

μ -TD 3[®]



Micro-Trap/Thermal Desorption

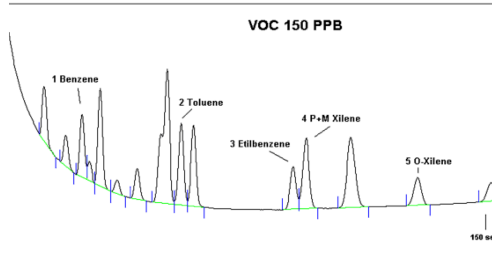
Specifically for the use with Micro-Gas-Chromatography

Gas Chromatography is widely used for chemical analysis because of its high resolution capability. Micro-GCs are popular because of their small size and autonomous operation. Micro-GCs measure into the low ppm range, however, on occasion the user requirement is below that.

AIRSENSE Analytics has developed a **Trap/Thermal desorption unit** specifically designed to enhance the sensitivity and selectivity of the Agilent Micro-GCs. A micro-GC interfaced with the μ -TD3 achieves lab quality results in the field.

Increase sensitivity by a factor from 10 to 1000. Adjust system parameters such as flow rate, temperatures and timing of the thermal desorption process using the Airsense control software. Operate the instrument with or without a PC attached to it.

The μ -TD3 gas flow system is designed to fulfill all needs within the different applications of a Micro-GC



- on site or in the lab
- performing single analyses or continuous cyclic operation

Features:

- Operates on 110 to 250 VAC or 12 VDC
- different gases possible for sample transfer
- works with computer or stand-alone mode
- user interface: display, 1 button operation windows-software parameter adjustment
- runs a full cycle in just over 6 to 10 minutes
- Increases sensitivity by a factor of 10 to 1000
- Increases selectivity by the use of specific adsorbent materials
- different adsorbent materials available, quick replacement
- specifically designed for the operation with Micro-GCs

Specifications



Sampling

| | |
|-----------------|---|
| Inlet Sampler | made of stainless steel and Teflon [®] heated tube up to 150°C, special fluidic and electrical connector |
| Inlet Detector | made of stainless steel, connection per swagelok to μ GC heated tube up to 150°C, special fluidic and electrical connector |
| Flow | adjustable : 50 to 500 ml/min |
| Temperatures | for sampling adjustable : typical 30°C for desorption adjustable : up to 250°C (during cleaning higher) |
| Condition | non-condensing gas of 0°C to 45°C |
| Adsorbent | different adsorbent materials available, most common Tenax TA [®] 50/100 mg or Tenax TA/Active Charcoal combination 100/50 mg |
| Tube holder | holder for one adsorbent tube which can be easily replaced |
| System | one internal pump for sampling, internal multiport valve, heated |
| Cycle time | typical 10 min full cycle : sampling, desorption, injection, cleaning and cooling |
| Cycle operation | single or continuous cycle |
| Repeatability | <1%, typical |

Environment Requirements

| | |
|---------------------|---------------------------|
| Temperature | typical : 0°C to 45°C |
| Humidity (relative) | 5% to 95%, non-condensing |

Power Requirement

| | |
|------------|---|
| Main Power | 110 to 230VAC or 12VDC (optional), max. 80W |
|------------|---|

Communication

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|----------------------|---|
| Computer Interface | USB port or serial RS-232 (optional) |
| Electrical Interface | TTL & relay, for devices attached to the unit |

Device Control / Data Handling

| | |
|--------------|---|
| Requirements | Win98SE, ME, 2000, XP |
| Software | TTD-Terminal |
| Display | 60 x 38 mm grey, CFC backlight text display |

Dimensions and Weight

| | |
|--------|------------------|
| Weight | 2.3 kg |
| System | 255 x 190 x 92mm |

Safety class

Compliant to EN292 Part1 & 2, EN294, EN61010-1, EN1050, EN60204-1, EN 55011 G1 CB, EN50270, EN61326

Warranty

12 month

