



GM-FLOW02-AP-UE

MICROPROCESSOR MODULE

for **MEASUREMENT**, **VISUALIZATION**, and **RECORDING**

[using dedicated outputs for recording data on our software] air flow rates, air speed in piping, differential pressure, and fluid temperature if the meter is equipped with temperature probe *GMSTN415D-EX* or *GMSTN425D-EX*, consisting of the microprocessor module and pitot tube with the length indicated by the final number in the code [measurement in inches], fixing flange and the pneumatic components necessary for the pitot tube to self-clean [internal wiring provided by our laboratory], managed by specific software to customize the process timer.

Air flow data shown at the centre of the display.

Alternating display of air speed (greater than 2 m/s) and differential pressure data.

Visualization of detected temperature data [if the temperature probe is present] or the value set by the user [default 25°C].

Display: backlit, 128 x 64 pixels.

Inputs:

- analog 4-20mA
- pressure

Output:

- analog 4-20mA
- analog 0-10V
- RS485 serial line.

Output 24Vdc - 200mA to power external devices.

Output with MINI-USB on the front of the instrument
[software to download data]

Output with RJ45 Ethernet socket on the side of the instrument
[data-recording software optional]

2-MB memory in the instrument for data recording with date and time

Power 1: from 85 to 264Vac [from 47 to 440 Hz]
or from 127 to 370Vdc.

Power 2: 24Vdc ± 10%

Both power supplies are included standard.

Operating temperature: -20°C - +60°C

Protection: IP54

For correct installation, the pitot tube must be situated at the centre of the pipe where it is installed. The table also shows the length of the pitot tube.

The container should be attached at a maximum of 8 linear metres from the pitot tube.



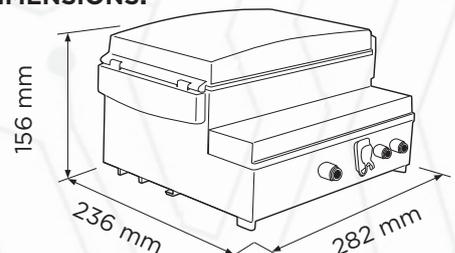
CODE

LENGTH mm
PITOT TUBE

GM-FLOW02-AP-UE-12
GM-FLOW02-AP-UE-18
GM-FLOW02-AP-UE-24
GM-FLOW02-AP-UE-36
GM-FLOW02-AP-UE-48
GM-FLOW02-AP-UE-60

304.80
457.20
609.60
914.40
1219.20
1524.00

DIMENSIONS:



TECHNICAL SPECIFICATIONS

Technology.

Microprocessor electronics with flash memory.

Input power:**Power 1**

May be applied regardless of the voltage from 85 to 264 VAC and frequency from 47 to 440 Hz, or any continuous voltage from 120 to 370 VDC.

Power 2

Power 24 VDC \pm 10%

Protection against:

overheating, overloads, voltage surges, and short circuits with automatic recovery.

Absorbed power.

< 6 W

Analogue current input

(Activated using software).

4-20 mA active. Temperature compensation

with **GMSTN415D** or **GMSTN425D**

4-20 mA passive (e.g. two-wire transmitter)

Pressure input

(Activated using software).

Absolute and differential pressure with on-board sensor (0-100 mmH₂O standard).

Air speed in the tube

Greater than 2 m/s

Analogue current output

(Activated using software).

4-2mA active (current generator).

4-20 mA passive (current load).

Analogue voltage output

(Activated using software).

0-10V

Resistance of current inputs 4-20 mA

< 50 Ω

Resistance of voltage inputs 0-10 V

>5000 Ω

Resistance load on 4-20 mA outputs

< 750 Ω

Resistance load on 0-10 V output.

> 10000 Ω

Input/output protection.

All analogue/digital inputs and outputs are protected with resettable fuses, Zener diodes, and varistors.

Type of digital output.

Two-wire RS485 protected with resettable fuses.

Output to power external devices.

24 VDC \pm 5% maximum current for external uses = 200 mA.

Visualization

Graphical display 128 x 64 pixels with LED back-lighting.

Two green LEDs for the relay threshold status

Precision.

\pm 0.1% F.S.

Working temperature/humidity.

Temperature from -20°C to +60°C.

Humidity from 0% to 90%, non-condensing.

Input buttons.

Four buttons for entering data.

Electrical connection:

- **One removable 6-pole terminal**, 5.08 mm step (2 relay outputs with switch contacts for self-cleaning).

- **One removable 2-pole terminal**, 7.62 mm step (Only Power 1)

- **One removable 9-pole terminal**, 5.08 mm step (Power 2, digital inputs, outputs, analog outputs, RS485).

Interfaces

1 USB + 1 Ethernet

Pneumatic connection

Two hose connectors for \varnothing 4 mm hoses.

Protection rating

IP54 front

Container

Recessed container 72 mm x 72 mm

Hole dimensions 68 mm x 68 mm. DIN 43700.

Container material

Self-extinguishing UL 94 VO.

Certifications

CE

ACCESSORIES:



GMSTN415D-EX
GMSTN425D-EX
Temperature
transducer

**GM-SW4-002-x**

SOFTWARE to manage and record data measured and transmitted using microprocessor module code GM-FLOW02-UE-xx