

## ENGINEERING SPECIFICATIONS

### TOC Systems Semi-Automatic Benchtop TOC

Model/Name	TOC Systems Semi-Automatic Benchtop TOC Analyzer	Notes
<b>Analysis Method</b>	Semi-Automatic Benchtop TOC/Non-Dispersive Infrared (NDIR) CO <sub>2</sub> Detection	
<b>Analytes Measured</b>	Total Organic Carbon; Total Carbon; Total Inorganic Carbon; Non-Purgeable Organic Carbon.	
<b>Detector Type (CO<sub>2</sub>)</b>	NDIR (solid state; no moving parts; computer-controlled; non-reflective sample cell-impervious to corrosion and guaranteed for 5 years)	See NDIR vs Conductivity Chart
<b>Control/Data Handling</b>	Internal Microprocessor, Menu Prompting	

<b>Sample Introduction</b>	Manual Injection Sparger. Manual Syringe Injection into UV/Persulfate Reactor and High Temperature Combustion Reactor (option)	
<b>Sample Handling</b>	Up to 400 Microns Suspended Solids	
<b>Measurement Specifications</b>		
Measurement Range (mg/L)	0-10 thru 0-1000	
Accuracy/Repeatability (%)	+/-3	Dependant on Manual Sample Injection precision
Carrier Gas Flow (mL/min.)	300 mL/max - Computer Controlled Mass Flow Controller CO <sub>2</sub> & HC - FREE AIR, OR O <sub>2</sub> 15 +/- 2 PSI	
Average Analysis Time (minutes)	TC - 2 minutes TOC - 3 minutes sparging/single sample	Can perform Multiple Sample Sparging to Conserve time
Display	LCD	

<b>UTILITIES Required</b>		
Power	100/240 VAC 50/60 HZ. 10 Amp Service	
Carrier Gas	CO <sub>2</sub> & HC - free air or O <sub>2</sub> (300 mL/minute-max.); 15 +/- 2 PSI	
Reagents	1M Sodium Persulfate Solution Laboratory Grade 10% Phosphoric Acid Solution Laboratory Grade Calibration Standards D.I. Water	
Sample Drain	gravity/air break	
<b>Environment</b>	Operating Temperature: 10° - 50°C 50° - 122°F	
<b>Construction</b>		
Enclosure	Stainless Steel & Epoxy Powder Coated Aluminum	
Dimensions (HxWxD)	51 x 58 x 25 (cm) 20 x 23 x 10 (in)	
Mounting	Benchtop	
Weight	14 Kg 30 Lbs	
<b>Conformity</b>	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	
<b>Options</b>	Oxygen Generator (electricity only)	Eliminates Gas Bottles for up to 5 analyzers. Plant Air Not Required. (For indoor/climate controlled environments only)

(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.)