

- Sampling Conditioning Systems ● Process Analytics
- System Integration ● Gas Generators ● FTIR-Analyser



analysing systems

CONTINUOUS EMISSION MONITORING SYSTEM MGS300



SAMPLE PROBE JES 300-FTIR

Sample Probe	JES300 - FTIR
Power density	500 Watts
Operating Temperature	180°C
Probe Material	SS 316, Viton
Filter element	0,3 µm ceramic
Dust loadings	< 1 g/m ³
Probe length	1 m
Sample temperature	600°C max.
Sample pressure	0.4 to 2 bar
Mounting flange	DN65 PN6
Temperature controller	0 - 200°C, included
Alarm output	Low temperature, fault

HEATED LINE JH300C-FTIR

Model	JH300C
Tube size	4 mm - ID, 6 mm - OD
Core material	Replaceable Teflon, PFA core
Operating pressure	max. 400kPa
Operating Temperature	max. 200°C
Fittings	6 mm Swagelok or 1/4"
Length	Max. 30 m @ 230 V, 15 m @ 115 V
Power supply	230 VAC or 115 VAC
Power density	110W/meter
Temperature controller	0 - 200°C
Alarm output	Low temperature, fault

TECHNICAL SPECIFICATIONS MGS300

HEATED SAMPLING SYSTEM JHSS

All parts before the sampling unit must be heated with 180°C to avoid condensation.

Operating temperature	180°C, non condensing
Power supply	100-115 VAC or 230 VAC/50-60Hz
Sampling Pump	Air ejector
Material	316SS
Filter Material	316SS; 2 µm
Sample flow rate	~ 2 l/min
Temperature controller	0 - 200°C
Alarm output	Low temperature, fault
Calibration valves	Non heated
Pressure	1 bar for Cal. Gas
Valves for	Zero Gas, Cal. Gas FTIR, Cal. Gas O ₂ , Purge Gas, Backflush (option)

FT-IR GAS ANALYSER MG2030

Measuring principle	Fourier Transform Infrared, FT-IR
Performance	analysis of up to 30 gas components
Ranges	From 10 ppb to 100 % full scale
Ambient temperature	20 - 30°C, non condensing
Storage temperature	5 - 45°C, non condensing
Power supply	100 - 115 or 230 V / 50 - 60 Hz
Power consumption	350 W
Spectral Resolution	0.5 - 128 cm ⁻¹
Scan frequency	1 Hz @ 0,5 cm ⁻¹ resolution
Detector	Linearised Peltier cooled MCT
Infrared Source	Silicon Carbide @ 1200°C
Reference Laser	HeNe
Beamsplitter	Ge/KBr
Wavenumber range	1100 - 5000 cm ⁻¹
Sample cell	Fixed path length 5,11 m
Cell Material	Nickel coated aluminium body
Mirrors	Fixed, protected M ₉ F ₂ coated
Window material	KBr, CaF ₂
Gaskets	Viton O-rings
Cell Volume	0,2 l
Connectors	Swagelok 6 mm or 1/4"
Cell Temperature	Heated up to 200°C
Gas inlet temperature	Non-condensing, 180°C sample gas temperature
Sample flow rate	120 l/h
Gas filtration	Filtration of particulates (0,3µm) needed
Sample gas pressure	Atmospheric pressure
Zero Point calibration	24 hours, auto cal. with nitrogen
Zero Point drift	< 2 % of measuring range
Sensitivity drift	None
Power connection	Standard plug CEE-22

COMPUTER MGS-300-PC

Configuration	512 MB Memory, > 160 GB hard disk, > 1 GHz Intel Pentium III Processor, CD-RW
Operating system	Windows operating system; 2000, XP
Software	MG2000 for Windows
Watchdog support	Included
Mouse	Included PS/2
Keyboard	Included PS/2
Display	Included
Power consumption	300 W
CE-label	According EMI 89/336/EC
Interface	9-pole D-Connector for RS-232, RJ 45
Remote control	VNC Virtual Network Control via VPN Virtual Private Network Ethernet RJ 45

CABINET MGS 300

Material	Mild painted steel, RAL7035
Dimensions (mm)	2100 x 1200 x 800 mm (H x W x D)
Weight	450 kg
Protection	IP 54
Ambient temperature	15 - 30°C

UTILITIES

Main supply	3 x 16 A, 3 x L+N+PE
Power consumption	< 7000 Watts fully equipped system with 30m heated line
Main supply	400/230V AC, 50 Hz, 3L, N, PE
Main fuse	3 x 16 A, < 7000 Watts
Air supply	Min. 4 bar, max. 10 bar
Air consumption	Normally 3,5 m ³ /h, max. 25 m ³ /h
Air quality	Instrument air - 40°C DP acc. ISO 8573.1 Class 1.2.1

MEASURING DATA OUTPUTS

Analog Output	10 x 4 - 20 mA, isolated (max. 16 optional)
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SYSTEM ALARM OUTPUTS

Alarms	Fault FTIR Analyser Fault PC/Software Fault heated probe Fault heated line Fault heated sampling system Cabinet temp. High (Log) Zero gas, pressure Low (Option) Log
Status	Calibration in process Maintenance request Sample flow low

