



physical. chemical. biological.



FGF test kit Thermal gas flow and density module

Benefits & Characteristics

Real-time density measurement for correction of the measured flow value for any pure gases as well as binary gas mixtures, opens up new dimensions in the segment of thermal flow measurement.

With:

- Multiparametric measurement for precise volume to mass flow conversion
- CleanGas identification
- Binary gas ratio evaluation and flow . compensation
- Fast response time and compact design for easy integration into gas manifolds and control systems

Product photo

For:

- Medical devices and industrial process monitoring, incl. gas valve control
- Food & Beverage gas dosing manifolds
- Process atmosphere gas supply, e.g. packaging, (laser) welding or cutting



Application range

Measured parameters

- Density
- Temperature Pressure
- Flow rate

Derived parameters

- Concentration of binary gas mixtures
- Standard density
- Mean molar mass
- Custom calculation

Typical media

- Nitrogen (N₂) Oxygen (Ò,)
- Carbon dioxide (CO_2)
- Argon (Ar) Methane, Propane, Butane $(CH_4, C_3H_8, C_4H_{10})$ on request

Custom gas specific calibration supported. Kindly contact us for more information.





Technical data

	Measuring range	Accuracy
Flow:	01000 sccm (with air)	±3% f.s. clean gases ±5% f.s. gas mixtures
Density:	0.2 19 kg/m³	±0.1 kg/m³ (±0.05 kg/m³)
Pressure:	0 5 bar (absolute)	±0.04 bar
Temperature:	-20 +60 °C	±0.8 °C
Fluidic interface:	2 x M5 - 6 mm tube connectors (exchangable)	
Electrical interface:	Modbus RTU via RS485	
Dimensions (L x W x H): Without fluidic connectors: With fluidic connectors:	70 x 26 x 35 mm 100 x 26 x 35 mm	
Weight:	90 g	

Electrical parameters

Supply voltage:	512 V
Power consumption:	max. 200 mW
Extra feature:	Additional I ² C-input for HYT humidity sensors

Order Information

Available modules

Module type	Flowrate Range*	Material number
FGF-E1-M-01-01000-EVA	+/- 1000 sccm	156393
FGF-E1-M-01-00200-EVA	+/- 200 sccm	156601
* calibrated for N at 23 °C (sccm \sim ml/min)		



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