CE

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**
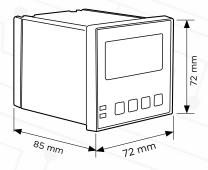
GMPID002-TRB-005
Microprocessor module for connecting one (1) triboelectric probe series: **GMTRB005D-EX-xx-xx**

GMPID002-TRB6
Microprocessor module for connecting one (1) triboelectric probe series: **GMTRB006D-EX-xx-xx**

DIMENSIONS:

72 mm
85 mm
72 mm

ACCESSORIES:

GMTC2P72
Flange to attach the microprocessor module to the metal container GMCTxxx

GM-CT2-P01
Polycarbonate container for microprocessor module GMPID002-TRB-xxx

The Technical and Commercial offices are at full disposal for any other inquiry.

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