

# Heated multi-gas infra-red GFC analyser







Turnkey system "on frame" including MIR 9000H



Using the heated Infra-Red Gas Filter Correlation technology, the MIR 9000H is a perfect multi-gas analyzer for multiple applications, including DeNOx (SCR/SNCR).

### **EXCLUSIVE FEATURES:**

- Available in 2 versions for the simultaneous and continuous measurement of:
  - NH, and H,O
  - $\bullet$  CO, CO<sub>2</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>, HCl, HF, N<sub>2</sub>O and O<sub>2</sub> in addition of NH<sub>2</sub> and H<sub>2</sub>O
- Designed to measure wet and corrosive sample
- Perfectly suited for ammonia slip detection
- 180°C heated measurement cell and sampling line
- Automatic spectral interference correction
- Reproducible and accurate, fast response time
- Excellent calibration stability
- Robust and reliable design built in a stainless steel tight box to withstand the harshest industrial environment
- Acquisition of up to 4 additional measurements (pressure, temperature, flow...)
- Remote access for maintenance and configuration backup
- Graphic LCD display, with interactive menu driven software; no PC required
- No nitrogen required for calibration, low maintenance costs
- Up to 60 m of heated sampling line
- Compliant with U.S. EPA
- Compliant with EN14181 and EN15267-3

#### **MAIN APPLICATIONS:**

- Waste Incineration: Municipal, Hazardous, Industrial, Special, Hospital Power & Combustion Plants • Process Control • Gas Turbines • Biomass • Cement Kilns
- Pulp and Paper DeNOx (SNCR, SCR), ammonia slip detection Industrial Boilers and Furnaces in Chemical & Petrochemical Plants • Testing Laboratories



# NH<sub>3</sub> • H<sub>2</sub>O & CO • CO<sub>2</sub> • NO • NO<sub>2</sub> • SO<sub>2</sub> • HCl • HF • N<sub>2</sub>O • O<sub>2</sub>

# Heated Multi-gas Analyzer MIR 9000H

## **TECHNICAL SPECIFICATIONS:**

	Lowest / highest available ranges
<b>NH</b> з	0-15 / 500 mg/m <sup>3</sup>
H <sub>2</sub> O	0-30 / 40 %
СО	0-75 / 10 000 mg/m <sup>3</sup>
CO <sub>2</sub>	0-20 / 40 %
NO	0-200 / 5 000 mg/m <sup>3</sup>
NO <sub>2</sub>	0-200 / 5 000 mg/m <sup>3</sup>
<b>SO</b> <sub>2</sub>	0-500 / 5 000 mg/m <sup>3</sup>
HCI	0-100 / 5 000 mg/m <sup>3</sup>
HF	0-40 / 300 mg/m <sup>3</sup>
N <sub>2</sub> O	0-100 / 500 mg/m <sup>3</sup>
02	0-25 %

#### Other ranges availables on request

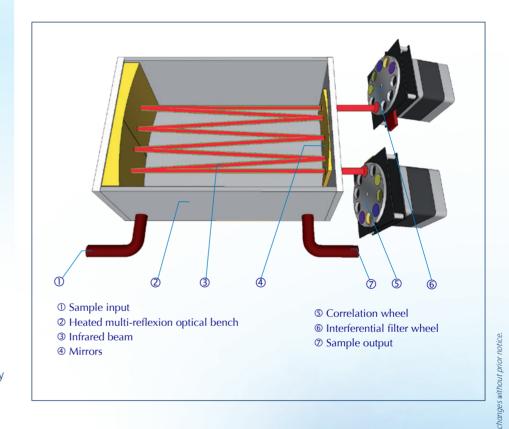
- Repeatability: < 2% of the Full Scale (F.S.)
- Zero/Span drift: <2% of the F.S. / 30 days</p>
- Linearity: < ± 2% of the F.S.
- Cross sensitivity: < ± 4% of the F.S.
- Chamber temperature: 180 °C
- Power supply: 115 or 230V ± 15 %, 50/60 Hz
- Nominal power consumption: 150 VA (max 450VA)
- Serial link: RS232 / RS422
- Ethernet link: RJ45 port
- USB function: software update and upgrade, data and configuration backup, flash memory
- 4 analog inputs (0-2.5V)
- 8 analog outputs (4-20 mA)
- 4 relay outputs
- 8 remote control inputs
- Dimensions: 710 x 560 x 300 mm (H x W x D)
- Weight: 40 kg

## **MAIN OPTIONS**

- HOFI Box sampling system
- Heated line, maximum 60m
- Pressure, temperature and velocity measurements of the sampled gas
- Remote supervision software
- Shelter, cabinet or transportable frame integration
- Automatic calibration control (TIG)

## **OPERATING PRINCIPLE:**

The gas sample is drawn up into the measurement chamber due to the venturi effect, which allows stable flow and pressure. The infrared beam passes through the chamber multiple times and is analysed by 2 correlation wheels equipped with interference filters and gas cell filters. This analysis leads to the measurement of the desired gases whilst compensating for cross sensitivities between different gases. Measurement values are displayed in real time and made available through 8 analog outputs, a serial link and an Ethernet link.







ECOPASS ISO 14001



