GE Power & Water
Water & Process Technologies
Analytical Instruments

## New! Sievers M5310 C TOC Analyzers

Reach the peak of productivity





Sievers Total Organic Carbon (TOC) Analyzers have always been quick to set up and easy to use and maintain. Providing twice-as-fast readings, the new M5310 C is smarter than ever. Designed to minimize operator intervention, the M5310 C offers cost-effective, time-efficient, reliable measurements—allowing you to reach the peak of productivity.

#### We've got you covered

For both raw and finished water monitoring, the M5310 C promises you peace of mind when measuring organics in your plant or distribution systems. M5310 C Analyzers recover difficult-to-oxidize organic compounds, such as humic acid, by combining UV/persulfate oxidation with the proven Sievers Membrane Conductometric Detection Technology, a USEPA-approved methodology under Standard Methods 5310 C and USEPA Method 415.3. Supporting Disinfectants and Disinfection Byproducts (DBP) Rule compliance, the M5310 C automatically calculates percent TOC removal for influent and effluent streams or samples.

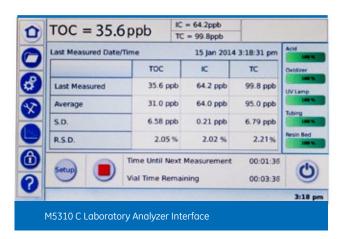


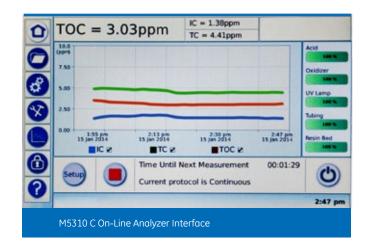
### Faster and smarter to optimize your water treatment process

- Twice-as-fast as GE's last generation TOC, now with two-minute TOC analysis.
- Broad analytical range from 4 ppb to 50 ppm.
- USEPA Approved Analytical Method (SM 5310 C and USEPA 415.3).
- Improved dashboard-style, touch-screen interface simplifies operation and data review.
- At-a-glance consumable status.
- Streamlined, faster system protocols.
- Informative error and alert messages to simplify troubleshooting.
- Secure database structure improves data seach and query capability.
- An internal Inorganic Carbon Removal module is now standard on all models for improved accuracy when analyzing water high in inorganic carbon (IC).

## Instinctively simple to boost your throughput

- Operations including calibration, verification, and sample analysis are faster and automated.
- Autoreagent feature automatically selects optimal reagent flow rates.
- Alphanumeric labeling for easy recall of Grab-Mode samples.





## Quick to set-up, easy to use and maintain

- Pre-calibrated at the factory so you can install and prepare for analysis in less than an hour.
- No special training is required to set up, operate, or maintain the instrument.
- Minimal maintenance—typically just a few hours per year.
- Modular design facilitates quick consumables replacement.
- On-line and portable models now with dust and spray/ drip resistant enclosures.
- Internal reagent packs—no external chemicals or gas supplies required.
- Easy data communications export or collect data via USB, 4-20 mA, or Modbus TCP/IP outputs.

Our innovative *Membrane Conductometric*Detection technology delivers unmatched stability, preventing significant drift over time. The recommended calibration for M5310 C is just once per year and can easily be conducted on-site. In contrast, TOC Analyzers that use non-dispersive infrared (NDIR) detection may require weekly or even daily calibration. To view an animated demonstration of our technology, visit our library at <a href="https://www.geinstruments.com/library">www.geinstruments.com/library</a>.



### Sievers Certified Plus



Protect your TOC analyzer investment with our Certified Plus genuine products and expert services. From start up, preventative maintenance and warranties,

to after-market consumables such as reagent packs, standards and vials, Certified Plus ensures you have a reliable and accurate TOC measurement solution.

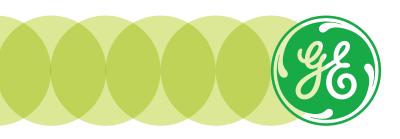
#### **TOC Standards**

Sievers Certified reference materials represent a comprehensive offering of ready-to-use TOC standards for calibration and verification. Our large-scale production capabilities provide substantial cost advantages over in-house preparation. Our expertise in preparing and storing standards allows us to guarantee the accuracy and extended shelf life of Sievers Standards, even at low concentrations.



#### Comprehensive technical support

As the world's leading manufacturer of total organic carbon (TOC) analyzers, we continuously strive to exceed expectations by providing superior technology, design, quality, and service. Our team provides ongoing phone and electronic technical support, as well as onsite installation, maintenance, calibration, and training services.



