

# Multi-channels temperature converter with LCD display

TEMAX105LCD



- **Temperature input**  
Up to 4 platinum RTD
- **2 wires transmitter**  
(4-20mA current loop powered)  
**Output current represents the maximum,  
minimum or an average of temperature inputs**
- **Display : 2 lines of 16 characters LCD**  
Display simultaneously the four temperature inputs
- **Fully configurable**



TEMAX105LCD is a 4-20mA loop powered digital transmitter with LCD display allowing signal processing of Pt100 temperature sensors (maximum value, minimum value, average value).

## Description :

### Temperature inputs:

- 4 Pt100 (2 wires) with linearization

### Signal processing:

- maximum value, minimum value, average value
- individual channel inhibition
- programmable security value for sensor breaking (short-circuit or open circuit)
- programmable response time from 0.2 to 60 sec, (measure filtering function)
- normal or reversed output,
- offset adjustment of each channel,

### Display:

- STN liquid crystal (extended temperature range),
- 2 lines of 16 characters (4 temperatures display)
- automatic positioning of decimal point

### Feature:

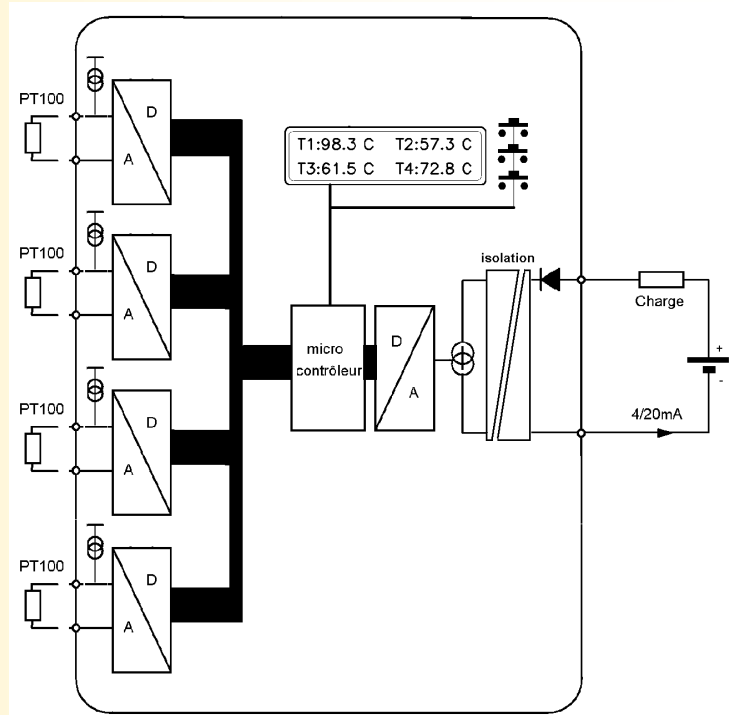
- symmetrical DIN rail mounting,
- connection on screw terminal blocks (2.5 mm<sup>2</sup> max),
- protection against reverse polarity,
- configuration via RS232 link,
- Configuration parameters saving on Flash memory, safety of data holding > 30 years,
- conformal coating,
- protection rating (enclosure / terminal blocks) : IP20.
- option: mounting within a IP65 enclosure

### Configuration:

The TEMAX105 is user configurable via the push buttons or a serial RS 232 link with any terminal software, under any operating system.

- no need of special software,
- Through the terminal, the user will be able to:
  - visualize the measure, shift the measure,
  - set the device: input range, output range, filter..

## Synoptic:



Version and order code:

[Request a quote](#)

**TEMAX105LCD/2** : 2 RTD inputs version

**TEMAX105LCD/3** : 3 RTD inputs version

**TEMAX105LCD/4** : 4 RTD inputs version

**INPUT (24 bits resolution)**

TYPE	RANGE	ACCURACY
4x 2 Wires RTD	-200 / 800 °C	± 0.3 °C
measure current	300 µA	
Measure rate	6 per second	

**OUTPUT (24 bits resolution)**

TYPE	RANGE	ACCURACY
Current	4 / 20 mA	± 0.01 mA
Security value (burn out current)	3.7 ... 22 mA	
Permissive load	550 Ohms @ 24Vdc	
Load influence	0.004 % / 100 Ohms	
Response time	200 ms to 60 s	
Intrinsic power consumption	< 3.7 mA	

**POWER SUPPLY**

Voltage (4-20mA current loop powered)	13 to 40 Vdc
Power supply influence	0.002 % / V

