Anatel

A-1000
TOC Analyzer

Total Organic Carbon

Analysis Systems for

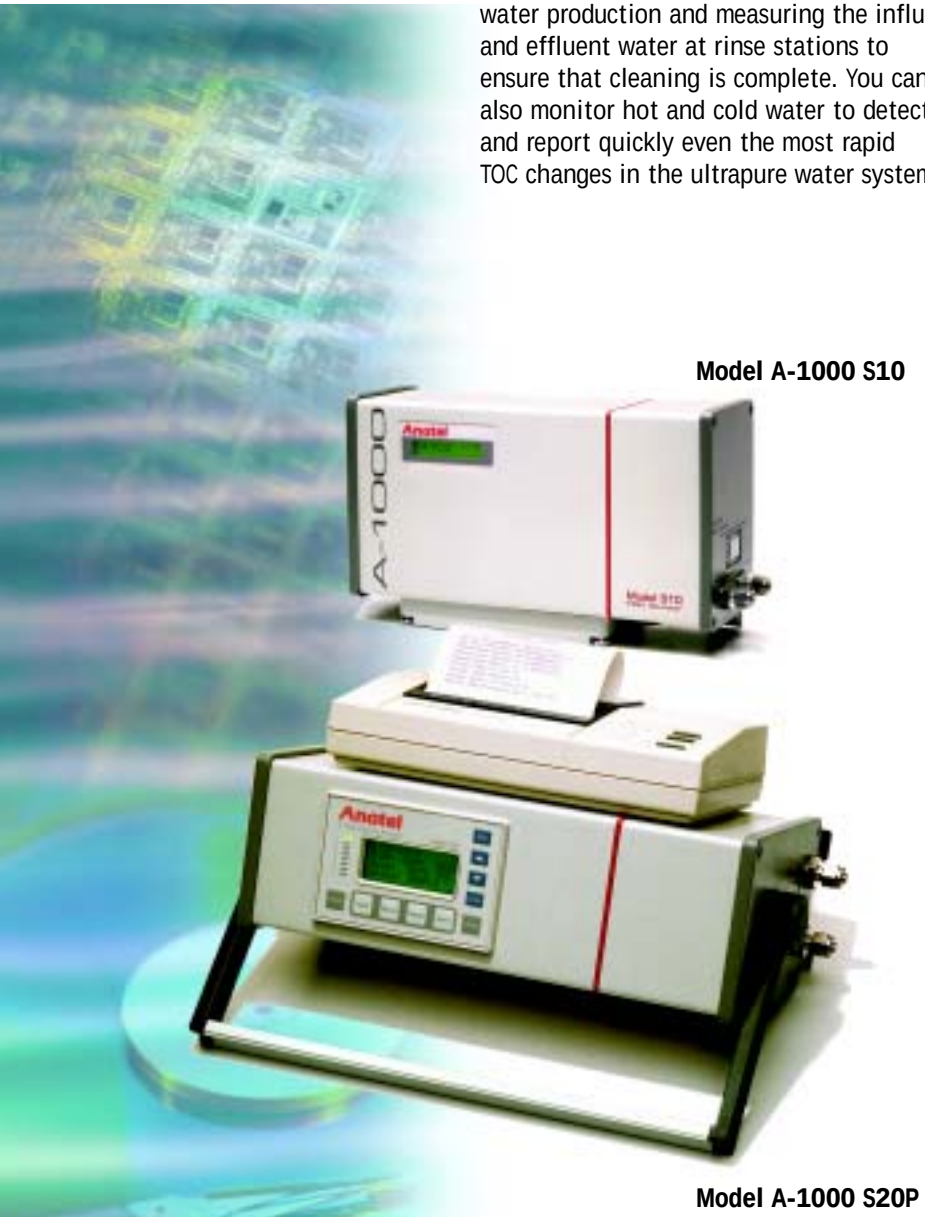
Electronics Manufacturing

Is your TOC analyzer as good as your ultrapure water? The Anatel A-1000 offers maximum sensitivity, low detection limits and superior stability for ultrapure water TOC monitoring.

Modern ultrapure water systems demand TOC analyzers that provide the lowest detection limits, most accurate results, maximum sensitivity to the smallest changes in water quality, and a measure of reliability that meets the most rigorous quality standards.

