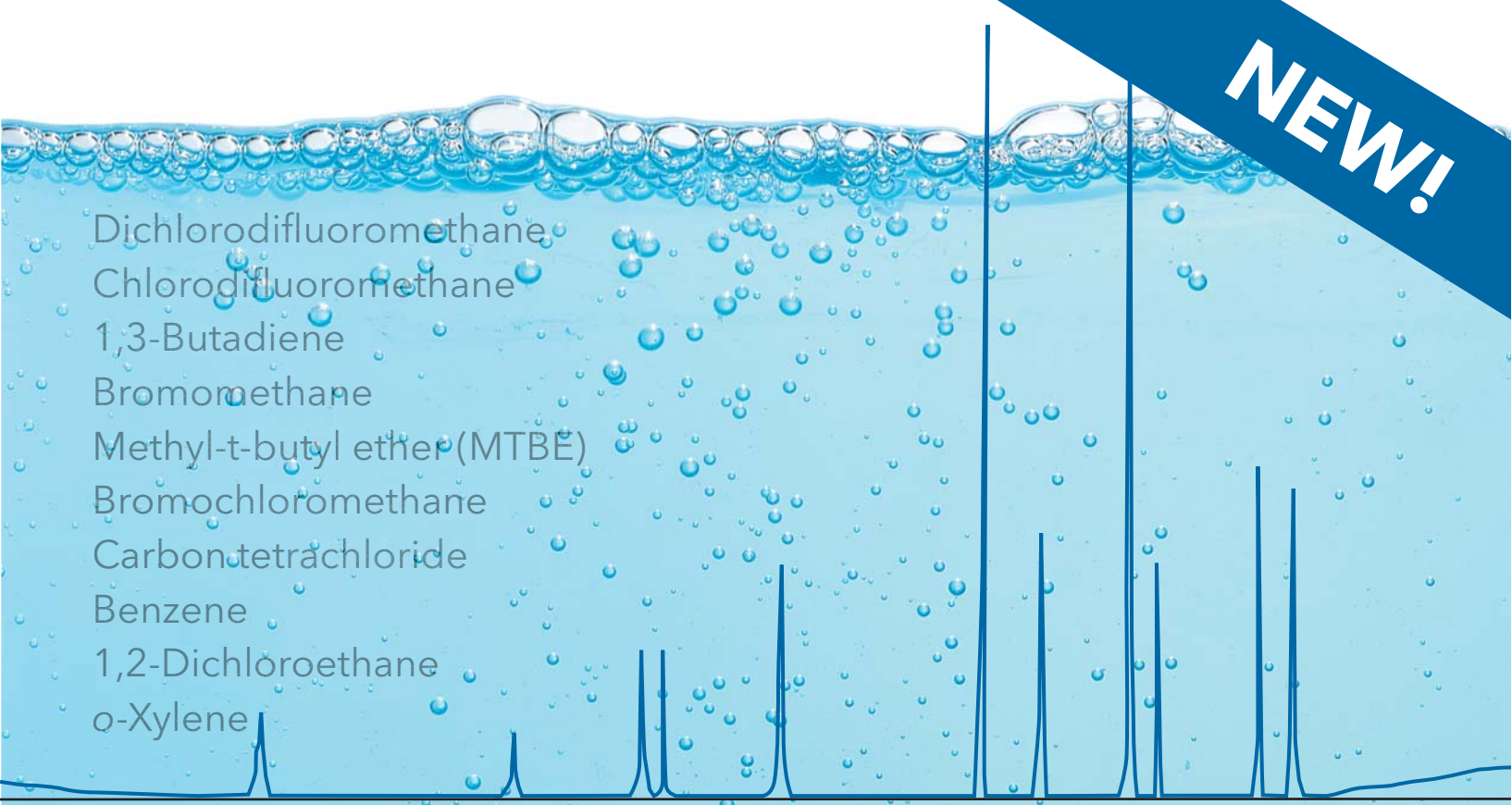
NEW!



SDWA USEPA 524.3 SW-846 USEPA 8260

Eclipse 4760
Purge-and-Trap Sample Concentrator

O·I·Analytical
a xylem brand

Optimized for Superior Analytical Performance

Eclipse 4760 Purge and Trap Sample Concentrator

Chamber lighting changes color at every stage. View instrument status at a glance from anywhere in the lab.

Thousands of laboratories trust the Eclipse series Purge and Trap Sample Concentrator for GC/GC-MS analysis of volatile organic compounds (VOCs). The **Eclipse 4760** sets a new standard in ease-of-use and economy of effort for these analyses. An updated slim-line design, intuitive user interface and industry leading performance are combined with key Eclipse features developed with over 30 years of VOC experience. Faster cycle times, higher sample throughput and exceptional reliability directly improve productivity and profitability.

