QbD1200 LABORATORY TOTAL ORGANIC CARBON ANALYZER

Applications

- Pharmaceutical
- Drinking Water
- Semiconductor
- Power



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 ppm and 3% at 100 ppb.

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 Precision	0.4 ppb - 100 ppm 3% or 3ppb, whichever is greater	Calibration Method Calibration Interval	Automated Routine: 18 Point Calibration Using KHP (6 Concentrations, 3 Replicates Each) 1 Year; Time to Calibrate 90 Minutes
Accuracy Sample to Sample	± 2 % <0.2%		
Carryover		Compliance	USP <643> (including Sterile Water SST), JP-16 <2.59>, EP <2.2.44>,
Overload Recovery Inorganic Carbon	Measurement No extra Inorgainc Carbon Removal	Power Requirements (Voltage)	IP, CP, KP, US EPA 5310c and 415.3
Handling	Module needed		100/240 V AC
Oxidation Method	UV Lamp + Persulfate		
Carrier Gas Options	CO_2 free Air, O_2 , or N_2	Power Requirements	47 - 63 Hz
Data Export	PDF, CSV	(Hz)	
Display Type	10.4 inch Hi-Res Color Touch Screen	Dimensions Metric (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 CO_2 . This is measured to ensure Total Inorganic Carbon (TIC) is not carried over into the TOC.

Oxidation

Convert TOC into CO_2 gas. In presence of UV light and powerful oxidizer (NH₄) $_2$ S $_2$ O $_8$, organic carbon species are converted into CO_2 gas by oxidation. Carrier gas is blown through the reaction chamber to push all CO_2 gas through NDIR detector.

TOC

 $\rm CO_2$ 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 $\rm CO_2$ gas signal (area under the curve) into TOC.

Ordering Information

QbD1200 Instrument		QbD1200 Instrument and		
9450000	QbD1200 Laboratory Total Organic Carbon Analyzer	Autosampler Replacement Items		
		9449900	Syringe Replacement Kit	
QbD1200 Autosampler		9449300	Ozone Destructor Replacement Kit	
9467100	QbD1200 Autosampler	9459100	Replacement Tubing Kit	
QbD1200 Reagent/Standards		9449200	UV Reactor Replacement Kit	
9459400	One Reagent Stock Solution	9464200	Reagent Bottle/Custom Cap Kit	
9459500	5 ppm C KHP Calibration Solution	9454300	QbD1200 Power Supply	
9459600	SDBS Validation Kit	9467200	Autosampler Tray	
9459700	USP System Suitability Kit (500 ppb)	9454400 Extender Tool for QbD1200 Autosample Tube Connection		
9459800	USP System Suitability Kit (8 ppm)			
9459900	Specificity Test Kit	9467300	QbD1200 Autosampler Power Supply	
9460000	Robustness Test Kit	9467400	QbD1200 Autosampler Needle Sleeve	
9460100	Validation Protocol Kit	SP6790	Autosampler Septum Piercing Needle	



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.

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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.