

Specifications

Chemistry:	Oxidation by Combustion; From 680°C to 1000°C				
Detector:	Apollo 9000:	Nondispersive Infrared (NDIR), 125 mm cell			
	Apollo 9000 HS:	Nondispersive Infrared (NDIR), 250 mm cell			
Analytical Modes:	TOC (NPOC), TC-IC, TC, IC, (POC Optional)				
Analytical:	Apollo 9000		Apollo 9000 HS		
	Range*:	100 ppb to 25,000 ppm (sample volume and dilution dependent) using only 5 selectable analytical ranges		Range*:	4 ppb to 4,000 ppm (sample volume and dilution dependent) using only 4 selectable analytical ranges
	Precision*:	Typical 0.05% of full scale or ≤3% RSD or CV, whichever is greater, over seven replicates.**		Precision*:	Typical 0.25% of full scale or ≤3% RSD or CV, whichever is greater, over seven replicates.**
	Injection Volume:	Up to 2 mL		Injection Volume:	Up to 2 mL
	Analysis Time:	1 to 3 minutes, typical		Analysis Time:	1 to 3 minutes, typical
	TOC Run Time:	20 minutes per triplicate, typical		TOC Run Time:	20 minutes per triplicate, typical
	* Analytical performance is affected by laboratory water, reagent and gas purity, sample container cleanliness, sample matrix, gas regulator cleanliness and precision, and operator skill ** %CV Area, as opposed to %CV and %RSD, calculates precision <u>before</u> blank subtraction. This yields a lower precision measurement, but impacts sensitivity and accuracy.				
Liquid Handling:	Syringe pump, 8-port distribution valve; Auto-dilution methods for higher TOC concentrations and difficult matrixes; Auto-rinsing from sample and/or rinse water				
Sample Introduction:	Automatic syringe injection; Autosampler; Solids Boat; Manual Syringe				
Controller:	PC, Interface through Windows™ (2000, XP); Password Protected				
Data Handling:	Automatic and customized Spreadsheet reports transferable to Microsoft™ Excel™; Real-time display of peaks; Automatic outlier deletion; Recalculations with different calibration curves; Recalculations with different blank values.				
Calibration:	Multi-point and automatic blank subtraction.				
Other Features and Options:	Automatic file management, Automatic shutdown/standby, Exceeds ISO 8245 particulate requirements with optional kit, Flow rate monitoring, Near line monitoring, Preprogrammed Point and click method setup, Priority samples via scheduled interrupt, Programmable Automatic Wakeup, Selectable IC sparge methods, Solids Module, Stirring Option, Text and CD ROM video help. Validation Support Package available, Certification Protocol available.				
Principal Applications:	Waste Water. Industrial Waste Effluent, Drinking and Surface Water, Ground Water, Clean-in-Place (CIP) Validation, Sea Water, Brine Solutions				
Official Methods:	EPA 415.1, 415.3 and 9060A, Standard Method 5310B, EP 2.2.44, ISO 8245, EN 1484, USP 643 (Chapter 24), ASTM D2579, prENV 13370, AOAC 973.47				
Certification:	UL, CSA, and CE; EMC EN 50081-1 and EN 50082-1				
Utility Requirements:	Voltage:	100/120/230 VAC (±10%)			
	Frequency:	50/60 Hz			
	Power:	1200 VA			
Dimensions (Approximate):	16" (40 cm) W x 23" (61 cm) D x 21" (53 cm) H; 110 lb (50 kg) shipping weight				

Gas Supply:	Hydrocarbon and CO ₂ free air with TOC content < 1ppm. Gas can be supplied from a cylinder or TOC gas generator. If a TOC gas generator is used, resulting gas must be hydrocarbon, and water free. To assure clean carrier gas is used we suggest employing a complete Carbon Dioxide(CO ₂) removal system and hydrocarbon trap (Teledyne-Tekmar part #14-1362-000) between the gas source and analytical instrument.
Gas Pressure:	30 to 35 psi (206.7 to 241.2 kPa)

STS-8000 Autosampler

Sampler Changer Type:	XYZ robot with stationary rack design	
Positioning Performance:	Accuracy: +/-1mm in XYZ dimensions\ Repeatability: +/-0.25 mm in XYZ dimensions	
Septum Piercing:	Available with septum piercing kit; vertical punch strength of 3.8 kg (8.38 lbs.)	
Rinsing:	Auto-rinsing from sample and/or rinse water via built-in rinse station.	
Rack Selection:	(2) 77 position trays for 25 mL culture tubes (18 x 150 mm); (2) 42 position trays for 50-60* mL culture tubes (25 x 150 mm); (2) 35 position trays for 40 mL VOA vials (28 x 95 mm); (2) 12 position trays for 4 oz. (125 mL) Boston Round bottles (48 x 117 mm) * Screw cap tube has 50 mL capacity to neck. Disposable tube has approx. overflow capacity of 60 mL.	
Dimensions:	21.1" W x 17.2" D x 14.6" H (53.5cm W x 43.7cm D x 37.1cm H) 39 lbs. (17.7 kg)	
Electrical:	Voltage: 100/120/230 VAC (±10%) Frequency: 50/60 Hz	Power: 200VA
Certification:	UL, CSA, and CE; EMC EN50081-1 and EN 50082-1	