

1950plus autoTOC analyzer

ASTRO has been designing TOC analyzers for over twenty years and is recognized as a worldwide industry leader.

The 1950plus was developed with input from countless users and our global service network.







Reliability & low maintenance

The 1950plus offers proven reliability utilizing the successful components of previous models.

The new streamline design and flow paths with advanced diagnostics make the 1950plus exceptionally easy to maintain.



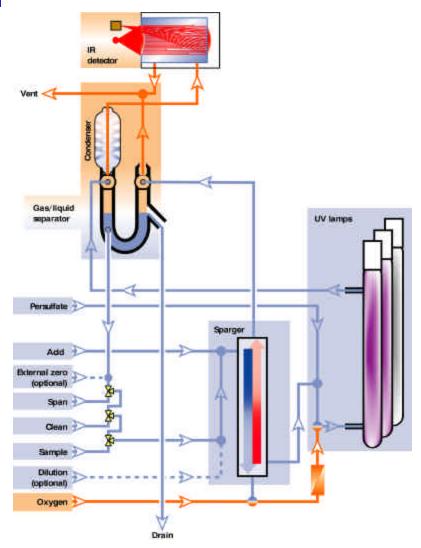






Analysis method

The EPA approved, UV-Persulfate Oxidation Method provides the most reliable on-line TOC measurement.





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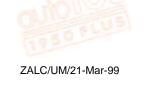


Modular & flexible design

The dual compartment enclosure protects the electronics from the analytical section.

Modular design offers a broad spectrum of factory set analysis ranges to meet your needs.

Flexible analysis system with dual range CO₂ NDIR detector, multiple UV lamp reactor, and a built-in sample dilution allows high-salts and hard-to-oxidize sample measurements.







Process & supply connections

Easily accessed customer connection ports are located on the outside of the analyzer.

The sample & dilution water fast-loop manifold reduces the stream pressure without sacrificing analysis response time.



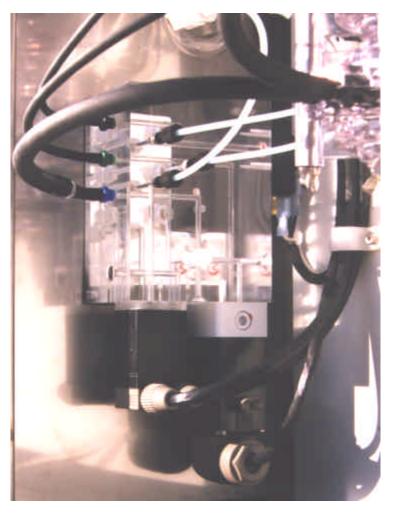






Fluidics improvements

The clear acrylic valve manifold with wide-bore flow paths reduces the number of connection points, tee connectors, and tube fittings. This greatly simplifies the maintenance of the fluidic system.









Sparger design improvements

The new two-piece, counter flow TIC sparger assembly allows easy access for cleaning.

Integrated carrier gas flow system provides troublefree flow control without using capillary flow restriction.



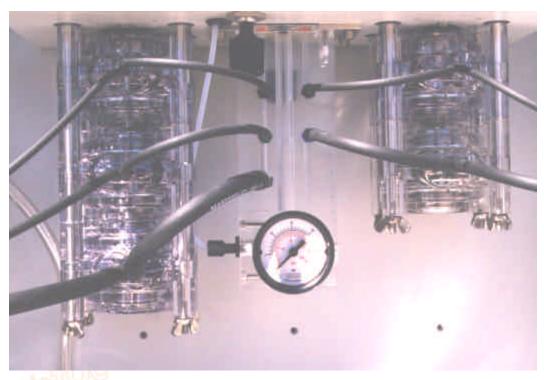


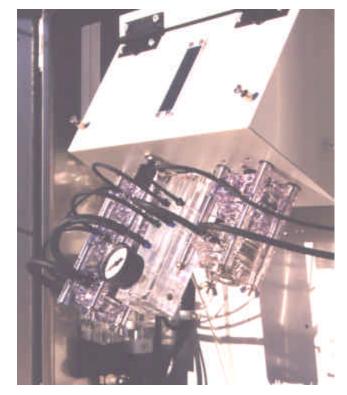
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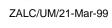
Decreases operating cost

Downtime is minimized and operating costs are lowered by a simplified layout designed for the maintainer.











Easy access & maintenance

Disconnect only two
Polypropylene fittings to
quickly remove the GLS
U-tube for cleaning and
maintenance.

Straight point-to-point pump tube connections with color-coded barb fittings simplifies pump maintenance.



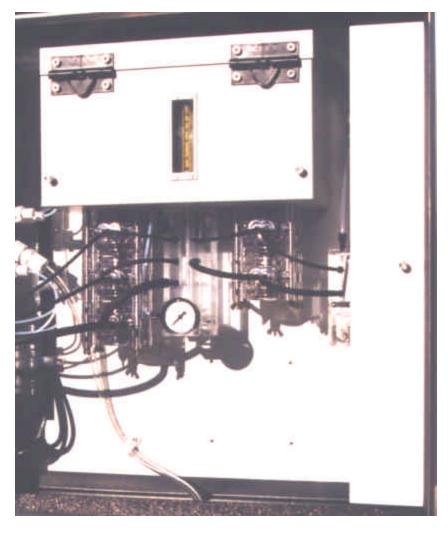






Easy access & service

If bench maintenance of the pump or UV-reactor module is needed, press in the hinge snaps for the pump module, or remove four thumb screws for the UVreactor module.





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Front panel features

A front panel membrane keypad featuring a large, backlit LCD display provides user-friendly operator interface.











Software

Software navigation is intuitive with dialog prompted analyzer operations for:

- Single Sample Analysis
- Analyzer Validation
- Analyzer Calibration







Software features

The software offers diagnostics for loss of sample flow, loss of UV reactor flow, loss of carrier gas, and pump tube deterioration.

Optional diagnostics for reagent levels and enclosure spills are also available.

A programmable process spill threshold concentration value protects the analyzer from fluidic blockages and pollution due to a measurement over range.





Software features

Auto cleaning, as well as auto validation prior to auto calibration are standard on this advanced control software.

The 1950plus software is available in five userselectable languages.







User output

- Five function mapped volt free contacts.
- Each alarm relay may be mapped to alarm 1, alarm 2, fault, online, offline, or maintenance.
- Two channel, parameter mapped 4-20 mA analog outputs.
- RS232 CSV data logging, half duplex X 3.28 communication and multi stream sequencer.







Regulations & standard compliance

Meeting worldwide customer specifications by following local regulations such as:

- EPA / ISO / EN / DIN
- CE/UL/CSA
- FM / CENELEC
- NAMUR



