



GMPID002-TRB

MICROPROCESSOR MODULE

for **VIEWING** the detected dust concentration
and custom management of triboelectric probes

Management of **one probe**[1] with values shown on the display

Display: backlit, 128 x 64 pixels

Inputs:

- analog current 4-20mA
(only for probes GMTRB005-...and GMTRB006-...)
- RS485
(for probes GMTRB003-..., GMTRB005-...and GMTRB006-...)

Outputs:

- analog 4-20mA
- analog 0-10V
- RS485 serial
- digital on two relays, fully customized using internal device software

Output 24VDC 200 mA to power external devices

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

Power 2: 24Vdc \pm 10%

Both power supplies are included standard.

Working temperature: -20°C - +60°C

Protection: IP54



GMPID002-TRB-003

Microprocessor module for connecting one (1) triboelectric probe series: **GMTRB003D-EX-xx-xx**

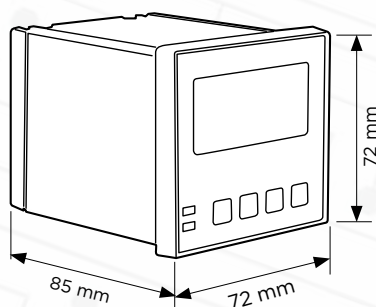
GMPID002-TRB-005

Microprocessor module for connecting one (1) triboelectric probe series: **GMTRB005D-EX-xx-xx**

GMPID002-TRB6

Microprocessor module for connecting one (1) triboelectric probe series: **GMTRB006D-EX-xx-xx**

DIMENSIONS:



ACCESSORIES:



GMTC2P72

Flange to attach the microprocessor module to the metal container GMCTxxMS



GM-CT2-P01

Polycarbonate container for microprocessor module GMPID002-TRB-xxx

TECHNICAL SPECIFICATIONS

Technology.

Microprocessor electronics with flash memory.

Input power:

Power 1

May be applied regardless of the voltage from 85 to 264Vac and frequency from 47 to 440Hz, or any continuous voltage from 127 to 370Vdc.

Power 2

Power 24Vdc \pm 10%

Protection against:

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

Absorbed power.

< 6W

Inputs

(Activated using software).

- analog current 4-20 mA (only for probes GMTRB005-...and GMTRB006-...)
- RS485 (for probes GMTRB003-..., GMTRB005-... and GMTRB006-...)

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 4-20mA current inputs

< 50 Ω

Resistance of 0-10V voltage inputs

> 5000 Ω

Resistance load on 4-20mA outputs.

< 750 Ω

Resistance load on 0-10V 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 maximum current for 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

Display 128 x 64 pixels with LED backlighting.

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).

Hour meter

One available starting with ver. 1.34.

Max. count 65,535 hours (7.5 years)

of continuous operation.

Resolution 1 min.

Saved every 5 min.

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