

Portable, Real-time TOC Measurement For Pure Water Systems



Rapid Response Time to TOC Excursions

The 450TOC portable total organic carbon analyzer provides continuous, real-time TOC analysis with instant measurements at any point of use. Reduce sampling time by 75% or more with on-the-spot results that eliminate lab analysis delays.



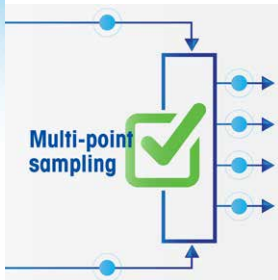
Data Capture Supports Compliance

The portable 450TOC analyzer's continuous monitoring capabilities and dual USB data ports allow you to maintain a clear overview of your TOC measurements and thereby comply with regulatory requirements. Export data to a spreadsheet or printer for hard-copy record keeping.



Elimination of Costly Sampling Errors

You can use the 450TOC portable total organic carbon analyzer to take TOC sample measurements directly at the sampling point. This eliminates the possibility of sample handling errors or contamination, ensuring accurate and reliable measurement.



Monitor TOC Where and When Necessary

The 450TOC analyzer allows you to take measurements where and when you need them. It is a fast, convenient solution for multiple sampling points that need to be monitored periodically. Pair it with an on-line TOC sensor for complete system verification.



450TOC Analyzer Portable TOC Measurement

Using proven continuous measurement technology, the 450TOC Total Organic Carbon (TOC) analyzer offers the fastest response available in an easily transportable TOC system. Its robust, portable design and convenient multi-point sampling ability makes the 450TOC a valuable tool for periodic sampling and water system diagnostics.

The 450TOC analyzer provides simple, real-time water quality monitoring that eliminates delays from grab sampling and laboratory analysis at measurement points where use of on-line instrumentation is not feasible.

Discover the 450TOC, visit:

► www.mt.com/450TOC

450TOC Technical Data

Measurement

Measurement range	0.05 - 1000 ppbC ($\mu\text{gC/L}$)
TOC accuracy	± 0.1 ppbC for TOC < 2.0 ppbC (for water quality > 15 M Ω -cm [0.067 $\mu\text{S/cm}$]) ± 0.2 ppbC for TOC > 2.0 ppbC and < 10.0 ppbC (for water quality > 15 M Ω -cm [0.067 $\mu\text{S/cm}$]) $\pm 5\%$ of measurement for TOC > 10.0 ppbC (for water quality 0.5 to 18.2 M Ω -cm [2.0 to 0.055 $\mu\text{S/cm}$])
Repeatability	± 0.05 ppbC < 5 ppbC, $\pm 1.0\%$ > 5 ppbC
Resolution	0.001 ppbC ($\mu\text{gC/L}$)
Analysis time	Continuous
Initial response time	< 60 seconds
Limit of detection	0.025 ppbC
Conductivity accuracy	$\pm 2\%$, 0.02 to 20 $\mu\text{S/cm}$; $\pm 3\%$, 20-100 $\mu\text{S/cm}$
Cell constant accuracy	2%
Temperature sensor	PT1000 RTD, Class A
Temperature accuracy	± 0.25 °C

General Specifications

Overall dimensions	13.15" [334 mm] W x 12.75" [324 mm] H x 7.3" [185 mm] D
Weight	With base: 7.0 kg [15.4 lb.]; without base: 6.1 kg [13.6 lb.]
Enclosure material	Ignition resistant polystyrene resin meeting UL 94 V-0
Ambient temperature/ humidity rating	5 to 50°C / 5 to 80% humidity, non-condensing
Power requirements	100-240VAC, 50-60 Hz, 40W maximum
Local indicators	Four LED lights for Fault, Error, Sensor Status and UV Lamp ON
Ratings/approvals	CE compliant, cULus listed. Conductivity and temperature sensors traceable to NIST, ASTM D1125 and D5391. Meets ASTM D5173 standard test method for on-line monitoring of carbon compounds in water by UV light oxidation

Installation/Power/Enclosure

Inlet connection	0.125" [3 mm] O.D. (6' [2 m] FDA compliant PTFE tubing supplied)
Outlet connection	Stainless steel drain tube (5' [1.5 m] flexible tubing provided)
Inlet filter	316SS, inline 60 micron
Wetted parts	316SS/quartz/PEEK/titanium/PTFE/silicone/FFKM/EPDM

Sample Water Requirements

Temperature	0 to 70 °C
Particle size	< 100 micron
Minimum water quality	≥ 0.5 M Ω -cm (≤ 2 $\mu\text{S/cm}$), pH < 7.5 *
Flow rate	20 mL/min
Pressure	4 to 85 psig (0.3 bar(g) to 5.8 bar(g)) at sample inlet connection

* For power plant cycle chemistry samples, pH may be adjusted by measurement after cation exchange.
Specifications subject to change without notice.

www.mt.com/pro

For more information

METTLER TOLEDO Group
Process Analytics Division
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Subject to technical changes
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Quality certificate.
Development, production and testing to ISO 9001.



CE Compliant



UL listed
Meets Canadian Standards