



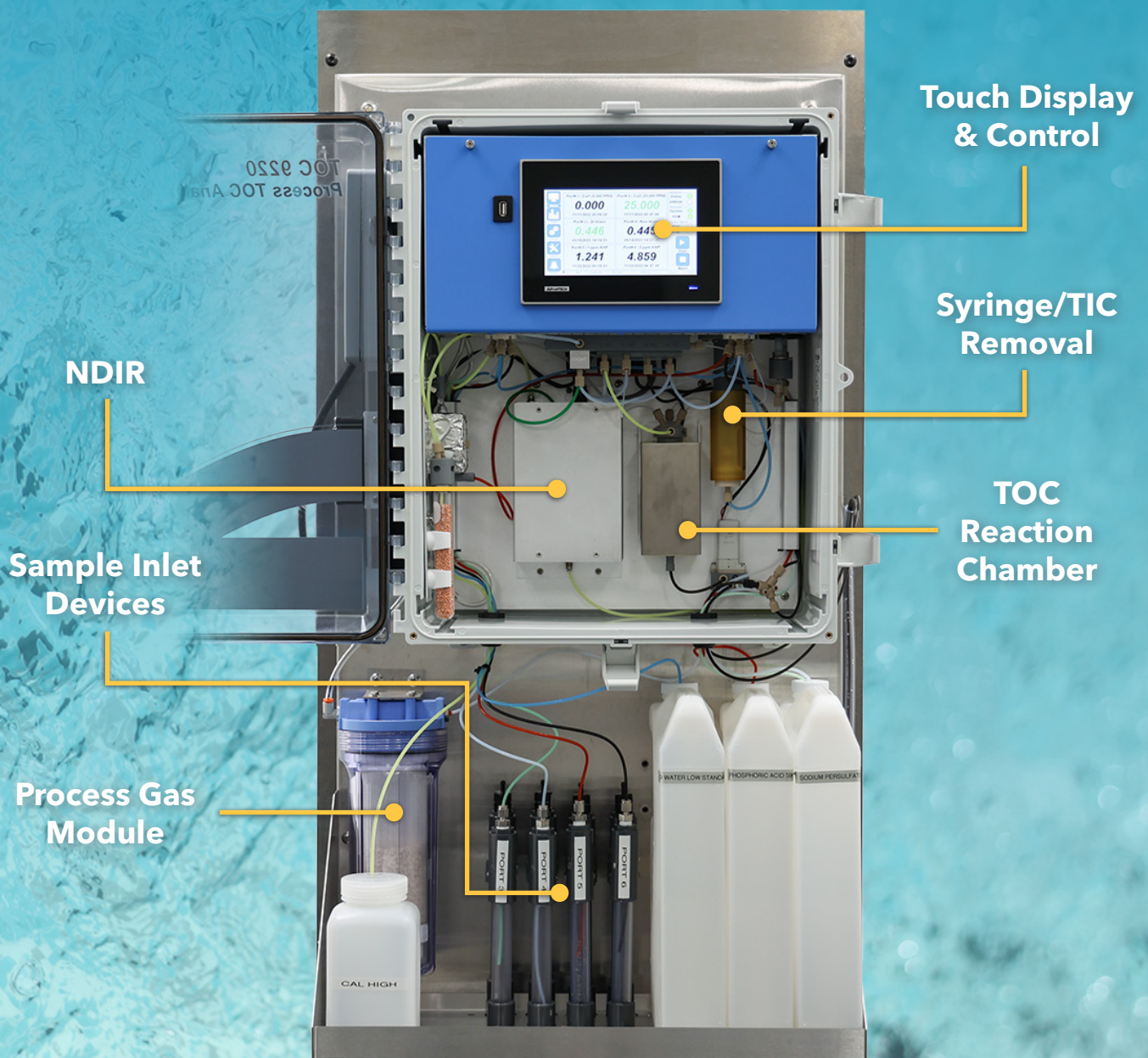
9220 TOC Analyzer

ONLINE ANALYZER FOR TOTAL ORGANIC CARBON

TOC Analysis for Process Optimization

Developed from over 50 years of TOC experience, from a brand you trust.

The **9220** is an online analyzer for continuous measurement of **Total Organic Carbon (TOC)** in water quality monitoring, water treatment and process water monitoring applications. With YSI's Heated Persulfate Oxidation and NDIR detection technology, the 9220 provides unmatched performance, reliability, versatility and ease of use.



