

The new Dimension in Process Gas Chromatography



microsam



MicroSAM – the new dimension!

MicroSAM, the newest on-line Process Gas Chromatograph from Siemens, brings a new dimension to the industry – small! Using modern silicon micro-machining techniques coupled with the well-established EZChrom software from the Siemens Maxum edition II Gas Chromatograph, the MicroSAM achieves miniature size while simultaneously increasing power and versatility.

And the soccer-ball-sized MicroSAM, with CSA Division 1 and ATEX 100 Zone 1 ratings, is so robust that it can be installed directly at the sampling point.

SIEMENS

MicroSAM – the new Dimension in Process Gas Chromatography opens a new world!



The most powerful oven module in chromatography today!

The explosion-proof enclosure contains concentrated intelligence. Everything needed for separation and detection of the measured sample is integrated into the space of a small platter:

- Valveless Live injection
MicroSAM injects all samples reliably and permits software-controlled injection volume that is adjustable to meet column requirements.
- Valveless Live column switching
MicroSAM performs field-proven, maintenance-free column switching that is perfected by the use of electronic pressure control.
- Multiple parallel micro-detectors
MicroSAM uses a thermal conductivity detector array integrated on silicon to measure all column and vent flows as well as the injection peak itself to enable analysis validation.

Operation has never been simpler!

MicroSAM uses built-in intelligence, versatile application modules, Windows-based software and Ethernet communication so that every parameter can be monitored in a simple manner. The entire analytical system is set up using a standard computer.

MicroSAM has complete system capabilities!

Every MicroSAM includes complete Maxum Analyzer Network capabilities. This means that multiple MicroSAMs can be easily connected together with Ethernet to permit several process streams to be analyzed simultaneously.

What this means to you is:

- Faster analysis update times to ensure better process control
- Simpler analyzer hardware with higher reliability to ensure lower maintenance cost
- Low cost redundancy to ensure uninterrupted measurement availability

The advantages of MicroSAM are significant:

- You save money because MicroSAM is small. Whether you mount it inside an analyzer shelter or directly at the sample extraction point, you need less space, less electrical power, less environmental control and less auxiliary gas and you send less sample to waste.

- You save time because the small MicroSAM is shipped turnkey. When you receive MicroSAM, it is immediately ready to mount and switch on which reduces installation and start-up time as well as cost.
- You save maintenance effort, service costs and off-line time because MicroSAM uses simple and easily interchanged analytical modules. They can be rapidly exchanged on site if required for maintenance which ensures virtually continuous on-line monitoring of product composition and quality.
- You achieve better process control. MicroSAM allows cycle times to be drastically reduced.
- You save sample handling costs. Using a sun and rain cover, you can install MicroSAM directly at the sample extraction point. It is perfectly designed for this application because only a single auxiliary gas is needed and because it has very low power consumption.

Technical data

Diameter	25 cm (10")
Height	23 cm (9")
Weight	15 kg (35 lb.)
Power consumption	typically 24 V DC; 15 VA, max. 50 VA
Classification	CENELEC II 2 G EEx de IIC T5 or NEC Class 1, Group A,B,C,D, Division 1
Max. permissible ambient temperature	-20 to +50 °C
Installations	Post, pipe or wall
Communication	Ethernet, RS485
Protocols	TCP/IP, MODBUS RTU

If you have any questions, please contact your local sales representative or any of the contact addresses below:

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