

gasQS™ static

Standard version biogas

Screw in, connect, start measuring



Analog
4–20 mA

The thermal conductivity is precisely determined with the help of a microthermal sensor. For biogas (methane in carbon dioxide), it can derive the percentage of both gases. In contrast to the market standard, this robust, compact and inexpensive device requires neither readjustment nor reference gases.

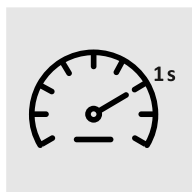
The two-wire connection enables simple integration into the control system without further knowledge of bus topology. The simple screw-in connection requires only minimal intervention in the pipe system and does not require an exhaust pipe.



The instrument is pressure compensated and therefore independent of the prevailing process pressure.



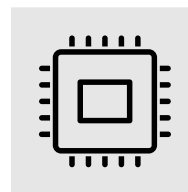
Very sensitive



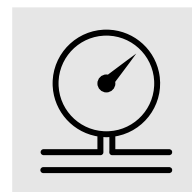
Fast measurement cycles



No complex bus integration



No moving parts



Pressure compensated

Measurement range

Output value std. ¹	Unit	Range	Accuracy ²	Repeatability ³
Percentage of gas	mol%	92 - 100	±0.2%	±0.01%

CH₄ in CO₂

¹ One output value per device, standard conditions 0 °C, 25 °C, 1013.25 mbar absolute, further reference conditions on request

² %-values refer to the measured value

³ Statistical scatter value with 2 sigma of moving average with 8 values

Specifications

Measuring time:	0.1 seconds
Measuring interval:	1 second
Response time:	T90 typically 2 seconds ⁴
Meas. range temp. compensated ⁵ :	-20 ... +80 °C
Operating/storage temperature ⁶ :	-25 ... +85 °C
Ex device protection type and certificate number:	Ex II 1G Ex ia IIC T4 Ga IECEX SEV 22.0008X SEV 15 ATEX 0191 X

Media

Media:	dry, neutral gases (10 µm filtering)
Load limit supply line:	+30 bar gauge
Supply line pressure range:	standard: -0.5 ... +9.0 bar gauge extended: -0.5 ... +15.0 bar gauge (on request)

Electrical

Connector:	M12-B, male, 5-pole
Output signal:	Analog 4 – 20mA
Supply voltage:	+16.0 ... +28.0 VDC
Maximum load:	$R \leq (V_s - 12 \text{ VDC})/0.02 \text{ A}$

Mechanical

Gas connection:	G 3/8 male thread
Dimensions (Diameter x Height) :	51 x 54 mm
Weight:	0.15 kg
Protection class:	IP54

Accessories (optional)

EX Package	1x SMART transmitter power supply unit 1x 10 m cable PVC assembled, shielded, RAL 5015 blue
Tee piece	Fitting optimised for fast measurements, G1/4 – G3/8 – G1/4

⁴ Depending on distance between device and gas line

⁵ Medium and ambient temperature