**Emission monitors gas**

**GM700 In-Situ gas analyser**

***Description***

High reliability and precision as well as minimal response times are the distinguishing features of the GM700 laser gas analyser. Based on the principle of TDLS (Tunable Diode Laser Spectroscopy) and by using specific light absorption, the GM700 is able to measure several gas components, such as NH3, HF, HCl or H2O. The in-situ measurement is ideal for the fast determination of gas concentrations in process control and emission monitoring.

**Specification:**

Measured values: NH3, HF, HCl, H2O

Performance-tested measured: HF

Measurement principles: Diode laser spectroscopy (TDLS)

Length of measuring path: Cross-duct version 0.5 m ... 6 m (Depending on application)

Open measuring probe (GMP): 0.25 m ... 1.5 m (Depending on application)

Gas-testable measuring probe (GPP) 0.227 m ... 0.977 m (Depending on application)

Measuring ranges

NH3 0 ... 25 ppm / 0 ... 4,000 ppm

NH3 0 ... 25 ppm / 0 ... 100 ppm

HF 0 ... 5 ppm / 0 ... 2,000 ppm

HCl 0 ... 10 ppm / 0 ... 3,000 ppm

Measuring ranges refer to 1 m measuring path

Measuring ranges depend on application and device version

Dual measuring ranges:   
  
HCl / H2O: 0 ... 10 ppm / 0 ... 3,000 ppm (HCl) 0 ... 50 Vol.-% / 0 ... 100 Vol.-% (H2O)

NH3 / H2O: 0 ... 25 ppm / 0 ... 4,000 ppm (NH3) 0 ... 20 Vol.-% / 0 ... 20 Vol.-% (H2O)

NH3 / H2O: 0 ... 25 ppm / 0 ... 100 ppm (NH3) 0 ... 40 Vol.-% / 0 ... 40 Vol.-% (H2O)

Measuring ranges refer to 1 m measuring path

Measuring ranges depend on application and device version

Certified measuring ranges

HF 0 ... 5 mg/m³ / 0 ... 25 mg/m³ Suitability-tested in the cross-duct type

Response time (t90): 1 s ... 360 s

Adjustable Accuracy: Zero point ≤ ± 2 %

Relative to measuring range end value

Sensitivity: ≤ ± 2 % Within the maintenance interval (6 months), relative to measuring range full scale

Process temperature: –40 °C ... +430 °C

Depending on device version

Ambient temperature: –40 °C ... +50 °C

Depends on parameterization, temperature change max. ±10 °C/h

Storage temperature: –40 °C ... +55 °C

Ambient humidity: ≤ 85 % Relative humidity, non-condensing

Conformities: Only for HF. 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

Electrical safety: CE

Enclosure rating: IP65

Test functions: Automatic check cycle for zero and span point (only for NH3 and HCl)