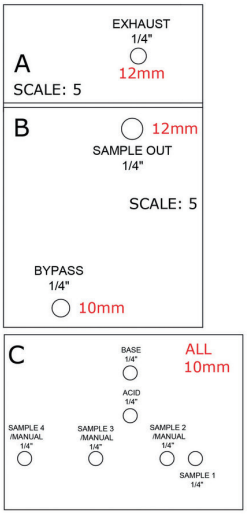
1500mm should be free in front of the BioTector so that its access doors can easily be opened.

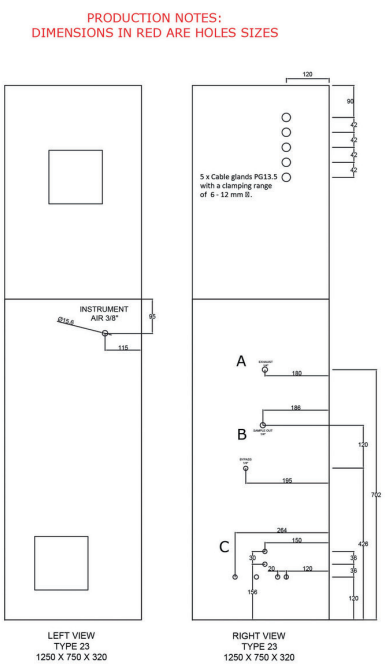
Dimensions in mm.

Enclosure



TOC connections





Order Information

Instruments

B7AAAA052AAAAA2	Hach BioTector B7000i Online TOC analyzer, 0 - 10000 mg/L C, 1 channel, 115 V AC
B7ABAA052AAAAA2	Hach BioTector B7000i Online TOC analyzer, 0 - 20000 mg/L C, 1 channel, 115 V AC

There are additional options available. Please contact Hach for more details.

Accessories

19-COM-160	BioTector Compressor 115 V / 60 Hz
19-COM-250	BioTector Compressor 230 V / 50 Hz
10-SMC-001	Air supply filter pack
19-KIT-131	B7000i 6 month service kit

Reagents

25255061	BioTector B7000 Acid Reagent 1.8 N Sulfuric Acid containing 80 mg/L Mn
2985562	BioTector Base Reagent 1.2 N Sodium Hydroxide

Be certain in your measurements with a first class Service Partner. Be confident with Hach Service.

By having regular on-site preventative maintenance and calibration, you maximize your measurement reliability and instrument uptime. Hach Service Programs give you full assurance that your instruments stay in compliance, and you stay within your budget.

Start-Up:

Commissioning will ensure you get the best performance from your instrumentation from the first day you use it.

Service Agreements:

Hach offers a wide range of service agreements that can be tailored to you to help maximize your measurement reliability and instrument uptime.

Contact us to get a service offering designed for you.

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