



## EDU-GC Enrichment and Desorption Unit Trap / Thermal Desorption

*Adsorption with thermal desorption is a well known method for the analysis of air or for sample preparation purposes in the lab. The EDU-GC system allows to concentrate substances or to select certain compounds for the following chemical analysis.*

**EDU-GC** is an unit of the successful Trap/Thermal Desorption series of Airsense. EDU-GC is optimised for Standard-GC's. EDU-GC is a fully automatic sampling and desorption device.

With this technique compounds of interest can be adsorbed, leading to **enrichment factors** of 100 to 1000 – depending on the target substance and the analysis parameter.

This instrument can be used to solve analytical problems which require lowest detection limits.

Another advantage is that with EDU-GC you can modify the **selectivity** and **sensitivity** (through software) of the analysis. When working with GC's, it is important to remove uninteresting compounds, such as water in environmental applications.

**EDU-GC** works also with inert gases.

Through an internal pump the unit is able to take samples automatically. EDU-GC

can be used as a stand-alone unit which can perform single steps like sampling, thermal desorption, injection, cleaning and cooling automatically.

Because of easiness of handling, it can also be used for single steps such as only thermal desorption for a quick analysis. For manual sampling and thermal desorption applications the adsorbent can be easily exchanged or replaced.

The easy connection to all standard-GC's makes the EDU-GC very flexible.

### Advantage of EDU-GC:

- **It is a very flexible and small unit**
- **It can be easily adapted to any kind of GC**
- **Better detection limits**
- **Increased selectivity and sensitivity**
- **Automatical cycles from sampling to thermal desorption**
- **Adsorbent tubes can be manually changed without tools**
- **Easily handling**
- **For quick lab analysis**
- **Desorption and injection with inert gases (He, N2) or air**

# AIRSENSE

A N A L Y T I C S

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## EDU-GC Enrichment and Desorption Unit

### Technical Data



Adsorbent	Different adsorbent materials available, most common Tenax TA®, 125mg or Tenax/charcoal combination 100/50mg
Tube holder	Holder for one tube, which can be easily replaced
Sampling flow	Adjustable, typical 0.2 – 0.5 L/min
Sampling temperature	Adjustable, typical 30°C (max. 100°C)
Desorption flow	Adjustable, 2ml/min – 20ml/min
Desorption temperature	Adjustable, up to 250°C (during cleaning higher)
Sampling inlet	Gas inlet made of stainless steel (silcosteel) or teflon, heated tube, up to 150°C, special fluidic and electrical connector
Transfer line	Transfer line made of silcosteel, heated tube, up to 150°C, special fluidic and electrical connector, connection per needle through septa of GC
Sampling system	One internal pump for sampling, internal multiport valve, heated
Cycle time	Typical 6 min, full cycle: sampling, desorption, injection, cleaning and cooling
Digital interface	TTL & relay, for devices attached to the unit or other peripheral devices
Computer interface	Serial port RS232
Power	110-230 VAC or 12 VDC (optional), max. 80W
Weight	2.3 kg
Dimensions	230 x 285 x 68mm
Operating temperatures	Typical: +5 to 40°C
Operating humidity	5% to 95% r. H., non condensing
Operating system	“EDU”, parameter input, system control (Win95, 98, Me or NT 4.0 (>SP3, XP))
Safety class	Compliant to IEC 61010-1
Warranty	2 years

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