

# Gas Analyzer System MGAS NH3 5.1



## FUNCTION:

Instrument for measuring  
following gas concentrations

Ammonia | %NH<sub>3</sub>

*Customizable Gas components are possible.*

### Additional measurement:

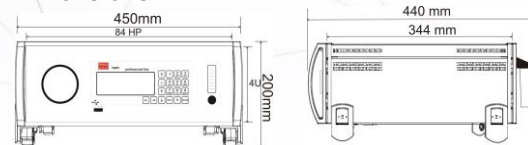
- Temperature

Based on state-of-the-art Tunable Diode Laser Spectrometry (TDLS) with high accuracy, good long-time stability and excellent repeatability, this equipment is qualified to measure furnace atmospheres online. Eight analogous outputs, eight digital inputs / outputs and an optional serial interface are possible. All Analog and Digital inputs / outputs can be configured manual e.g. as Alarm, starting calibration or switching off pump. An optional data logging function with USB data transfer and an internal memory with 16MB is available. The logging function can work in manual or timer mode. With the delivered Software "MGas Viewer" you can visual, print, export and administrate your stored data. The equipment is adjustable by a high quality foil keyboard with self-explainable menu structure in German and English language. Automatic calibration for zero-point and span for all gas components is possible. Additional it is possible to configure several protection functions, e.g. low process temperature, in order to increase the lifetime of the device.

## CONSTRUCTION:

Transportable Instrument (desktop) or Rack-mounting

### Dimensions:



### -Desktop variant:

450 x 200 x 440 (w x h x d)

### -Rack variant:

U=4, HP=84, D=400mm

**Weight:** Approx. 15 kg

**Protection type:** IP 20 to IEC 529

### Power supply:

230V +4% / -10%, 50-60Hz or  
115V ± 10%, 50-60Hz

**Power:** Approx. 100W / Slow Fuse 2A in Power switch

### Communication - optional:

MODBUS  
RS232, RS422, RS485  
Profibus

**Heat up time:** Approx. 15 min.

**Storage:** 0...50 °C

**Operation:** 5...40 °C

### Measuring range:

NH<sub>3</sub>: 0...20.000,0 ppm

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## TECHNICAL DATA:

### Gas inputs:

- Measurement gas input
- Zero gas input
- Reference gas input

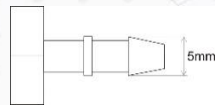
### Pressure:

- Maximal pressure: 100 mbar overpressure (ü)
- Working pressure: 0 do 50 mbar overpressure (ü)
- Gas flow: Approximately 0,4 l/min

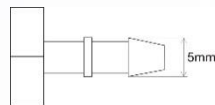
### Gas outputs:

- Gas output 1
- Gas output 2
- Pressure: Pressureless

Connection type:  
Hose connector



Connection type:  
Hose connector



**Measuring gas components:** NH<sub>3</sub>

**Additional calculation:**

Temperature, thermocouple K,S

**Measuring method:**

TDLS - Tunable Diode Laser Spectrometry

**Influence values:**

Accuracy:	± 2% of reading or, ± 2 ppm whichever is larger
Precision	2σ: ± 0.9 ppm
Linearity:	included in the accuracy
Repeatability:	included in the accuracy
Zero drift over 2 h period:	below accuracy
Span drift over 8 h period:	below accuracy
Operating pressure:	800...1100 mbar

### Order number

800-1076

### Device name

MGas 5.1 NH3

### Additional options and accessories

included

Internal Data logger, 16 MB memory capacity, USB + viewing software