

Cryo Trap System



# Specifications

#### Uses

The CTS 1 is used for cryogenic trapping of analytes between the pre-column and the analytical column in a dual GC-oven system. When trapping has been completed, analytes are released from the trap using a highly accurate temperature program ensuring the best possible introduction to the analytical column for optimal analyte separation and detection limits. Analytes can be concentrated from multiple injections onto the pre-column and subsequently separated and determined in one run on the analytical column helping to achieve better limits of detection.

#### System Configuration

- compatible with Agilent<sup>®</sup> Technologies GC 6890 and 7890
- fitting for capillary columns with 1 mm outer diameter
- used as a cryotrap for GERSTEL Multidimensional Column Switching System MCS

#### **Thermostated Zones**

- 1 combined zone that can be cooled or heated, length 5 cm
- 2 heated transfer lines each 24.5 cm long

# **Cooling Option**

LN<sub>2</sub> cooling \*)

#### **Temperature Programming**

- 2 temperature ramps
- second ramp starts sattelite GC
- heating rate 0.5 ... 20 °C/s
- initial temperature -150 ... 400 °C
- 1. hold temperature -150 ... 400 °C
- 2. hold temperature 0 ... 400 °C
- · hold time maximum 650 min for each hold temperature

#### \*) Dewar vessel with 1.0-2.0 bar operating pressure mandatory.

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#### Control

- C505 or C506 controller based
- in combination with the GERSTEL MAESTRO software, integrated in the Agilent<sup>®</sup> Technologies ChemStation software 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 software
- hardware start signal for the 2nd GC-oven is provided by the CTS 1 ensuring optimal synchronization of the two GC-ovens

### **Operating Conditions**

- 15 ... 35 °C
- relative humidity max. 50-60%, non-condensing
- max. 4615 m above sea level

#### **Storage Conditions**

- -20 ... 50 °C
- relative humidity max. 50-60%, non-condensing
- max. 4615 m above sea level

# Dimensions

- total length approx. 54 cm
- distance between the GCs approx. 25 cm
- outer diameter approx. 5.7 cm

#### Weight

• 1.25 kg

# Cryo Trap Enrichment System

• CTE 1

The Cryo Trap Enrichment System CTE 1 consists of a CTS 1 and a pneumatic module that enables venting of the pre-column effluent combined with separate pneumatic control of the analytical column.

Custom solutions for special performance requirements available upon request.

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