The A-1000 is ideal for monitoring ultrapure water production and measuring the influent and effluent water at rinse stations to ensure that cleaning is complete. You can also monitor hot and cold water to detect and report quickly even the most rapid TOC changes in the ultrapure water system.

Model A-1000 S10



Model A-1000 S20P

The A-1000 offers detection limits from 0.05 to 1999 ppb TOC. This operating range ensures the correct operation of water systems in the semiconductor and flat panel display industries. To give an idea of the level of sensitivity, consider that 1 second over a period of 32 years is an equivalent comparison to 1 ppb of carbon in solution.

The A-1000 family of TOC Analyzers includes all the features needed to monitor organic contamination in today's most efficient ultrapure water systems. Anatel's TOC Analyzers eliminate guesswork in your process and offer total confidence in your operations.

KEY FEATURES

Patented stopped flow and photocatalytic oxidation: You are always sure of complete oxidation and the most accurate results

Robust design offers superior reliability: Downtime is practically eliminated and you get the results you need.

Network sensors with ANET: Set instrument parameters and aquire data from as many as eight sensors with a single C80 controller– the most convenient control available

Detection limits to 0.05 ppb TOC: The smallest changes in TOC concentration can be detected and reported so that you always know the current status or your water system

Convenient serial, analog, and digital interfacing: A complete array of data handling capability is included to allow you to mange your data effectively.

Portable TOC sensors: A-1000 sensors can be permanently installed or you can use the S20P portable model for spot-checks throughout the water system.

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PERFORMANCE SPECIFICATIONS

Automatic TOC Mode	Operating Range:	0.05 to 1999 ppb as carbon
	Repeatability:	±0.05 ppb < 5 ppb TOC, ±5% > 5 ppb TOC
	Minimum Input Resistivity:	5.0 M-cm for all waters
		1.0 M-cm for neutral waters
		0.2 M-cm for water with CO_2 as sole conductive species
	Ambient Operating Temperature:	S10 Sensor: 5 °C to 40 °C (41 °F to 104 °F)
		S20/S20P Sensor: 5 °C to 35 °C (41 °F to 95 °F)
	Sample Water Temperature:	0 °C to 100 °C (32 °F to 212 °F)
	Inlet Pressure:	100 psig maximum (690 kPa)
	Display Resolution:	0.00 to 19.99 ppb, 20.0 to 199.9 ppb, 200 to 1999 ppb
Purge Mode	Resistivity:	0.01 to 18.20 M-cm
	Conductivity:	0.05 to 100 microsiemens/cm
	Display Resolution:	Three significant figures as resistivity
		Four significant figures as conductivity

PHYSICAL SPECIFICATIONS

General	Installation Category:	II, IEC 1010
	Pollution Degree:	2, IEC 664
Anet Network Capacities	Type:	RS-485
	Sensors:	8 maximum
	C80 Controllers:	8 maximum (any configuration)
	Network Length:	1 km (3,000 ft) maximum
	Network Cabling:	Shielded Twin-axial, Twist-Lock BNC
Display	Main:	1-line x 16-character Super-Twist LCD
	Backlighting:	Yellow LED
	Character Height:	0.163”
Physical	Operating Temperature:	0 °C to 35 °C (32 °F to 95 °F)
	Relative Humidity:	90% RH maximum
	Altitude:	4,000 m (13,125 ft) maximum
	Size:	330 L x 172 W x 112 mm D (13.0” x 6.8” x 4.4”)
	Weight:	6.5 kg (12.75 lb)
	Analysis Cell Volume:	7.5 mL
	Power:	85 to 264 VAC ±10%, 50/60 Hz
	Power Consumption:	2 Amps max. @ 120 VAC, 1 Amp max. @ 230 VAC
I/O Connections	Analog:	Opto-isolated 4-20 mA output
		Non-isolated 12 VDC output @ 1/2 Amp max.
	Digital I/O:	Two opto-isolated inputs, Two opto-isolated outputs
	Serial Interfaces:	RS485 opto-isolated Network,
		RS232 Data Acquisition, RS232 Printer, RS232 Diagnostics

HACH ULTRA ANALYTICS

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