



GME700

EXTRACTIVE GAS ANALYZERS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
GME700	On request

The exact device specifications and performance data of the product may deviate from the information provided here, and depend on the application in which the product is being used and the relevant customer specifications.

Our regional sales organization will help you to select the optimum device configuration.

Other models and accessories → www.sick.com/GME700

Product description

Reliability and precision are the distinguishing features of the GME700 laser gas analyzer. Based on the principle of TDLS (Tunable Diode Laser Spectroscopy) and by using specific light absorption, the GME700 is able to measure several gas components, such as NH₃, HF, or HCl. The compact 19" unit includes the analyzer and evaluation unit as well as a heated multipath measuring cell.

At a glance

- High selectivity due to high spectral resolution
- No calibration required
- No moving parts: minimal wear and tear
- Heated multipath measurement cell
- Hot-wet measurement technology

Your benefits

- Best match for the measuring task by adapting gas conditioning
- High reliability during operation
- Also suitable for use in harsh ambient conditions
- Easy integration into existing extractive systems
- No problematic test gases required



Fields of application

- Ammonia slip measurement in DeNOx plants
- Measurement of hydrogen fluoride in semiconductor production
- Ammonia measurement in exhaust gas of combustion engines
- Ammonia measurement in urea production or composting plants
- Plastics processing
- Hydrogen chloride monitoring in raw gas before scrubber in waste incineration plants

Detailed technical data

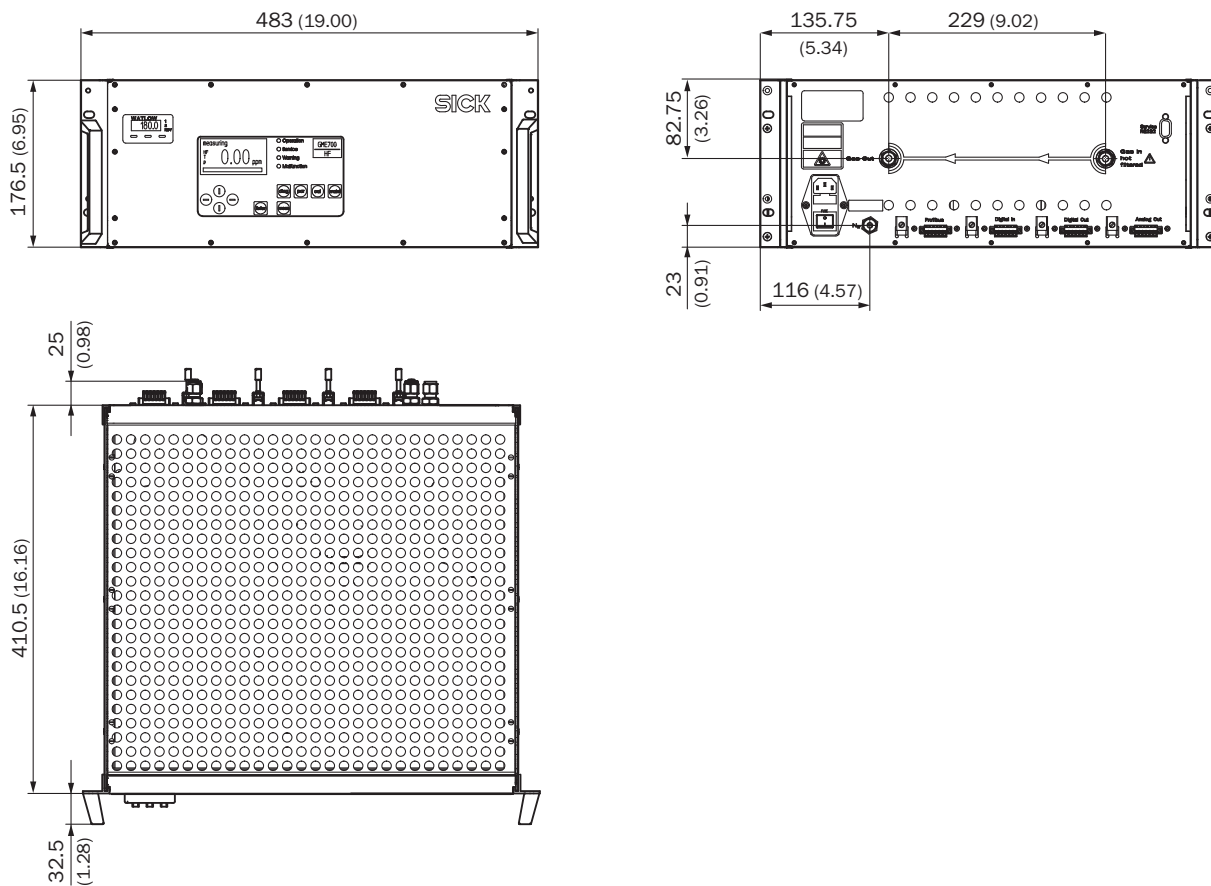
GME700 system

Measured values	HCl, HF, NH ₃ , H ₂ O
Maximum number of measurands	2
Measurement principles	Diode laser spectroscopy (TDLs)
Gas flow rate	0 l/min ... 20 l/min Depending on application
Measuring ranges	HCl 0 ... 5 ppm / 0 ... 3,000 ppm HF 0 ... 5 ppm / 0 ... 2,000 ppm NH ₃ 0 ... 25 ppm / 0 ... 5,000 ppm
Dual measuring ranges	HCl / H ₂ O 0 ... 5 ppm / 0 ... 3,000 ppm (HCl) 0 ... 25 Vol.-% / 0 ... 100 Vol.-% (H ₂ O) NH ₃ / H ₂ O 0 ... 25 ppm / 0 ... 5,000 ppm (NH ₃) 0 ... 3 Vol.-% / 0 ... 20 Vol.-% (H ₂ O)
Response time (t₉₀)	≤ 360 s Depending on sample gas flow
Accuracy	≤ 2 % ... ≤ 4 % Of the measured value (depending on the application)
Sample gas temperature	≤ +120 °C Temperature at analyzer inlet
Process pressure	600 hPa ... 1,200 hPa
Ambient temperature	0 °C ... +50 °C
Storage temperature	-40 °C ... +55 °C
Ambient humidity	≤ 85 % Non-condensing
Enclosure rating	IP 20
Analog outputs	3 outputs: 0/4 ... 20 mA
Digital outputs	3 relay contacts: 48 V AC/DC Preset for failure, maintenance and functional control
Digital inputs	2 potential-free contacts: / 24 V DC
Interfaces and bus protocols	RS-232 Proprietary service interface
Operation	Menu-driven operation via LC-display and membrane keyboard

Dimensions (W x H x D)	483 mm x 176.5 mm x 420 mm
Weight	12.5 kg
Power supply	Voltage 115 V / 230 V Frequency 50 Hz / 60 Hz Power consumption ≤ 500 W
Sample gas connections	Swagelok 6 mm For 6/4 mm piping
Auxiliary gas connections	N ₂ flushing for oxygen measurement: Swagelok 6 mm For 6/4 mm piping
Test functions	Automatic check cycle for zero and span point

Dimensional drawing (Dimensions in mm (inch))

GME700



SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com