The purge-and-trap technique involves multiple sample processing steps, each of which directly affect analytical performance. Innovative, patented components in the Eclipse 4760 improve instrument operation, reliability and analytical performance.

4100 Water/Soil Sample Processor

The **4100 Water/Soil Sample Processor** processes up 100 drinking water, wastewater, or soil samples and can operate with up to two Eclipse 4760 Purge and Trap systems.

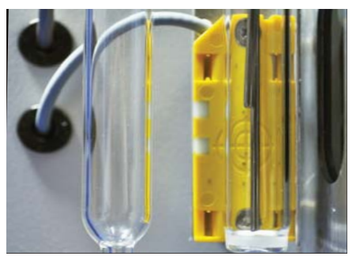
The 4100 is equipped with an innovative, pneumatically-actuated cylindrical vial gripper. The VOA Constrictor™ mechanism lifts and transports VOA vials to and from the sampling system with exceptional reliability.

4551A Autosampler

The **4551A Autosampler** docks directly underneath the Eclipse 4760 and enables unattended automated analysis of 51 water samples. The 4551A can be equipped with options for cooling sample vials and adding internal standards to ensure compliance with quality control requirements in USEPA methods. The optional **LV-20 Standards Addition Module** is equipped with high-speed injection valves that minimize standard usage and help decrease laboratory operating costs for expensive standards.

Sparge Overfill Sensor

The optional Sparge Overfill Sensor ensures that the sparge vessel has been properly drained before a new sample is introduced.



Patented Foam Sensor

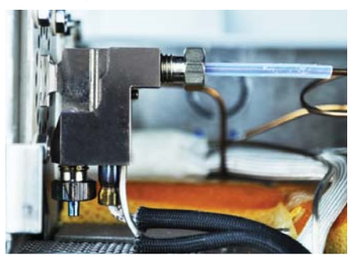
The purge vessel can be equipped with an optional, noninvasive optical sensor to prevent contamination from foaming samples and system downtime.

Direct Trap Heating

Direct resistance heating of the trap at >1,000 ˚C/min eliminates the need for a trap preheating step and decreases overall purge and trap cycle time.

Water Management System

The proprietary cyclone water management system removes >96% of trapped water during the thermal desorb step outperforming all other purge and trap instruments.



Intuitive Software

The new simplified user-interface provides easier navigation, while the integrated, multi-colored LED enables users to see the system's status at a glance.

Infra-Sparge Sample Heater

The proprietary Infra-Sparge option heats the purge vessel to improve the purge efficiency of hydrophilic and oxygenated compounds as recommended in USEPA method 524.3.

Eclipse 4760 Specifications

Dimensions	19.25 in H x 7.25 in W x 18 in D (48.9 cm H x 18.4 cm W x 45.7 cm D)
Weight	36 lbs (16.3 kg)
Sparge Vessel	5 mL (standard); 10 mL and 25 mL (optional)
Trap	3.175 mm O.D. x 2.227 mm I.D. (0.125 in O.D. x 0.105 in I.D.)
Trap Heating	Direct resistance heating
Trap Temperature	Programmable to Bake: 450 °C, Trap: 200 °C, and Desorb: 250 °C
Trap Cooling	> 240 °C/minute cooling rate (200 °C to 30 °C in < 50 seconds); Cool down to ambient temperature + 1 °C
Water Management	Eliminates > 96% of trapped water, maximum temperature 240 ˚C; Cool down to ambient temperature + 1 °C
Sample Transfer Line	1/16 in x 48 in standard (60 in optional)
Sample Transfer Line Temperature	Programmable ambient to 325 °C
Standards Injection	SAM, LV-20 (optional)
Sample Heater	Optional infrared heating of sparge vessel with in-situ temperature measurement and feedback control
Foam Sensor	Optional optical sensor detects foam in sparge vessel and stops run to prevent sample pathway contamination
Sparge Overfill Sensor	Optional capacitance sensor detects presence of water in sparge vessel to prevent introduction of a new sample and overfilling if the previous sample has not drained properly
pH Detect™ Module	Optional module automatically measures the pH of samples with date and time stamps stored in a log file for reporting or transfer to a LAN/LIMS system
Autosamplers (Optional)	Model 4551A (water samples) or Model 4100 (water/soil samples)
Operator Interface	Windows®-based PC graphical user interface
Communications	USB to RS-485 adapter cable
Gas Requirements	99.999% (UHP Grade) He or N_2 purge gas
Power Requirements	115 VAC ± 10% 50/60 Hz 230 VAC ± 10% 50/60Hz 750 VA maximum
Certifications	**Safety:** Low Voltage Directive 2006/95/EC, EN 61010-1:2010 3rd Ed. **EMC:** Directive 2004/108/EC, EN 61326-1:2013
Patents	US 5,250,093 5,261,937 5,337,619 6,894,784B2

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