

# LUMIN

## Purge and Trap Concentrator

- Electronic Mass Flow Controller allows for use with either Helium or Nitrogen. The ability to vary flow rates in different modes which increases sample throughput
- Ultra-low carryover
- New Moisture Control System (MCS) reduces moisture by up to 60% over previous models
- Proprietary trapping material allows for excellent desorption efficiency
- Automated leak checking
- Sample logging ensures data integrity
- Foam detection and prevention options
- Software control allows for built-in diagnostics and self-testing

### Product Description

The Lumin Purge and Trap Concentrator utilizes an electronic Mass Flow Controller that delivers extraction gas to the sample, thus stripping the VOCs and delivering them to a sorbent trap. The trap is then heated and back-flushed to a GC for separation and subsequent detection. The system then automatically performs a clean-up step, allowing for the next sample analysis.

### Methods

- USEPA 502.1, 502.2, 524.2, 524.3, 524.4, 503.1, 601, 602, 603, 624, 8010, 8015, 8020, 8021, 8030, 8240, 8260
- ASTM and Standard Methods
- Massachusetts VPH and GRO Methods



# Lumin Specifications

<b>Cycle Time:</b>	Less than 15 minutes
<b>Trap Furnace:</b>	Ambient to 350°C
<b>Trap Cooling:</b>	Cools from 250° to 40°C in 70 seconds
<b>Sample Pathway:</b>	Inert coated tubing and fittings. Transfer line heated up to 250°C
<b>Sample Heater:</b>	Optional heater capable of up to 90°C
<b>Maximum Sample Concentration:</b>	1ppm. High level samples should be prescreened with HT3 Headspace sampler
<b>GC interface:</b>	Interfaces to virtually all commercially available GC instruments.
<b>Column Compatibility:</b>	0.18 to 0.75mm ID. Recommend 20m x 0.18mm ID Fast Volatiles columns
<b>Valving:</b>	24VDC motor-actuated 6 port valve. Temperature controlled up to 250°C.
<b>Sample Glassware:</b>	5mL frit sparger standard. Optional 25mL frit sparger, 5 or 25 mL needle sparger, and 25mL disposable test tubes.
<b>Data Input:</b>	Lumin TekLink™ PC software communicates via USB.
<b>Electronic Mass Flow Controller*:</b>	System is capable of controlling flow rates from 5mL/min to 500mL/min. Each mode is independently controlled, via the Lumin TekLink™ software interface.
<b>Electronic Pressure Monitor:</b>	Automatic leak check and over-pressure sensing capability.
<b>Voltage Requirements:</b>	100/115 VAC +/- 5%, 50/60Hz, 10 amps, 1150 watts 220/240 VAC +/- 5%, 50/60Hz, 5 amps, 1150 watts
<b>Gas Requirements:</b>	99.999% He or N <sub>2</sub> gas at 50 -100psig
<b>Unit Dimensions (HxWxD):</b>	17.2" x 8.9" x 18.7"
<b>Weight:</b>	27lbs
<b>Operating Conditions:</b>	System is capable of operating in a temperature range of 10 - 30°C and a humidity range of 10 - 90%
<b>Corrosion Resistance:</b>	The front cover is corrosion resistant to waters with a pH range of 1 -10.

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\*Covered by patent US 7651866.