

ENGINEERING SPECIFICATIONS: StarTOC Dual Method: OZONE/HYDROXYL RADICAL + UV/HEATED PERSULFATE ON-LINE TOC

Model/Name	StarTOC Dual ON-LINE Ozone/Hydroxyl Radical + UV/Heated Persulfate TOC	Notes
Analysis Method	Ozone/Hydroxyl Radical + UV/Heated Persulfate	
Analytes Measured	Total Organic Carbon; Total Carbon; Total Inorganic Carbon; Non-Purgeable Organic Carbon; TOC-True (including purgeable Organics)	
Detector Type (CO₂)	NDIR (solid state; no moving parts; computer-controlled; non-reflective sample cell-impervious to corrosion and guaranteed for 5 years)	
Control/Data Handling	Industrial Microsoft Windows CE Computer, Touch Screen, Paperless Chart Recorder	
Sample Introduction	Continuous Pump or Digital Injection	
Sample Handling	Up to 3 Microns Suspended Solids, STD. Larger Particles, Option	
Measurement Specifications		
Measurement Range (mg/L)	0-1 thru 0-25,000 ppm	
Accuracy/Repeatability	2% FS	
Carrier Gas Flow	300 cc/min - Computer Controlled Mass Flow Controller CO ₂ & HC - FREE AIR, OR O ₂ 15 +/- 2 PSI	
Average Analysis Response Time, TOC-TRUE Method	6 minutes	
Outputs	RS-232 RS-485 4-20 mA (2 ea.) Alarm Relays (3) 2 Level Alarms 1 Malfunction Alarm Loss of Carrier Out of Service Signal (when unit in calibration or validation check)	
Display	Flat Panel Color Paperless Chart Recorder	
Data Storage	Internal Memory	
Sample Requirements		
Temperatuere Range	4° - 90°C 40° - 194°F	TOC Systems offers cooler for
Sample flow rate	20 mL/min STD.	Fast by-pass loop suggested
Inlet pressure	0-5psi	
Sample Drain	gravity/air break	
UTILITIES Required		

Power:	100/200 VAC 50/60 HZ. 10 Amp Service recommended	
Carrier Gas	CO ₂ & HC - free air or O ₂ (300 mL/minute-max.); 15 +/- 2 PSI	
Reagents	Prepackaged Sodium Persulfate/Sodium Hydroxide Phosphoric Acid Calibration Standards D.I. Water	
Environment	Operating Temperature: 10° - 50°C 50° - 122°F (cf. Factory)	
Construction		
Enclosure	FRP	
Dimensions (HXWXD)	76 X 61 X 31 (cm) 30 X 24 X 12 (in)	
Mounting	Rack or Wall Mount	
Weight	23 Kg 50 Lbs	
Area Classification Option	NEMA - 4X, IP 65 Enclosure (cf. factory)	
Compliance/Certification	CE, CSA, ASTM, EPA Methods	
Conformity	Complying with all International Standards, such as: DIN-EN 1484, DIN-ENV 12260, DIN 38409-H3, ISO 8245, Standard Method 5310B, Standard Method 5310C, Standard Method 5310D, USEPA 415, USEPA 9060, ASTM D5173, EN 13137	
General Features	Auto-Claibration, Auto-Validation, Auto-Clean, Historical Data/Time and Date Stamped	
Options	Multi-Stream Analysis Oxygen Generator (electricity only)	User to specify number of streams Eliminates Gas Bottles for up to 5 analyzers. Plant Air Not Required. (For indoor/climate controlled environments only)
	StarTOC also offers custom options.	

(All performance specifications have been verified in a controlled laboratory environment. Actual field performance may vary with application. Measuring range and detection limits depend on the method, injection volume, vessel purity, chemicals and gases used, and the qualification of the operators.)