# Optional accessories and configurations

- Two-Stream Inlet configuration for the M5310 C On-Line Analyzer enables automatic sampling of two water sources.
   One stream can be dedicated to raw water and another to finished water for DBP Rule monitoring.
- The high-capacity GE Autosampler enables 24+ hours of unattended sample analysis (63 or 120 sampleposition capacity).
- DataPro2 software integrates the Autosampler with the M5310 C Laboratory and Portable Analyzers, enabling timesaving features that maximize productivity and ensure easy TOC data management.
- Unique Integrated On-Line Sampling (iOS) allows you to introduce standards or grab samples without removing the instrument from the continuous sample source or changing the sample inlet configuration.
- Pre-filter Kits are available in normal- and heavy-use versions to ensure optimal instrument performance when measuring raw water samples on-line.

|                      | Laboratory | Online | Portable |
|----------------------|------------|--------|----------|
| Autosampler/DataPro2 | X          |        | Χ        |
| iOS                  |            | X      | X        |
| Pre-Filter Kits      |            | Χ      | Χ        |
| Two-Stream Inlet     |            | X      |          |



### **Specification summary**

M5310 C

M5310 C

|                             | Laboratory Analyzer   | On-Line Analyzer   | Portable Analyzer   |  |
|-----------------------------|---|--|---|--|
| Operating Specifications    |   |  |   |  |
| Range                       | 4 ppb to 50 ppm   |  |   |  |
| Precision                   | <1% RSD   |  |   |  |
| Accuracy                    | ± 2% or ± 0.5 ppb, whichever is greater   |  |   |  |
| Sample Type                 | Autosampler or discrete<br>grab sample and TOC<br>removal grab  | On-line continuous or<br>discrete grab sample,<br>timed on-line,<br>TOC removal on-line, TOC<br>removal grab | On-line continuous,<br>Autosampler, or discrete<br>grab sample, timed on-<br>line, TOC removal on-line,<br>TOC removal grab |  |
| Display Readout             | 3 significant digits  |  |   |  |
| Calibration                 | Typically stable for 12 months  |  |   |  |
| Analysis Time               | 2 minutes   |  |   |  |
| Sample Temperature          | 5-60 °C (41-140 °F)   |  |   |  |
| Ambient Temperature         | 5-40 °C (41-104 °F)   |  |   |  |
| Sample Pressure             | n/a   | 100  | psig  |  |
| On-Line Flow Rate           | n/a >50 mL/min (for on-line mode)   |  |   |  |
| Instrument Sample Flow Rate | 0.5 mL/min  |  |   |  |
| Analyzer Specifications     |   |  |   |  |
| On-Line Inlet(s)            | n/a   | One stream, or two-stream inlet (option)   | One stream  |  |
| Outputs                     | USB device port (1),<br>USB host ports (3);<br>Modbus TCP/IP  4-20 mA outputs (3); alarm outputs (4); binary input (1);<br>USB device port (1), USB host ports (2); Modbus TCP/IP |  |   |  |
| Display                     | 7" WVGA 800x480 pixel, Color LCD w/ touch-screen  |  |   |  |
| Power                       | 100 − 240 V~, 50 − 60 Hz, 100 VA  |  |   |  |
| Fuses                       | Replace with same type and size fuse:<br>T 1.6 A 250 VAC Fuse (Slow Blow), size 5 x 20 mm appliance inlet   |  |   |  |
| Dimensions                  | H: 42.2 cm (16.6 in.);<br>W: 24.6 cm (9.7 in);<br>D: 40.0 cm (15.8 in)  | H: 54.9 cm (21.6 in);<br>W: 45.0 cm (17.7 in);<br>D: 26.5 cm (10.4 in)                                       | H: 39.5 cm (15.4);<br>W: 22.9 cm (9.0 in);<br>D: 46.4 cm (18.3 in)  |  |
| Weight                      | 9.7 kg (21.4 lb)  | 16.2 kg (35.6 lb)  | 9.8 kg (21.6 lb)  |  |
| Enclosure Rating            | n/a   | IP-45  | IP-21   |  |
| Safety Certifications       | ETL. CE   |  |   |  |
| Environment                 |   |  |   |  |
| Maximum Relative Humidity   | 0 – 95%, non-condensing   |  |   |  |
| Maximum Altitude            | 3,000 m (9,800 ft)  |  |   |  |
| Pollution Degree            | 2   |  |   |  |
|                             |   |  |   |  |









Call or visit our website to schedule a demonstration and learn how Sievers M5310 C Analyzers can take you to the peak of productivity. www.geinstruments.com/M5310C

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M5310 C

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