MICROPROCESSOR MODULES FOR MANAGING TEMPERATURE PROBES

02/2023

CE

GMPID001-V1.4-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 24 VDC 100 mA to power external devices

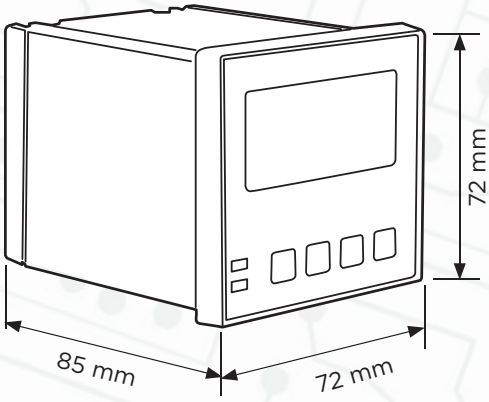
Power:
standard from 85 to 264Vac [from 47 to 440 Hz] and from 127 to 370Vdc
or specify 24Vdc when ordering

Operating temperature: -20°C – +60°C
Front protection: IP54

GMPID001 V1.4-1 – To connect one thermovelocimetric probe (1): GMSTVxxxD-EX

GMPID001 V1.4-2 – To connect two thermovelocimetric probes (2): GMSTVxxxD-EX

DIMENSIONS:



ACCESSORIES:

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

GM-CT2-P01
Polycarbonate container for microprocessor module GMPID001

GM SISTEMI
ELECTRONIC DEVICES

GM SISTEMI s.r.l. Via dell'Artigianato 421 - 37056 Salizzole (VR) Italy
Tel. +39 045 6900919 - Email: gmsistemi@gmsistemi.it
www.gmsistemi.it

MADE IN ITALY

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

MICROPROCESSOR MODULES FOR MANAGING TEMPERATURE PROBES

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 ± 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-Ω 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 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.
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.
± 0.1% F.S.

Operating 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

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