9220 Online TOC TOTAL ORGANIC CARBON ANALYZER SPECIFICATIONS

Performance	
Operating Principle	Heated sodium persulfate oxidation
Measurement Technique	Non-dispersive infrared (NDIR) detection
Regulatory Method Compliance	USEPA 415.3 (source water & drinking water) SM 5310C (water & wastewater)
Measurement Range	0 to 25 ppm (standard); adjustable up to 100 ppm
Measurement	Accuracy: $\pm 5\%$; Precision: 2% RSD
Limit of Detection	0.015 ppm
Sample Processing	Analysis Time: 5 to 9 min intervals; Ports: 6 (included)
General	
Operator Interface	7" WSVGA display with a capacitive touchscreen (Windows® CE-based)
External Dimensions (Enclosure)	23in H x 22in W x 10in D (58.5cm H x 55.9cm W x 25.4cm D)
Mounting Dimensions (Panel w/ reagent tray)	44.75in H x 22in x 11in D (113.7cm H x 55.9cm W x 28cm D)
Certifications	IEC 61326-1, IEC 61010-1, cETLus (ETL and CSA Standards)
Instrument Enclosure Certifications	IP66; NEMA 4
Weight	Analyzer: 16.6 kg (36.5 lbs); Analyzer, panel w/ reagent tray, PGM, and full reagent containers: 44.4 kg (98 lbs)
Instrument Warranty	2 years
Reagents and Requirements	
Reagents Required	10% sodium persulfate, 5% phosphoric acid, DI water
Reagent Lifetime (Liquid)	Nominally 30 days at 77 °F (25 °C); 90 days at temperatures less than 39 °F (4 °C)
Sample and Gas Requirements	
Inlet Pressure	1 to 20 psig with Sample Inlet Device
Gas Requirements (internally generated)	Process Gas Module (included); Consumption = <100 ml/min. CO2 free air
Power and Communication	
Power Requirements	100 to 240 VAC, 70VA, 50/60 Hz
Input Relays	2 (remote start/remote stop); 5A/30 VDC Max - potential free contact closure
Output Relays	2 (system alarm, sample alarm); 5A/30 VDC Max - potential free contact closure
Analog Outputs	4 (4 to 20 mA; user-configurable concentrations)
Digital Outputs	RS-485/422 Modbus RTU protocol or ASCII standard
Data Export	To PC via USB memory stick (Microsoft® Excel®-ready .csv file format)
Environmental	
Operating Temperature Range	41 to 113 °F (5 to 45 °C)
Humidity	Up to 90% humidity (non-condensing)

Ordering Information

Item No.	Description
333205	9220 ONLINE TOTAL ORGANIC CARBON ANALYZER PACKAGE (includes analyzer, mounting panel with reagent rack and startup kit)
327114	SAMPLE INLET DEVICE (only required if analyzing more than 2 streams)
326243	REAGENT - SODIUM PERSULFATE 1 GAL, 10% (required for startup)
326244	REAGENT - PHOSPHORIC ACID 1 GAL, 5% (required for startup)

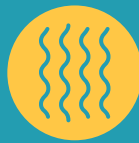
9220 TOC Analyzer

The Clear Choice for Online TOC Monitoring



Improved Accuracy

Determines TOC as Non-Purgeable Organic Carbon (NPOC), requiring only one measurement instead of two, enhancing precision and reducing errors.



Multiple Streams Monitoring

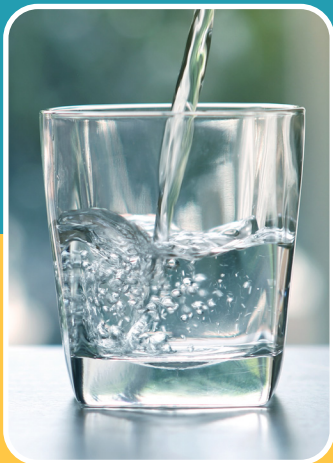
Capable of monitoring up to **four sample streams** simultaneously, eliminating the need for additional sampling systems or kits.



Ease of Setup & Maintenance

Quick installation in under an hour, with a user-friendly touchscreen interface for simple operation and data review. Requires minimal maintenance, with a yearly preventative check taking less than 30 minutes.

Monitor Total Organic Carbon for these applications:



Drinking Water

Monitor source and finished water to meet TOC removal targets and optimize the process.



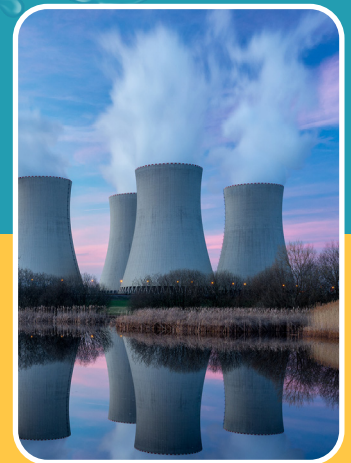
Wastewater

Monitor effluent for process optimization and regulatory requirements.



Environmental Monitoring

Monitor water quality of rivers, lakes and streams around discharge and intake points.



Power Generation

Monitor source and process water in critical boiler feed and condensate return applications.



IQ SensorNet Compatibility

The **9220** integrates with YSI's **IQ SensorNet system** via the MIQ IC2 module and the analyzer's 4-20mA output. It supports RS 485/422 Modbus or ASCII standard communication for seamless integration.



Scan the QR code to **Learn More.**



Reliable Process Control

Offers real-time insights into Natural Organic Matter (NOM) levels, allowing for precise control over coagulation, flocculation, and disinfection steps, minimizing disinfection by-products.



Regulatory Compliance

Adheres to Standard Method 5310C, EPA method 415.3, and ISO standards using the reliable Heated Persulfate Oxidation with NDIR detection method.



Autocalibration & Auto Validation

Ensures accurate measurements without regular user calibrations. Pre-calibrated for a range of 0 - 25 ppm, adjustable up to 0 - 100 ppm to suit specific application needs.

FAQ Is the YSI 9220 NSF-61 certified?

No, and it doesn't have to be! Why you ask? Because the YSI 9220 TOC analyzer is a **side stream** analyzer. Meaning, the analyzer does not perform the measurement directly in the process. Instead, sample is piped out of the process and sent to the analyzer. The analyzer adds reagents to the sample, measures the reaction 'side stream', and then the sample is wasted to a drain. Therefore, the 9220 never comes into direct contact with finished, potable water and does not need to be NSF-61 certified.

NSF/ANSI Standard 61 (NSF-61) is a drinking water standard that establishes stringent requirements for the control of equipment that comes in contact with either potable water or products that support the production of potable water.

Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

For more information on how Xylem can help you, go to www.xylem.com



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