



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 ± 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**

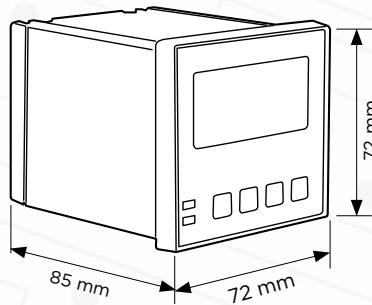
GMPID002-TRB-005

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 ± 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.

± 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