

# On-line, Continuous TOC Measurement For Pure Water Systems



## Real-time Compliance

The 6000TOCi analyzer provides rapid, continuous measurement of TOC levels in your water system. Versus batch systems that measure at intervals, 6000TOCi users have real-time data to demonstrate that TOC excursions are never missed, not even for a minute.



## Stable and Reliable Analysis

The 6000TOCi uses proven UV oxidation technology and the highest accuracy conductivity sensors to provide repeatable and precise measurements. You can be confident that you have conclusive data to meet regulatory and internal water quality requirements.



## Verifiable System Performance

Using advanced sensor diagnostics, the 6000TOCi gives you the insight needed to ensure your TOC system is always measuring effectively. Dynamic Lifetime Indicator (DLI) tool monitors remaining UV lamp life in hours so you can plan maintenance before problems occur.



## Water Efficient Sensor

The 6000TOCi operates at a flow rate of only 8.5 mL/min, minimizing the amount of expensive, high quality water used for this key measurement. These water consumption costs are often overlooked and the 6000TOCi's optimized flow rate can deliver significant savings over the sensor lifetime.



## 6000TOCi Never Miss an Excursion

The 6000TOCi total organic carbon sensor provides true continuous measurement, refreshing every second, for immediate detection of organic contamination. With the fastest response to TOC changes, the 6000TOCi is ideal in all pure water applications where rapid detection of TOC level changes is critical.

Intelligent Sensor Management (ISM<sup>®</sup>) technology provides advanced diagnostics, such as the Dynamic Lifetime Indicator tool, to monitor the remaining UV lamp life so you can plan maintenance before problems occur.

Discover the 6000TOCi, visit:

► [www.mt.com/6000TOCi](http://www.mt.com/6000TOCi)

# 6000TOCi Technical Data

## TOC Sensor

Measurement range	0.05 - 2000 ppbC ( $\mu\text{gC/L}$ )
Accuracy	$\pm 0.1$ ppbC for TOC < 2.0 ppbC (for water quality > 15 M $\Omega$ -cm [.067 $\mu\text{S/cm}$ ]) $\pm 0.2$ ppbC for TOC > 2.0 ppbC and < 10.0 ppbC (for water quality > 15 M $\Omega$ -cm [.067 $\mu\text{S/cm}$ ]) $\pm 5\%$ of measurement for TOC > 10.0 ppbC (for water quality 0.5 to 18.2 M $\Omega$ -cm [2.0 to 0.055 $\mu\text{S/cm}$ ])
Repeatability	$\pm 0.05$ ppbC < 5 ppbC, $\pm 1.0\%$ > 5 ppbC
Resolution	0.001 ppbC ( $\mu\text{gC/L}$ )
Analysis time	Continuous
Initial response time	< 60 seconds
Update rate	1 second
Limit of detection	0.025 ppbC

## General Specifications

Case dimensions	11.9" [302.75 mm] W x 9" [229.8 mm] H x 5.7" [144.7 mm] D
Weight	11.0 lb. (5 kg)
Enclosure material	Ignition resistant polystyrene resin meeting UL 94V-0, painted aluminum
Enclosure rating	IP55
Ambient temperature/ humidity rating	5 to 50°C / 5 to 80% humidity, non-condensing
Power requirements	100-240VAC, 50-60 Hz, 25W
Local indicators	Four LED lights for Fault, Error, Sensor Status and UV Lamp ON
Altitude rating	3000 m
Pollution rating	2
Ratings/approvals	CE compliant, UL and cUL (CSA Standards) 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	0.125" [3 mm] O.D. (6.5" [165 mm] fixed 316SS tube provided)
Inlet filter	316SS, inline 60 micron
Wetted parts	316SS/quartz/PEEK/titanium/PTFE/EPDM
Wall mount	Standard, mounting bracket provided
Maximum sensor distance	300 ft [91 m]

\* Readout in equivalent S/m ranges selectable at M800

\*\* Temperature above 70°C requires Sample Conditioning Coil (included)

\*\*\* For power plant cycle chemistry samples, pH may be adjusted by measurement after cation exchange.

\*\*\*\* Process pressure above 85 psig (5.9 bar(g)) requires optional High Pressure Regulator p/n 58 091 552.

Specifications subject to change without notice.

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For more information

### METTLER TOLEDO Group

Process Analytics Division

Local contact: [www.mt.com/pro-MOs](http://www.mt.com/pro-MOs)

Subject to technical changes

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### Quality certificate.

Development, production and testing to ISO 9001.



CE Compliant



UL listed  
Meets Canadian Standards