Custom solutions for special performance requirements available upon request.

Specifications

Uses
The GERSTEL DHS efficiently extracts and concentrates VOCs from liquid or solid samples placed in standard Headspace vials prior to GC or GC/MS analysis. The DHS module provides thermostating and agitation as well as purging of the sample headspace onto a replaceable sorbent tube with a controlled flow of inert gas.

System Configuration
• Compatible with most standard GCs
• Automated operation based on the GERSTEL Multi-Purpose Sampler MPS
• GERSTEL Thermal Desorption Unit TDU is used for thermal desorption of analytes
• GERSTEL Cooled Injection System CIS is used for analyte focusing prior to GC or GC/MS analysis

Sample Volume
• Max. 10 mL, in 20 mL Headspace vials

Adsorbent Tubes
• Standard GERSTEL TDU tubes
• Individual tubes can be freely selected for each sample
• Detailed information on TDU tubes and adsorbent materials is available in a separate flyer

Analyte Transfer
• Heated needle system between the Headspace vial and TDU tube, similar to standard Headspace technique
• No transfer line in system

Cooling Option
• Peltier Cooling UPC

Incubation Temperature
• 30 … 200 °C depending on the ambient temperature
• 10 … 200 °C with Universal Peltier Cooling UPC

Trap Temperature
• 20 … 70 °C

Transfer Temperature
• Max. 150 °C

Agitation Speed
• 250 … 1500 rpm

Gases
• He
• N₂
• Synthetic air

Gas Purge Volume
• Max. 100 liters

Gas Flow
• 5 … 100 mL/min
• Controlled by a mass flow controller
Control
- Based on Controller C506
- In combination with the GERSTEL MAESTRO software, alternatively integrated in an Agilent® Technologies chromatography data system, or coupled to a chromatography data system from Thermo Scientific®, or operated in stand-alone mode
- Only one method and one sequence table required for the complete system including GC/MS when integrated in the ChemStation or MassHunter software

Dimensions (H × W × D)
- 27.5 × 7.5 × 27.5 cm

Weight
- 2.6 kg

Operating Conditions
- 20 ... 35 °C
- Relative humidity max. 50-60%, non-condensing
- Max. 4615 m above sea level

Storage Conditions
- 5 ... 40 °C
- Relative humidity max. 50-60%, non-condensing
- Max. 4615 m above sea level

DHS Large Option
The DHS Large Option enables the determination of volatile analytes from a large solid sample in a vessel with a volume of up to 1 liter. It is easily retrofitted to a DHS module.

Features
- Especially suitable for large-volume, solid samples
- Maximum sample container volume of 1 liter
- Maximum sample weight of 2 kg
- DHS FlowLog option at gas outlet for leak checking and logging
- Easy switching between DHS and DHS Large operation
- Software-controlled locking mechanism locks the carriage in the appropriate position
- Manual sample exchange
- Temperature range: AT ... 200 °C
- No upgrade to DHS Large Autosampler possible

Sample Vessel with Cover
- Vessel volumes of 1 L, 500 mL and 250 mL
- Inner diameter of 9.9 cm
- Maximum filling height: 
  11.7 cm (1 L vessel),
  5 cm (500 mL vessel),
  1.7 cm (250 mL vessel)
- Produced from stainless steel, deactivated
- Viton® sealing ring
- Safety valve limits the inner pressure to 2.3 bar

Power Consumption
- 300 Watt

Power Supply
- 100 ... 230 VAC, 50/60 Hz