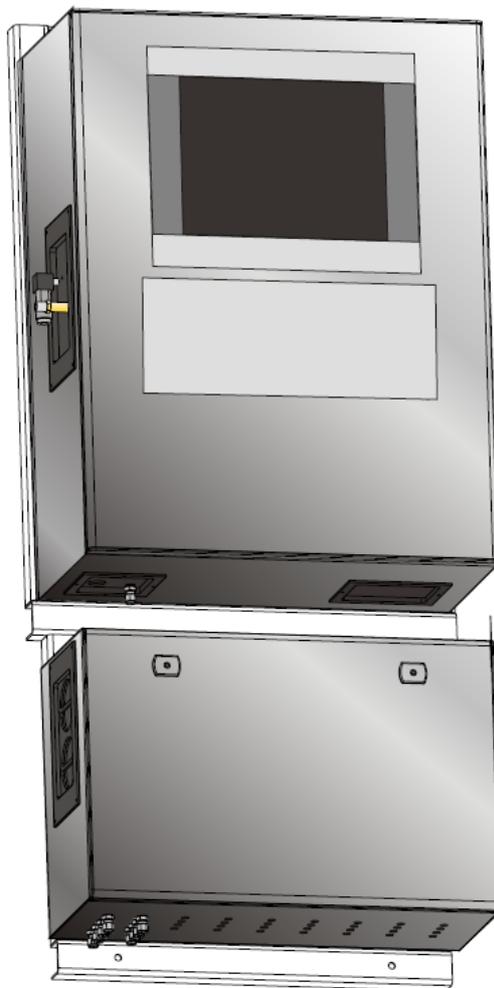


MSS Multipoint Sampling System



Gasmeter Multipoint Sampling System (MSS)

The Gasmeter MSS is designed for continuous monitoring of multiple measuring points. It's designed to work as an integral part of the Gasmeter FCX measuring system.

The Gasmeter MSS is used for on-line measurements. It is an ideal tool to measure components of interest in ambient conditions from several measuring points. The sample pump, valves, filter and sample lines are at ambient temperature and the system can be used to measure gases which are non-condensing.

The Gasmeter MSS is built in a wall mounted stainless steel case which includes all valves, a flow meter, a pump and a filter. Standard setup includes four (4) sample gas input lines and one pump. Zero gas, span gas 1 and 2 inputs as well safety air inputs with flow meters are included as a standard.

The function of the MSS is fully automatic and controlled by the Calcmet software. Sample flow and instrument air pressure alarms are provided.

As an option MSS can be equipped up to 32 sample gas input lines and with second sample gas pump to reduce the system response time.

General parameters

There is no need to dilute the sample gas before Gasmeter sampling unit. All parts are at ambient temperature

Operating temperature:	20 ± 20 °C, non-condensing
Sample gas temperature:	Non-condensing
Sample gas pressure:	Ambient
Cooling:	Fan circulation
Power supply:	100-240 VAC / 50 - 60 Hz

Sample pump

Material:	316 SS
Diaphragms:	Teflon
Flow:	~4.0 l/min
Pressure:	1.5 bars max.
Temperature:	Ambient

Filter

Material:	Bonded microfiber (sintered steel 0.1µ as an option)
Gas filtration:	Filtration of particulates (2 µm)
Temperature:	Ambient

Electrical connectors

Power connection:	100-240 VAC / 50 - 60 Hz
Control:	From computer via Ethernet cable. Control logic included into sampling system.

Gas connections

All gas connections are Swagelok connectors for 6 mm PTFE or ss-316 tubes.

Gas inputs:	Sample gas 1 Sample gas 2 Sample gas 3 Sample gas 4 Span gas 1 Span gas 2 Zero gas Instrument air
Gas outputs:	Sample out 1 (to FTIR) Interferometer purge air

Input connectors on the bottom and output connectors on the right side of the enclosure

Valves

The Gasmeter MSS sampling unit includes automatic solenoid valves for all gas inlets. The function is controlled by Calcmeter software

Solenoid valves:	Bürkert 6012
Pressure:	0 - 10 bars (maximum)

Flow meters

The Gasmeter MSS sampling unit includes adjustable flow meters for unheated gases.

4 l/min:	Safety air Zero gas Span 1 and 2 gas to sample out
0.5 l/min:	Interferometer purge

Flow switch

The Gasmeter MSS includes flow switch for sample gas flow.

Flow switch:	CTE-LPH-125
Alarm limit:	Sample gas flow < 0.7 l/min

Options

Sample gas inputs:	4 pcs input kit, up to 32 input lines
Sample pump II:	Second sample pump to reduce the response time. Second pump is used to pump all other lines which are not used for analyse. Specification same as with standard pump
Vortex cooling:	Cooling capacity 270 W (air 7 bar, 21 °C, dewpoint -40 °C) Air consumption 425 NI/min, max Air pressure 7-10 bar temperature + 43 °C, max. dewpoint -40 °C

Enclosure

Material:	Stainless steel
Dimensions (mm):	600 * 400 * 250
Weight:	50 kg
Protection:	IP 54
CE label:	According to EMI guideline 89/336/EC