

# CoM4.Flow-Eco-HP-01

## Technical Data Sheet

Evaluation unit for a flow measurement system for air and gases. Includes differential and absolute pressure sensors, as well as temperature and optional humidity sensors. A microcontroller handles sensor data acquisition and calculates current and averaged flow values based on the appropriate physical model. Usable with an external laminar flow element (LFE).

<b>Product name</b>	CoM4.Flow-Eco-HP-01
<b>Controller</b>	CoM4.SYS
<b>Document version</b>	25.05.2026
<b>Housing size</b>	19" 3U benchtop housing with handles

## Measured variables and calibrated ranges

Measured variable	Unit	min	max	max. deviation
Flow	mL/min - m <sup>3</sup> /min (depending on external LFE)	-	-	Accuracy: < 0.3 % O.R. Uncertainty (k=2): < 1.5% O.R.
Differential pressure	mbar	2	20	0.075% F.S., min. 1.0.
Absolute pressure	bar	0.8	4	0.15 % F.S.
Temperature	°C	5	50	0.35°C

## Sensors

Sensor type	Measuring range	Overload
PDP differential pressure	0 - 20 mbar	6 bar
PDP absolute pressure	0 - 4 bar	3 × max. measuring range
PT100 temperature sensor	0 - 75 °C	max 75°C

## Operating conditions

Inlet pressure	0.8 - 4 bar abs.
Inlet temperature	0 - 50 °C
Humidity	0 - 100 % non-condensing

## Ambient conditions

Temperature	-10 to +50 °C (without enclosure)
Humidity	0 - 100 % non-condensing
Pressure	atmospheric
Protection class	IP20

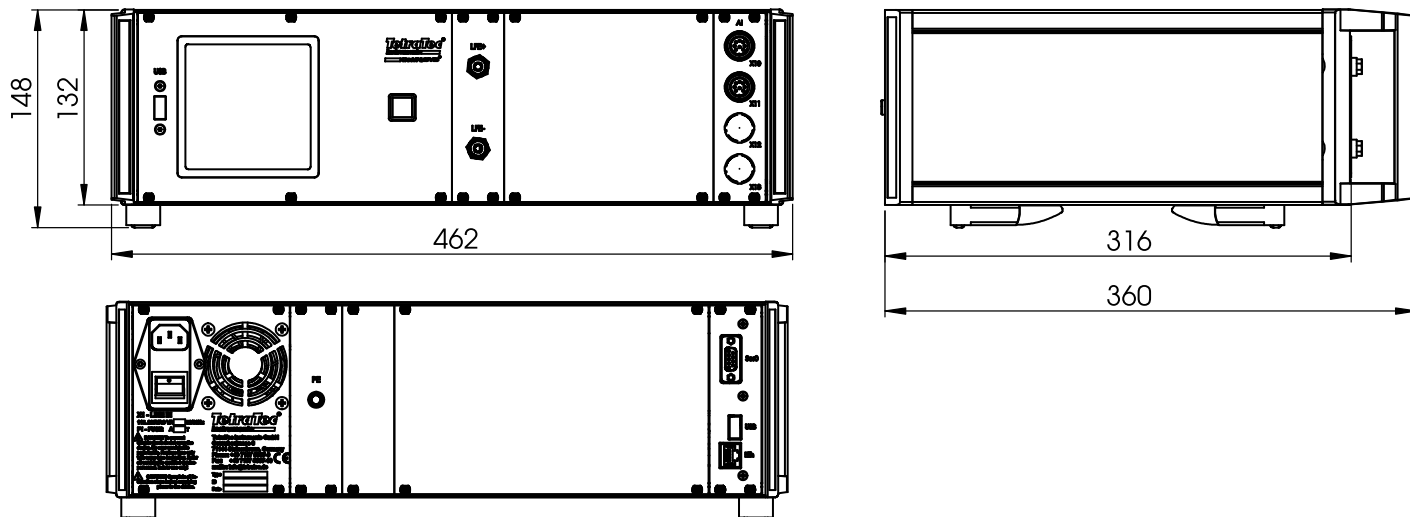
## Media compatibility

Permitted media	Clean, dry, non-condensing, non-flammable, non-corrosive gases
Purity requirements	ISO 8573-1; 5 µm filter + oil/water separator required

## Standards and approvals

Standards	EN 61010-1
Directives	Machinery Directive 89/392

## Mechanical and electrical data



<b>Housing</b>	450 x 150 x 316 mm
<b>Process connections</b>	Plastic hoses with union nuts 4/6 mm
<b>Display</b>	4-inch graphical user interface
<b>Power supply</b>	90–260 VAC / 50/60 Hz
<b>Power consumption</b>	max. 80 W
<b>Electrical connections</b>	IEC power connector, circular connector (Lumberg)

## Interfaces

<b>Communication</b>	Ethernet, USB 2.0 (Type A – for updates)
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## Accessories

<b>Flow measuring element</b>	TTI Laminar Flow Element Measuring ranges available between 1 mL/min – 64 m <sup>3</sup> /h
<b>Humidity measuring element</b>	HUMTMP humidity/temperature combination sensor for humidity measurement at 0–100% r.H.

## Options and variants

- Housing variants: benchtop housing or rack housing (with or without handles)
- Sensor connections: device rear side instead of device front side