CoM4.Geo

Technical Datasheet



Short description

Determination of geometric factors with Laminar Flow Elements
The **CoM4.Geo functional testing system** enables the **highly precise, dynamic determination of geometric properties** at locations that are optically inaccessible. The basis of the measurement method is that the cross-section to be tested forms the **narrowest point of the measurement section** – this is the only way to ensure reliable and reproducible geometric detection.

Identification

Product Name	CoM4.Geo
Controller	CoM4.SYS
Document Status	12.11.2026
Enclosure Size	19" 4 U desktop enclosure without handles

Measured variables and calibrated ranges

MEASURAND	UNIT	MIN.	MAX.	ACCURACY / RESOLUTION
Flow Rate	L/min	1	12	Accuracy: < 0.3 % rdg. Measurement uncertainty (k=2): < 1.0 % rdg.
Absolute Pressure	bar	0.8	1.2	0.01 % FS
Temperature	°C	0	50	0.15 °C
Humidity	% RH	0	90	3 % RH
Diameter	mm	0.8	2	Resolution 0.1 µm

rdg. = of reading, FS = full scale. The calibrated ranges apply to air.

Sensors

SENSOR TYPE	MEASURING RANGE	OVERLOAD
Absolute Pressure Sensor	0–4 bar	2 × max. measuring range
PT100 Temperature Sensor	0–50 °C	0.15 °C
Humidity Sensor	0–100 % RH	- no wetting with water
Gauge Pressure Sensor 1	0–4 bar	2 × max. measuring range

Operating conditions

Inlet Pressure	max. 8 bar
Inlet Temperature	0–45 °C
Humidity	0–100 % RH, non-condensing

Ambient conditions

Temperature	0 to +40 °C
Humidity	0–100 % RH, non-condensing
Pressure	atmospheric
Degree of Protection	IP20

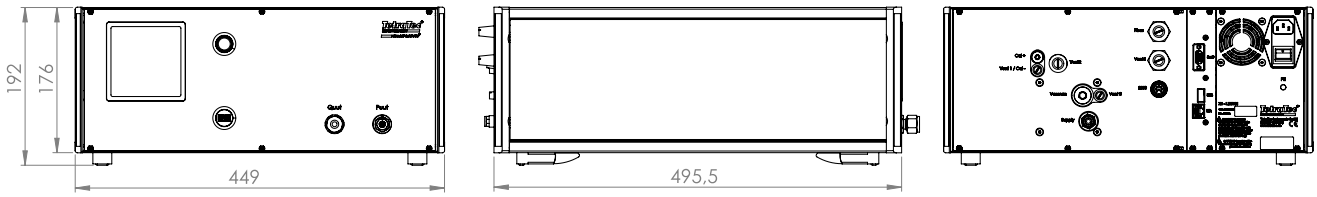
Media compatibility

Permissible Media	Clean, dry, non-condensing air
Purity Requirements	ISO 8573-1; 5 µm filter + oil/water separator required

Standards and approvals

Standards	EN 61010-1

Mechanical and electrical data



Dimensions in millimetres. Drawing not to scale; binding dimensions on request.

Enclosure	495.5 × 449 × 192 mm
Process Connections	Plastic hoses with 8 mm union nuts on UUT adaptation
Display	4-inch graphical user interface
Power Supply	90–260 VAC / 50/60 Hz
Power Consumption	max. 80 W
El. Connections	IEC connector
Weight	approx. 12.5 kg

Interfaces

Communication	Ethernet, USB 2.0 (Type A - for updates)

Options and variants

- Enclosure variants: desktop enclosure or rack enclosure (also with handles)

Ordering information

The system can be adapted to the requirements of the test task. For design and quotation we need:

- Flow measurement range(s)
- Test volume
- Operating conditions (pressure and temperature)
- Ambient conditions
- Enclosure requirements
- Power supply
- Data acquisition requirements
- Other specific requirements

FURTHER INFORMATION

Benefits, operating principle and application examples are given in the product brochure **CoM4.Geo**. To discuss your measuring task, contact us at **+49 7157 5387-0** or **info@tetratec.de**.