



## GM-FLOW02-xx

### MICROPROCESSOR MODULE for MEASUREMENT and VISUALIZATION

air flow rate, 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] and fixing flange.**

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.
- digital on two relays, fully customized using internal software.

**Output 24Vdc - 200mA to power external devices.**

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

**Power 2:** 24Vdc  $\pm$  10%

**Both power supplies are included standard.**

Working 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.

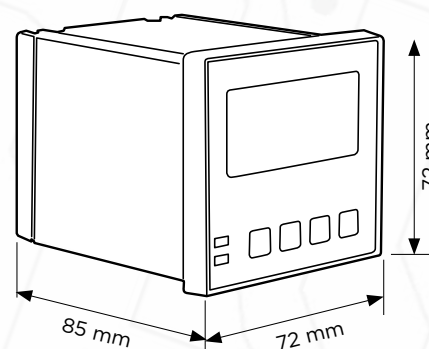
**The container should be attached at a maximum of 8 linear metres from the pitot tube.**

CODE

LENGTH mm  
PITOT TUBE

<b>GM-FLOW02-12</b>	304.80
<b>GM-FLOW02-18</b>	457.20
<b>GM-FLOW02-24</b>	609.60
<b>GM-FLOW02-36</b>	914.40
<b>GM-FLOW02-48</b>	1219.20
<b>GM-FLOW02-60</b>	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 mmH<sub>2</sub>O standard).

#### Air speed in the tube

Greater than 2 m/s

#### Analogue current output

(Activated using software).

4-20mA 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  $\Omega$

#### Resistance of voltage inputs 0-10 V

>5000  $\Omega$

#### Resistance load on 4-20 mA outputs

< 750  $\Omega$

#### Resistance load on 0-10 V output.

> 10000  $\Omega$

#### 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.

#### Number of thresholds.

2

#### Threshold output.

Two relays with 250 VAC/30 VDC 5 A contacts.

#### Threshold type.

Entirely software programmable.

#### Visualization

Graphical display 128 x 64 pixels with LED backlit.

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).
- **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).

#### 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:



#### GM-CT2-PG

Polycarbonate container for microprocessor module  
GM-FLOW02-xx



#### GMSTN415D-EX GMSTN425D-EX

Temperature transducer