

QBD1200 LABORATORY TOTAL ORGANIC CARBON ANALYZER

Applications

- Drinking Water
- Semiconductor
- Power
- Clear Samples TOC <100 ppm



The Hach QBD1200 takes the pain out of TOC analysis and lowers your total cost of ownership.

Want to Trust Your TOC Results?

Stop throwing away your first replicate. The QBD1200 has 95% less carryover. Inconsistent results? Trust 2% standard deviation at 50 mg/L and 3% at 100 µg/L.

Want to Lower Your Total Cost?

Stop wasting money. Save 60% of your reagent costs. Say goodbye to frequent maintenance. Enjoy annual service vs. monthly.

Want to Simplify Your Analysis Process?

Tired of complicated setup? Begin testing with 90% fewer steps.

Want to Save Time?

Stop wasting all day calibrating. Only 90 minutes for a calibration routine.

Specifications*

Range	0.4 ppb - 100 ppm
Precision	3% or 3ppb, whichever is greater
Accuracy	± 2 %
Sample to Sample Carryover	<0.2%
Particle Size	up to 100 µm
Sample Homogenization	Available with Autosampler
Overload Recovery	1 Measurement
Inorganic Carbon Handling	No extra Inorganic Carbon Removal Module needed
Oxidation Method	UV lamp + Hot Persulfate
Carrier Gas Options	CO ₂ free Air, O ₂ , or N ₂
Data Export	PDF, CSV

Display Type	10.4 inch Hi-Res Color Touch Screen
Calibration Method	Automated Routine: 18 Point Calibration Using KHP (6 Concentrations, 3 Replicates Each)
Calibration Interval	1 Year; Time to Calibrate 90 Minutes
Compliance Certifications	USP <643> (including Sterile Water SST), JP-16 <2.59>, EP <2.2.44>, IP, CP, KP, US EPA 415.3 and Standard Method 5310c
Power Requirements (Voltage)	100/240 VAC
Power Requirements (Hz)	47 - 63 Hz
Dimensions (H x W x D)	410 mm x 320 mm x 507 mm

*Subject to change without notice.

Principle of Operation

TIC

Acid is added to lower the pH so that inorganic carbon is sparged off as CO₂. This is measured to ensure Total Inorganic Carbon (TIC) is not carried over into the TOC.

Oxidation

Convert TOC into CO₂ gas. In presence of UV light and powerful oxidizer (NH₄)₂S₂O₈, organic carbon species are converted into CO₂ gas by oxidation. Carrier gas is blown through the reaction chamber to push all CO₂ gas through NDIR detector.

TOC

CO₂ gas is detected as it goes through NDIR detector and TOC is quantified by integrating the area under the curve. TOC is then calculated, based on instrument calibration, by converting the CO₂ gas signal (area under the curve) into TOC.

Ordering Information

QBD1200 Instrument

9450000 QBD1200 Laboratory Total Organic Carbon Analyzer

QBD1200 Autosampler

9467100 QBD1200 Autosampler

QBD1200 Reagent/Standards

9459400 One Reagent Stock Solution

9459500 5 ppm C KHP Calibration Solution

9459600 SDBS Validation Kit

9459700 USP System Suitability Kit (500 ppb)

9459800 USP System Suitability Kit (8 ppm)

9459900 Specificity Test Kit

9460000 Robustness Test Kit

9460100 Validation Protocol Kit

QBD1200 Instrument and Autosampler Replacement Items

9449900 Syringe Replacement Kit

9449300 Ozone Destructor Replacement Kit

9459100 Replacement Tubing Kit

9449200 UV Reactor Replacement Kit

9464200 Reagent Bottle/Custom Cap Kit

9454300 QBD1200 Power Supply

9467200 Autosampler Tray

9454400 Extender Tool for QBD1200 Autosampler Tube Connection

9467300 QBD1200 Autosampler Power Supply

9467400 QBD1200 Autosampler Needle Sleeve

SP6790 Autosampler Septum Piercing Needle

Hach World Headquarters: Loveland, Colorado USA

United States: 800-227-4224 tel 970-669-2932 fax orders@hach.com

Outside United States: 970-669-3050 tel 970-461-3939 fax int@hach.com

hach.com

Printed in U.S.A.

©Hach Company, 2016. All rights reserved.

In the interest of improving and updating its equipment, Hach Company reserves the right to alter specifications to equipment at any time.



Be Right™