**ENVIRONMENT**

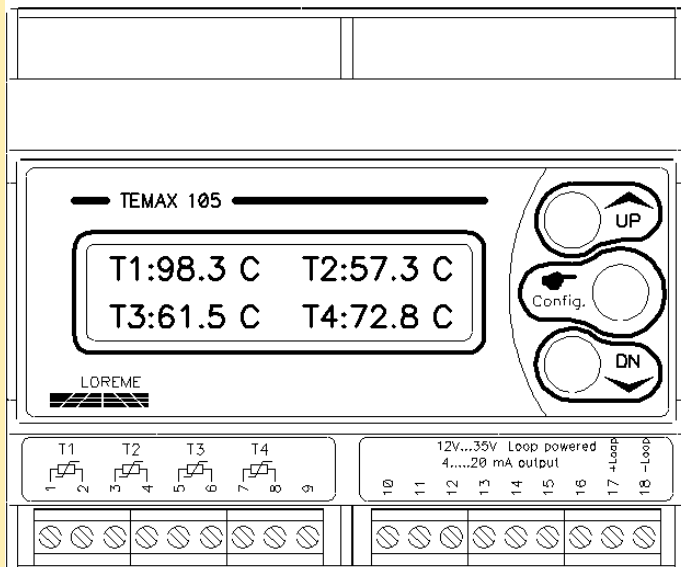
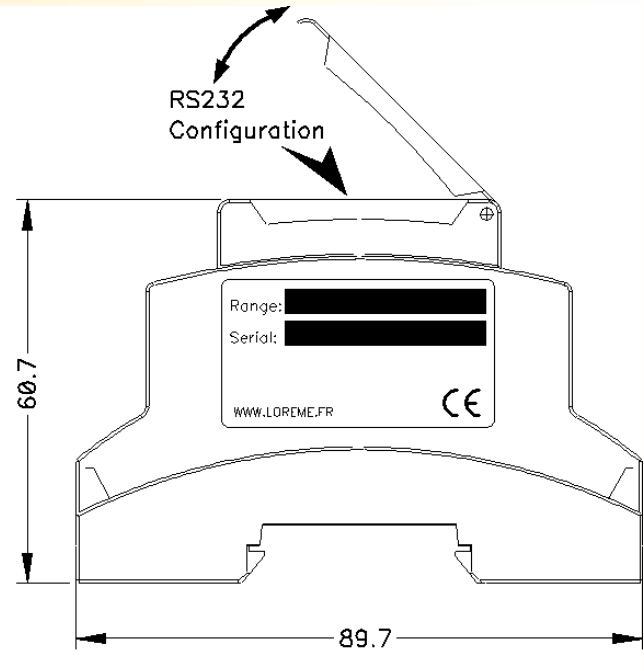
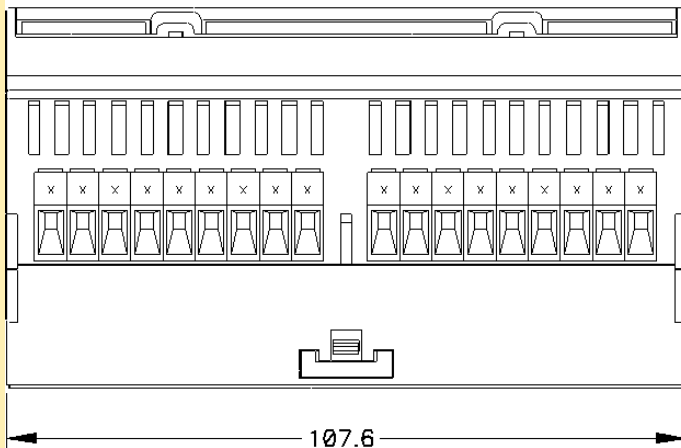
Operating temperature	-20 to 60 °C
Storage temperature	-20 to 85 °C
Temperature Influence	< 0.01 % / °C
Humidity	85 % not condensed
Weight	120 g
Protection rating	IP 20

**Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE**

Immunity standard for industrial environments EN 61000-6-2		Emission standard for industrial environments EN 61000-6-4
EN 61000-4-2 ESD	EN 61000-4-8 AC MF	EN 55011  group 1 class A
EN 61000-4-3 RF	EN 61000-4-9 pulse MF	
EN 61000-4-4 EFT	EN 61000-4-11 AC dips	
EN 61000-4-5 CWG	EN 61000-4-12 ring wave	
EN 61000-4-6 RF	EN 61000-4-29 DC dips	



**WIRING AND OUTLINE DIMENSIONS:**



**OPTION: IP65 BOX - 6 MODULES**  
 height (external): 200mm Width (external): 159mm  
 Depth (external): 112mm  
 Color: Light Grey IP65 Matter: Polystyrol