1088 Rotary Autosampler

Autosampler for the Aurora 1030 TOC Analyzer

- Automates introduction of 88 samples to the Aurora 1030 TOC Analyzer
- Configurable for pre-acidication and sparging of sample TIC content within the autosampler to reduce TOC analysis time
- Performs programmable rinse steps via an integral wash station to clean the sampling needle and prevent cross-contamination
- Magnetic stirring ensures insoluble and particulated samples are homogeneous for accurate results
- Fits directly under the Aurora 1030 TOC analyzer to minimize laboratory benchspace requirements
- Supports sampling from open vials and septum piercing of sealed vials

Principal Applications

- Drinking water
- Wastewater
- Ultrapure water
- Cleaning validation
- Water for injection
- Groundwater
- Surface water
- Industrial process water
- Seawater

Sampling Methods

- Open vial
- Septum piercing

Description and Function

The 1088 Rotary Autosampler is specifically designed to operate with an Aurora 1030 TOC analyzer. The 1088 autosampler aspirates liquid samples from vials and transfers each sample aliquot to an Aurora 1030 TOC analyzer for analysis. A removable 88-position autosampler tray loads the sample vials for fully automated, unattended operation.

The 1088 supports a number of special functions to address a range of sample conditions and analysis requirements. Onboard magnetic stirring ensures samples containing insoluble components or particles are homogeneous for sampling and accurate analysis. Septum piercing provides closed vial sampling for applications where open vials may comprise the accuracy of measurements. System configuration for sample pretreatment allows pre-acidification and purging of samples within the 1088 prior to sampling. This technique removes the TIC content of samples, reducing the analysis time required for TOC measurements.

Operating Principle

The sampling sequence of the 1088 autosampler is user-programmed through the Aurora 1030 touchscreen display. A stepper motor drive positions the appropriate vial below the sampling needle. The needle mechanism then lowers into the vial, aspirates the specified sample volume, and transfers it to the reaction chamber of Aurora 1030. Following sample transfer, the sampling needle returns to a wash station to be rinsed. A user-programmable number of rinses are then performed to clean the needle before the next vial is sampled.

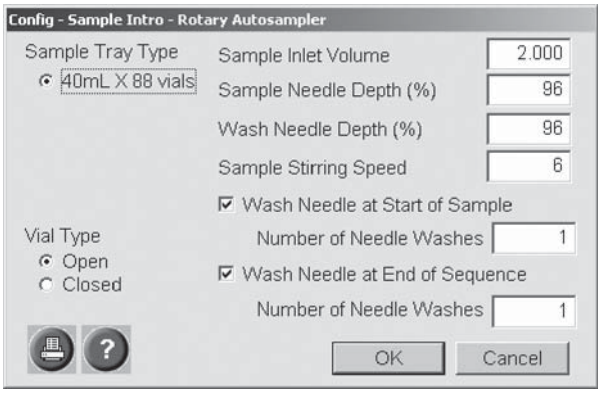
O·I·Analytical

Specifications

Dimensions (1088 Autosampler)	64.77–cm H x 38.1–cm W x 48.26–cm D (25.5” H x 15” W x 19” D)
Weight (1088 Autosampler)	19 kg (42 lbs)
Dimensions (1088 Autosampler & Aurora 1030)	66–cm H x 47–cm W x 66–cm D (26” H x 18.5” W x 26” D)
Weight (1088 Autosampler & Aurora 1030)	34.4 kg (76 lbs)
Benchspace Footprint	3,102 cm^2 (494 in^2)
Environment	15–35 °C operating temperature 10–90% relative humidity
Sample Capacity	88 sample vials
Sampling Needle	8.4”, two-hole, stainless steel
Sample Transfer Tubing	0.045” I.D. x 1/8” O.D. Teflon® tubing
Vials	40-mL VOA vials
Caps	Open-hole caps
Septa	TFE-faced septa
Sample Transfer Volume Range	10 µL–10 mL
Particulate Handling	Up to 500 µm
Special Functions	On-board magnetic stirring Septum piercing Sample pre-treatment for TIC removal
Power Supply	100–230 V_{AC} (±10%); 50/60 Hz; 150 W (max)
Communication	RS-485 (Aurora 1030 analyzer to 1088 Autosampler)
Certifications	CE
Warranty	12 months on parts and labor

Autosampler Tray with Vials

Programmable Autosampler Parameters



Publication 22700808

O·I·Analytical PO Box 9010 College Station, Texas 77842 • Tel (800) 653-1711 • FAX (979) 690-0440 • www.oico.com

OICO NASDAQ LISTED