

9220 TOC ONLINE TOTAL ORGANIC CARBON ANALYZER



For more information visit: **YSI.com/9220**

Reliable data for regulatory compliance and process control

TOC 9220

TOC Analyzer

The **9220 Online TOC** Analyzer, developed from over 50 years of TOC experience, provides unmatched performance, reliability, ease of use, and low cost of ownership to meet your specific water quality standards.



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Regulatory Compliance – Adheres to US EPA method 415.3 (source and drinking water), Standard Method 5310C (wastewater) and ISO standards.



Improved process control – Optimize coagulation and flocculation of raw water and maintain total organic carbon removal targets.



Multi-stream capability – Monitor up to four process streams on a single analyzer at no additional cost.



Autocalibration & Auto Validation – Ensures accurate measurements without regular user calibrations.



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9220 Online TOC TOTAL ORGANIC CARBON ANALYZER SPECIFICATIONS

Measurement TechniqueNon-dispersRegulatory Method ComplianceUSEPA 415.3 SM 5310C (xMeasurement Range0 to 25 ppmMeasurement Accuracy±5%Measurement Precision2% RSDLimit of Detection0.015 ppmSample Processing/Analysis Time5 to 9 minutSample Processing Ports6 (included)Sample Processing Valve Controls4 (included)Sample Processing ValvesUp to 4 (optGeneral7" WSVGA ofOperator Interface7" WSVGA ofExternal Dimensions (Enclosure)23 in H x 22 inMounting Dimensions (Panel w/ reagent tray)44.75 in H x 20 inMeagent Sangler CortificationsIEC 61326-11Instrument Enclosure CertificationsIP66; NEMAWeightAnalyzer: 16 Analyzer, paInstrument Warranty2 yearsReagents and Requirements5L high-demReagent Containers5L high-demReagent Lifetime (Liquid)Nominally 30Sample Flow Rate to Sample Inlet Device50 to 1,000 fInlet Pressure1 to 20 psigSample Temperature Range41 to 113 °FGas Requirements (internally generated)Process GasPower and CommunicationProcess GasPower Requirements100 to 240 VInput Relays2 (remote stOutput Relays2 (system al	
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CertificationsIEC 61326-1Instrument Enclosure CertificationsIP66; NEMAWeightAnalyzer: 16 Analyzer, paInstrument Warranty2 yearsReagents and Requirements10% sodiumReagents Required10% sodiumReagent Containers5L high-denseReagent Lifetime (Liquid)Nominally 30Sample and Gas Requirements50 to 1,000 forSample Flow Rate to Sample Inlet Device50 to 1,000 forInlet Pressure1 to 20 psigSample Temperature Range41 to 113 °FGas Requirements100 to 240 WInput Relays2 (remote state)Output Relays2 (system alagost	W x 10in D (58.5cm H x 55.9cm W x 25.4cm D)
Instrument Enclosure CertificationsIP66; NEMAWeightAnalyzer: 16 Analyzer, participationInstrument Warranty2 yearsReagents and Requirements2 yearsReagents Required10% sodiumReagent Containers5L high-demReagent Lifetime (Liquid)Nominally 30Sample and Gas Requirements50 to 1,000 mInlet Pressure1 to 20 psigSample Temperature Range41 to 113 °FGas Requirements100 to 240 WInput Relays2 (remote state)Output Relays2 (system also)	2in x 11in D (113.7cm H x 55.9cm W x 28cm D)
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Reagents Required10% sodiumReagent Containers5L high-demReagent Lifetime (Liquid)Nominally 30Sample and Gas RequirementsSo to 1,000 mSample Flow Rate to Sample Inlet Device50 to 1,000 mInlet Pressure1 to 20 psigSample Temperature Range41 to 113 °FGas Requirements (internally generated)Process GasPower and Communication100 to 240 VInput Relays2 (remote state)Output Relays2 (system ala	
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Sample and Gas RequirementsSample Flow Rate to Sample Inlet Device50 to 1,000 mInlet Pressure1 to 20 psigSample Temperature Range41 to 113 °FGas Requirements (internally generated)Process GasPower and Communication100 to 240 VInput Relays2 (remote state)Output Relays2 (system alago)	ity polyurethane
Sample Flow Rate to Sample Inlet Device50 to 1,000Inlet Pressure1 to 20 psigSample Temperature Range41 to 113 °FGas Requirements (internally generated)Process GasPower and Communication100 to 240 VInput Relays2 (remote state)Output Relays2 (system alago)) days at 77 °F (25 °C); 90 days at temperatures less than 39 °F (4 °C)
Inlet Pressure1 to 20 psigSample Temperature Range41 to 113 °FGas Requirements (internally generated)Process GasPower and Communication100 to 240 VInput Relays2 (remote state)Output Relays2 (system also)	
Sample Temperature Range41 to 113 °FGas Requirements (internally generated)Process GasPower and CommunicationPower Requirements100 to 240 VInput Relays2 (remote state)Output Relays2 (system alage)	nL/min when using Sample Inlet Device
Gas Requirements (internally generated)Process GasPower and Communication100 to 240 VPower Requirements100 to 240 VInput Relays2 (remote strOutput Relays2 (system ala	with Sample Inlet Device
Power and CommunicationPower Requirements100 to 240 VInput Relays2 (remote state)Output Relays2 (system ala)	(5 to 45 °C)
Power Requirements100 to 240 VInput Relays2 (remote strOutput Relays2 (system ala	Module (included); Consumption = < 100 ml/min. CO2 free air
Input Relays2 (remote strOutput Relays2 (system ala)	
Output Relays 2 (system ala	
	AC, 70VA, 50/60 Hz
Analog Outputs 4 (4 to 20 m/	AC, 70VA, 50/60 Hz rt, remote stop); 5A/30 VDC Max - potential free contact closure
Digital Outputs RS-485/422	rt, remote stop); 5A/30 VDC Max - potential free contact closure
Data Export To PC via US	rt, remote stop); 5A/30 VDC Max - potential free contact closure rm, sample alarm); 5A/30 VDC Max - potential free contact closure
Environmental	rrt, remote stop); 5A/30 VDC Max - potential free contact closure rm, sample alarm); 5A/30 VDC Max - potential free contact closure A; user-configurable concentrations)
Operating Temperature Range 41 to 113 °F	rrt, remote stop); 5A/30 VDC Max - potential free contact closure rm, sample alarm); 5A/30 VDC Max - potential free contact closure A; user-configurable concentrations) Modbus RTU protocol or ASCII standard
Humidity Up to 90% h	art, remote stop); 5A/30 VDC Max - potential free contact closure rm, sample alarm); 5A/30 VDC Max - potential free contact closure A; user-configurable concentrations) Modbus RTU protocol or ASCII standard B memory stick (Microsoft® Excel®-ready .csv file format)
Storage Temperature Range41 to 113 °F	art, remote stop); 5A/30 VDC Max - potential free contact closure rm, sample alarm); 5A/30 VDC Max - potential free contact closure A; user-configurable concentrations) Modbus RTU protocol or ASCII standard B memory stick (Microsoft® Excel®-ready .csv file format)

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YSI Municipal Water



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