



*“The ANATEL
PAT700
Analyzer is
specifically
designed
for On-line
Release of
USP Water.”*

ANATEL PAT700 Total Organic Carbon Analyzers

Science and Risk-based On-line TOC Analyzer



Be Right™

The ANATEL PAT700 fully compliant real time release TOC Analyzer



The PAT700 TOC analyzer fully complies with all global pharmacopeias (USP, EP, JP) requirements.

The ANATEL PAT700 fully oxidizes each sample guaranteeing the most accurate TOC result that follow EP2.2.44 guidelines. Production uptime is assured with the ANATEL PAT700 main and standby dual UV lamp design, making the PAT700 the ideal choice for on-line TOC release.

Implement the FDA PAT initiative for on-line release for TOC and Conductivity eliminating time-consuming and costly laboratory analyses.

The ANATEL PAT700 is designed to meet the FDA PAT initiative. Confidence in the data is assured with UV Detect, excursion alarming, and fully traceable calibration.

Increase water system uptime with dual UV lamps and continuous UV Detect monitor

Production uptime is assured with the ANATEL PAT700. UV Detect automatically switches from the main to standby UV lamp ensuring uninterrupted operation making the PAT700 the ideal choice for on-line TOC release.

Maximize production uptime with the ANATEL PAT700

Reduce the risk of product recall and speed up water loop troubleshooting when an excursion alarm occurs

The ANATEL PAT700 internally captures two samples and then re-analyzes the first sample to validate the excursion alarm and saves the second sample for further root-cause analysis.

Simplified system suitability with guaranteed calibration results and minimal operator time

Simple on-screen instructions and RFID technology ensures that valid standards are correctly loaded and all information uploaded to the analyzer. Automated routines allow the operator to push a button and walk away.

The ANATEL PAT700 stability extends calibration interval to one year and provides complete calibration data and traceable results.

The ANATEL PAT700 optimizes TOC accuracy by utilizing a single conductivity cell throughout the analysis. The use of only one cell ensures a more stable, accurate and repeatable TOC result over extended timescales. Move to assured compliance with the ANATEL PAT700.



The ANATEL PAT700 brings your production vessel on-line faster with Clean-in-Place solutions

**Confirm production vessels are clean
and ready to go on-line faster with
automated Clean-in-Place (CIP) analysis**

The ANATEL PAT700 clean-in-place analysis maximizes production uptime by providing immediate on-line results for both TOC and conductivity. The PAT700 provides instant on-line verification that your production vessel is ready for production changeover.



Simple precise TOC laboratory analysis without chemicals reagents and gasses

Save hours and expand laboratory throughput with the ANATEL PAT700 36 bottle auto-sampler

Using the ASX-7200 autosampler allows laboratory users to set up 36 bottles for TOC analysis and walk away. Using the PAT700 there is no requirement for costly reagents or carrier gasses.

Maximize laboratory throughput with the ANATEL PAT700 TOC analyzer

Use the ANATEL PAT700 to grab sample or perform on-line TOC analysis

Save time and money – the ANATEL PAT700 can be installed online and run up to 4 grab samples offline.



Specifications for ANATEL PAT 700

TOC	Operating Range	0.5 to 2,000 ppb as Carbon
	Display Resolution	0.1 ppb
	Accuracy	±1 ppb or ±5%, whichever is greater
	Repeatability	±0.3 ppb or ±1%, whichever is greater
	Limit of Detection	0.5 ppb
	Maximum Input Conductivity	0.2 µS/cm for all waters, 1.0 µS/cm for all neutral waters, 5.0 µS/cm for water with CO ₂ as the sole conductive species
Conductivity	Conductivity Range	0.05 to 150 µS/cm (@ 25°C)
	Display Resolution	0.01 µS/cm
	Conductivity Accuracy	±2% over full range (uncompensated)
	Resistivity	Resistivity Range 0.2 to 18 MΩ·cm (@ 25°C)
	Display Resolution	0.01 over full range
Temperature	Available Modes	Temperature compensated to 25°C, or uncompensated
	Ambient Operating Range	10 to 40°C (50 to 104°F)
	Measurement Accuracy	±0.4°C
	Sample Water Range	5 to 95°C (41 to 203°F)
Physical Specs	Display Resolution	0.1 over full range
	UV Lamps	2, with UV Detect technology
	Interface/Display	Color touch screen
	Maximum Altitude	4,000 m (13,125 ft)
	User I/O Wiring	Three, ¾-inch conduit openings or quick disconnect fittings
	Standards System	Onboard, Automated Standards Introduction System (OASIS)
	Dimensions	59.7 w X 22.9 d X 25.4 h cm (23.5 X 9 X 10 inches)
	Weight	13.6 kg (30 lbs)
	Sample Inlet Flow Rate Range	60 mL/min to 300 mL/min
	Sample Inlet Pressure Range	10 to 100 psi (69 to 690 kPa)
Compliance	Installation Category	II
	Pollution Degree	2, IEC 61010-1
	CE Compliance	EN 61010-1 and EN 61326
	Safety Rating	ETL, conforming to UL 61010-1 and CSA 22.2 No. 61010-1
	Enclosure Rating	Conduit version: IP56 Quick connect version: IP46
	Release tests,	USP <643>, USP <645>, JP 16, EP 2.2.44
	CIP	Selectable mode for Clean-In-Place analysis
New Features	Dual Stream option	Toggle or programmable stream switching
	Excursion sampling	Minimum flow rate to fill excursion bottle = 160 mL/min
	Rouge detection	Identifies oxidation cell contamination from rouging

Specifications for ASX 7200

Physical Specs	Vial Capacity	36 Grab sample bottles HDPE or Borosilicate USP Type 1 glass
	Dimensions	45.7 cm x 36.6 cm x 53.7 cm (H x W x D)
	Weight	21 kg (45 lbs)
Communications	Communications	RS232 interface with PAT700, No external PC required
Environment	Ambient Environment	10 – 40° C, 5 – 95% non-condensing RH
Power	Power Requirements	100 – 240 VAC +/- 10%, 4.4A

For full product specifications please see the HACH ANATEL PAT700 TOC Analyzer brochure on www.hach.com

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In the interest of improving and updating its equipment, Hach Company reserves the right to alter specifications to equipment at any time.



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Keep it pure.

Make it simple.

Be right.

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