**Emission monitors gas**

**MCS100FT Multi gas analyser**

***Description:***

The FTIR measuring principle allows the simultaneous determination of more than 12 measuring components – tailor-made for the particular requirements of the customer. The MCS100FT FTIR analyser system with its heated measuring cell enables the monitoring of hydrogen fluoride limits as requested by legislation. The MCS100FT is equipped with an oxygen sensor as standard and can be supplemented with a total hydrocarbon analyser. With its reliable measuring technology, its easy operation and low maintenance requirements, the MCS100FT provides a solution that offers unequalled opportunities.

**Specification:**

Measured values: CH4, CO, CO2, Corg, HCl, HF, H2O, NH3, NO, NO2, N2O, O2, SO2, NOx, C3H8, C2H6

Performance-tested measurements: CH4, CO, CO2, Corg, HCl, HF, H2O, NH3, NO, NO2, N2O, O2, SO2

Measurement principle: FTIR spectroscopy, flame ionisation detection, Zirconium dioxide sensor

Gas flow rate: ≤ 300 l/h

Measuring ranges

CH4 0 ... 70 ppm / 0 ... 210 ppm

CO 0 ... 60 ppm / 0 ... 1,200 ppm

CO2 0 ... 25 Vol.-%

Corg 0 ... 7.5 ppm / 0 ... 75 ppm

HCl 0 ... 10 ppm / 0 ... 100 ppm

HF 0 ... 3 ppm / 0 ... 10 ppm

H2O 0 ... 40 Vol.-%

NH3 0 ... 13 ppm / 0 ... 65 ppm

NO 0 ... 150 ppm / 0 ... 1,500 ppm

NO2 0 ... 25 ppm / 0 ... 250 ppm

N2O 0 ... 25 ppm / 0 ... 250 ppm

O2 0 ... 21 Vol.-%

SO2 0 ... 25 ppm / 0 ... 525 ppm

NOx 0 ... 100 ppm / 0 ... 1,000 ppm

C3H8 0 ... 25 ppm

C2H6 0 ... 40 ppm

*Other measuring ranges and components on request*

Certified measuring ranges

CH4 0 ... 50 mg/m³ / 0 ... 150 mg/m³

CO 0 ... 75 mg/m³ / 0 ... 300 mg/m³ / 0 ... 1,500 mg/m³

CO2 0 ... 25 Vol.-%

Corg 0 ... 15 mg/m³ / 0 ... 50 mg/m³ / 0 ... 150 mg/m³ / 0 ... 500 mg/m³

HCl 0 ... 15 mg/m³ / 0 ... 90 mg/m³ / 0 ... 150 mg/m³

HF 0 ... 3 mg/m³ / 0 ... 10 mg/m³

H2O 0 ... 40 Vol.-%

NH3 0 ... 10 mg/m³ / 0 ... 50 mg/m³

NO 0 ... 200 mg/m³ / 0 ... 400 mg/m³ / 0 ... 2,000 mg/m³

NO2 0 ... 100 mg/m³ / 0 ... 500 mg/m³

N2O 0 ... 50 mg/m³ / 0 ... 500 mg/m³

O2 0 ... 21 Vol.-%

SO2 0 ... 75 mg/m³ / 0 ... 300 mg/m³ / 0 ... 1,500 mg/m³

Response time (t90): ≤ 200 s

FID ≤ 45 s

Sensitivity drift: < 3 %: of the measuring range full scale value per maintenance interval

FID < 2 %: of measuring range full scale per week

Zero point drift: < 3 %: of the measuring range full scale value per maintenance interval

FID < 2 %: of measuring range full scale per week

Detection limit: < 2 %: of measuring range full scale

Process temperature: ≤ +1,300 °C

Sample gas temperature: ≤ +220 °C

Process pressure: 900 hPa ... 1,100 hPa

Ambient temperature: +5 °C ... +35 °C, With cooling device +5 °C ... +50 °C

Storage temperature: –20 °C ... +60 °C

Ambient pressure: 900 hPa ... 1,100 hPa

Ambient humidity: ≤ 80 % Non-condensing

Conformities-Approved for plants requiring approval  
2001/80/EC (13. BImSchV)  
2000/76/EC (17. BImSchV)  
27.BImSchV  
TA-Luft (Prevention of Air Pollution)  
EN 15267  
EN 14181  
MCERTS

Electrical safety: CE

Enclosure rating: IP43, Optional IP54