

## Industrial Measurements: MICROPROCESSOR MODULES FOR MANAGING TEMPERATURE PROBES



### GMPID001-STN-X

#### MICROPROCESSOR MODULE for **VIEWING** the temperature

and for personalized management of the temperature probe.

Possibility of managing up to **two probes [2]** with values shown on the display.

**Display:** backlit, 128 x 64 pixels

**Inputs:** • analog current 4-20mA  
• RS485

**Outputs:** • analog 4-20mA  
• analog 0-10V  
• RS485 serial  
• digital on two relays, fully customized using the device software

**Output 24Vdc 100mA to power external devices**

**Power:** standard from 85 to 264Vac [from 47 to 440 Hz] and from 127 to 370Vdc  
or specify 24Vdc when ordering

Working temperature: -20°C - +60°C

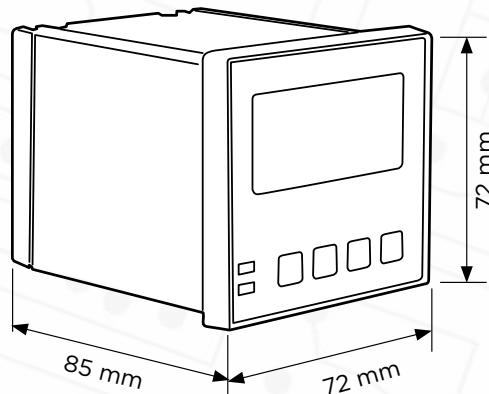
**Front protection:** IP54

**GMPID001-STN-1** - To connect one (1) thermal probe: GMSTN415-EX or GMSTN425D-EX

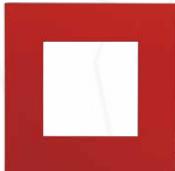
**GMPID001-STN-2** - To connect two (2) thermal probes: two (2) GMSTN415-EX or  
two (2) GMSTN425D-EX



#### DIMENSIONS:



#### ACCESSORIES:



##### GMTC2P72

Flange to attach the microprocessor module to the metal container GMCTxxMS



##### GM-CT2-PO1

Polycarbonate container for microprocessor module GMPID001

## 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 440 Hz, 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

### Analogue current input

(Activated using software).

4-20mA active.

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

### RS485

input.

### Temperature input

(Activated using software).

Platinum 100- $\Omega$  PT100 thermistor @ 0°C IEC 751 DIN43760.

Standard range -50°C - +250°C (two/three wires) (other ranges on request).

### 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  $\Omega$

### Resistance of 0-10V voltage inputs

> 5000  $\Omega$

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

< 750  $\Omega$

### Resistance load on 0-10V 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.

24Vdc maximum current for external uses = 100mA.

### Number of thresholds.

2

### Threshold output.

Two relays with 250Vac/30Vdc 5A contacts.

### Threshold type.

Entirely software programmable.

### Visualization

Graphical 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