

Product Flyer

GasGenerator for IMR-MS

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V&F
Analyse- und
Messtechnik
GmbH

GasGenerator for IMR-MS

Basics

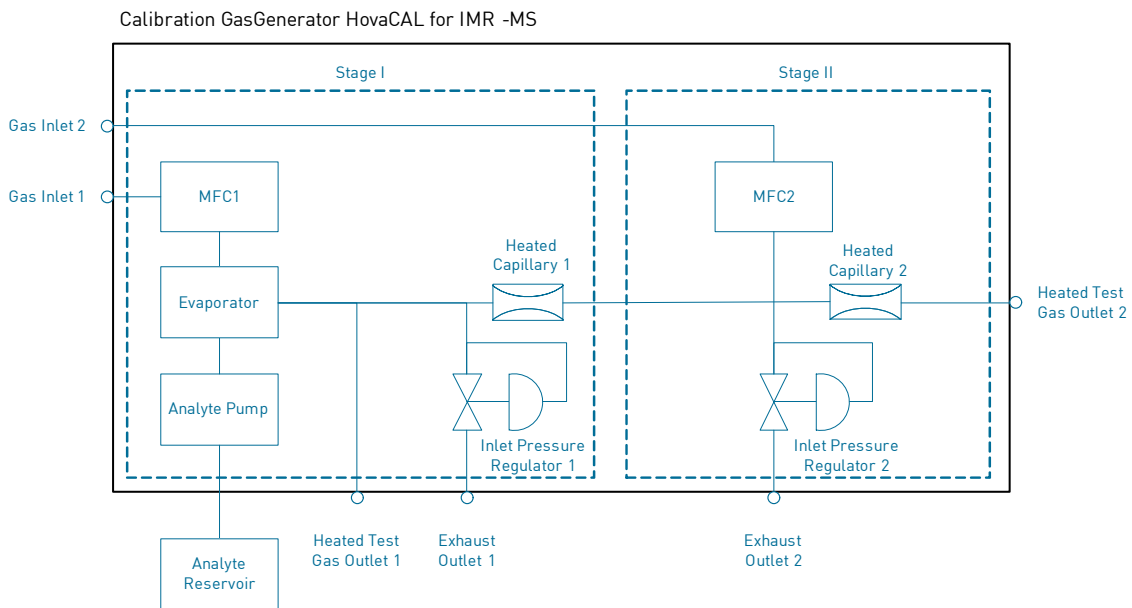
The HovaCAL® GasGenerator for IMR-MS dynamically generates calibration gases by vaporizing organic and inorganic components and mixing them with a carrier gas stream, and by further diluting the gas vapor mixture.

Operation is done solely on an external PC or notebook via Ethernet interface and software viewCAL2222.

Test gases can be taken on the rear of the generator and used as calibration gases with our V&F Analyzers. Carrier and dilution gas are connected via the front ferrule fittings. The exhaust gases flow back on the rear through separate lines.



Components Overview



The GasGenerator consist of two stages:

- Stage I: Dosage and Vaporizing Unit
- Stage II: Dilution Unit

Stage I: Dosage and Vaporizing Unit

The desired substance is transported into a heated evaporator via spray dosage system, and is there mixed with a defined carrier gas-stream (MFC1).

The spray pump operates push-pull, i.e. during one syringe does the dosage, the second one is drawn and filled. Automatic switching of lowest dead volume rotary slide valves enables a continuous operation.

Stage II: Dilution Unit

The premix stage I will be diverted via a bypass and a capillary tube from the evaporator. Thus, a defined partial flow of the premix is mixed with a defined dilution gas stream (MFC2).

The flow of the capillary is kept constant by electronic pressure controllers. If a partial flow is diverted over the heated capillary of Stage II and diluted with a dilution gas stream of 2.0 l/min, the dilution factor is 1000.

High Operating Comfort

The user can attach the GasGenerator via an Ethernet cable (RJ45 connector on the front of the instrument) to a local network. Additionally you have to install the viewCAL software on a PC running with Windows 7 or higher. The control software viewCAL serves as control and data collection of the GasGenerator as well as of the dosage utilities and the moistening.

- Operation is done via PC or notebook and the software viewCAL (based on LabView).
- All components of the system are shown schematically on the software interface and can be operated either directly via input fields or automatically via a temporary profile.
- Open platform for the integration of parent LabView functions.
- The metering data are presented numerically and graphically (trend graph) and are stored in a file.

Features, Benefits

- vaporizes organic and inorganic components
- dilution of the calibration gas with a carrier gas stream
- robust and reliable
- user friendly software package
- minimized service and operation costs

Specification, Technical Data

Technical Data	Value	Technical Data	Value
Dimension (WxHxD)	535 x 215 x 640 mm	Weight	25 kg
Power	230V/50Hz 1000W	Output at spray volume	12,5 µl: 0,2 µl/min to 75 µl/min
Input pressure range	max. 6 bar	Vaporizer temperature	up to 180 °C
Gas connections for carrier and dilution gas	clamping ring 1/4"	Gas outlet for test gas 1 and test gas 2	clamping ring 1/8"
Gas connections for exhaust gas	clamping ring 1/4"	Volume of gas-proof precision syringes	12,5 µl to 250 µl
Mass Flow Controller Stage I	calibrated to 1500 up to 5000 ml/min air	Mass Flow Controller Stage II	calibrated to 500 up to 5000 ml/min air



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