



300 40070 Rev. D

M500 Specification

Sievers M500 Online Total Organic Carbon (TOC) Analyzer

General	1	Tag No.	Tag Rev.		
	2	P&ID No.			
	3	Line No.	Equip No.		
	4	Line Size			
	5	Line Spec			
	6	Area Classification		Non-Hazardous	
Process Data	7	Fluid	Fluid Phase	Water	Liquid
	8	Flow	Min/Oper/Max	50 mL/min	N/A
	9	Pressure	Min/Oper/Max	2psig (0.14bar)	100psig (6.89bar)
	10	Temp	Min/Oper/Max	1°C	95°C
	11	Conductivity	Min/Oper/Max	0.01 µS/cm	800 µS/cm
	12	TOC	Min/Oper/Max	0.03 ppb	2,500 ppb
Instrument	13	Type	Analysis Method	Online Integral	UV/MC
	14	Analysis Modes		Grab, Online, Online (Timed), Online (Averaged)	
	15	Analysis Time <sup>1</sup>		3 minutes (Online Mode)	
	16	Inlet Connection	Connection Size	Swagelok Compression	0.25 inch
	17	Outlet Connection	Connection Size	Barbed	0.5 inch
	18	Surface Finish	Wetted/Non Wetted	Mfg Std	Mfg Std
	19	Ozone Compatibility <sup>2</sup>		300 ppb O3 continuous	
	20	Sample Temp Rng	Sample Press Rng	1 to 95°C	2-100psig (0.14-6.89bar)
	21	Raw Cond Rng	Max Sample Cond <sup>3</sup>	0.01 to 800 µS/cm	800 µS/cm
	22	Cond Accuracy	Cond Precision	0.005 µS/cm or 1%, whichever is greater	≤ 1% RSD
	23	TOC Range		0.03 to 2,500 ppb	
	24	TOC Accuracy	TOC Precision	±5% or ±0.1ppb whichever is greater	1% or 0.03ppb whichever is greater
	25	Type		Integrated	
	26	Full Span	Lower/Upper	0 ppb	2,500 ppb
	27	Calib Range	Lower/Upper	0 ppb	2,500 ppb
	28	Accuracy		(same as instrument)	
	29	Enclosure Material	Enclosure Rating	Powder Coated Aluminum	IP-55
	30	Electrical Connection		Hard wire 100 to 240 VAC, 70W, 50/60 Hz	
	31	Analog Output	Signal Communications <sup>4</sup>	3	RS232, USB, Ethernet
	32	Display Type		Backlit 10.1", 1280 x 800, touchscreen display	
33	Manufacturer		Veolia WTS Analytical Instruments, Inc		
34	Model No.		M500		
Other	35	pH Range		5.5 to 8.0	
	36	Calibration Stability		12 months	
	37	Interferences		Insensitive to organic heteroatoms	
	38	Wetted Materials		316L SS, 316 SS, PCTFE, PTFE, PVDF (Sampler)	
	39	Ambient Temperature		5-40°C	
	40	Max Relative Humidity		95% non-condensing	
	41	Maximum Altitude		3,000 m (9,843 ft)	
	42	Inputs		Two isolated binary inputs	
	43	Outputs		(1) Modbus, (3) isolated 4-20mA, (1) RS232, (1) USB, (4) alarm	
	44	Safety Certifications		ETL conforming to UL 61010-1, CE, UKCA	
	45	Dimensions		H: 43.4 cm (17.1 in) W: 54.7 cm (21.5 in) D: 28.4 cm (11.2 in)	
	46	Weight		13.6 kg (30.0 lbs) Standard iOS, 16.3 kg (35.9 lb) Super iOS	
Notes	<p>Note#1: Base model analysis time is six minutes for continuous online measurement.</p> <p>Note#2: Up to 300 ppb O3 continuously with ozone destruct kit. Not compatible with sample conductivity option.</p> <p>Note#3: Maximum sample conductivity for TOC accuracy is 800µS/cm.</p> <p>Note#4: Optional Wireless (Region Dependent)</p>				