

# PT100 temperature converter 0...10V output 6 channels

Type: CTL105

LOREME

- **Up to 6 measure channels**

Platinum sensor inputs  
0...10V voltage output

- **Fully configurable**

Range, filter, offset, ...

- **"Low cost" application**



The CTL105 is a programmable multi channels temperature converter. It may be used for the treatment of PT100 temperature sensors to convert in analog signals. Mainly designed for instrumentation of full systems : Motors, heat pump, wind turbine, ...

**Description :**

**Temperature inputs:**

- Up to 6 platinum sensors probes (2 or 3 wires mounting) with linearization

**Signal processing:**

- individual channel inhibition
  - programmable security value for sensor breaking (short-circuit or open circuit)
  - programmable response time from 1 to 60 sec, (measure filtering function)
  - normal or reversed output,
  - offset adjustment of each channel,
- In option :
- special function for max value, min value, average value

**Feature:**

- symmetrical DIN rail mounting,
- connection on screw terminal blocks (2.5 mm<sup>2</sup> max),
- 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:**

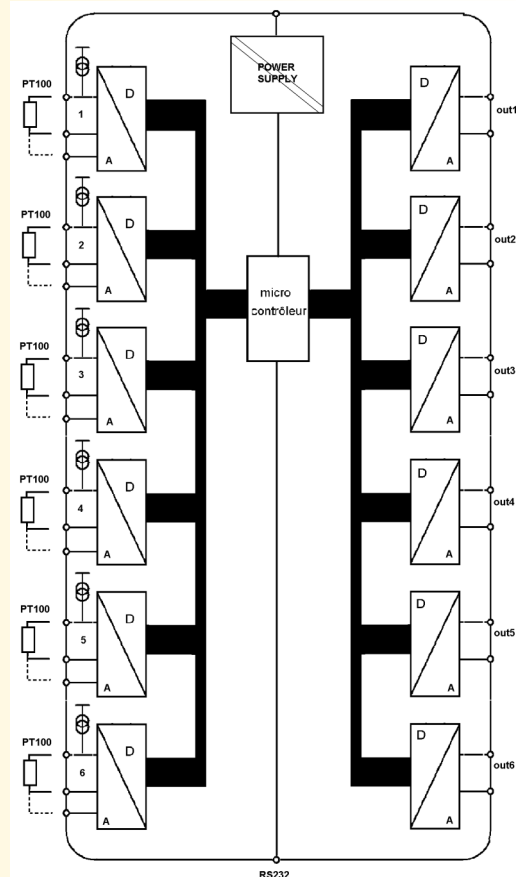
The CTL105 is user configurable via the serial RS 232 link with any terminal software, under any operating system.

- no need of special software,

Through the terminal, the user will be able to:

- visualize the measure, shift the measures,
- setting the device parameters: input range, output range, filter..

**Synoptic:**



Version and order code:

[Request a quote](#)

- CTL105/2 : 2 x PT100 inputs / 2 x 0...10V outputs
- CTL105/3 : 3 x PT100 inputs / 3 x 0...10V outputs
- CTL105/4 : 4 x PT100 inputs / 4 x 0...10V outputs
- CTL105/5 : 5 x PT100 inputs / 5 x 0...10V outputs
- CTL105/6 : 6 x PT100 inputs / 6 x 0...10V outputs

User handbook ->



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**INPUT (16 bits resolution)**

TYPE	RANGE	ACCURACY
PT100	-200 / 800 °C	± 0.3 °C (3 wires)
The accuracy in 2 wires mounting depends of wires resistance between probe and terminals ( offset correction is possible)		
measure current	900 µA	
Measure rate	6 per second	
(all inputs are with common ground)		

**OUTPUT (10 bits resolution)**

TYPE	RANGE	ACCURACY
Voltage	0...10 V	± 20 mV
Security value	0 ... 11 V (programmable)	
Permissible load	mini 1KOhms	
Load influence	negligible	
Response time	1000 ms to 60 s	
(all outputs are with common ground)		

**POWER SUPPLY**

Voltage	230 Vac +/- 15%
Frequency	45....70 Hz
Consumption	< 2.3VA
(other supply voltage on request)	

**ENVIRONMENT**

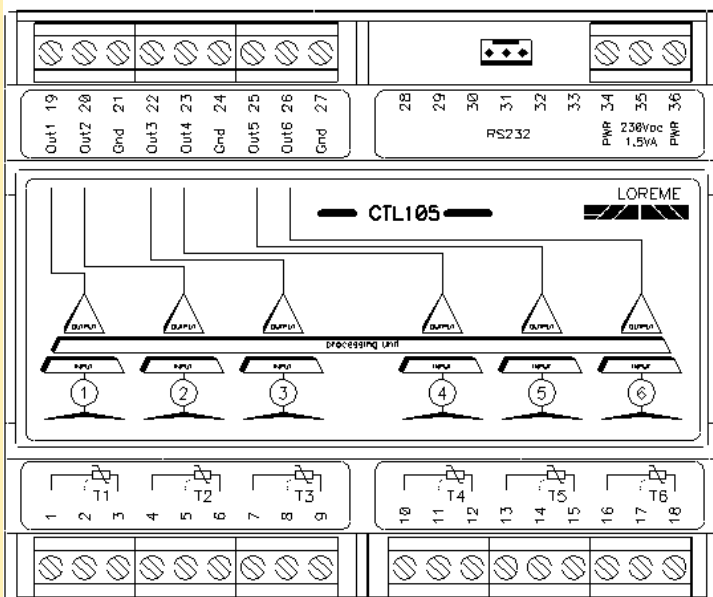
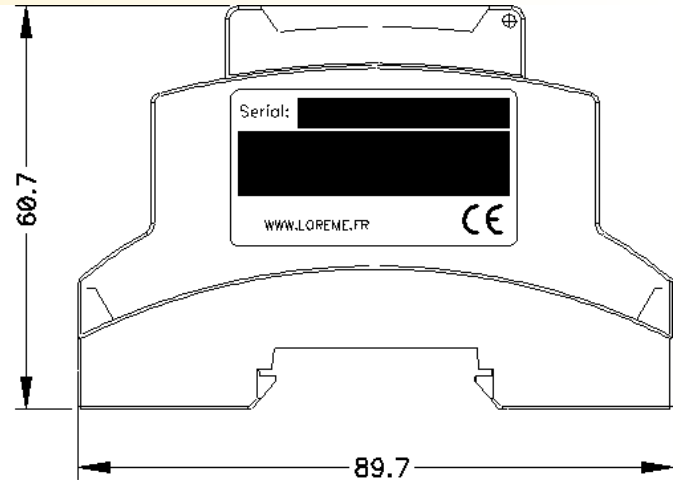
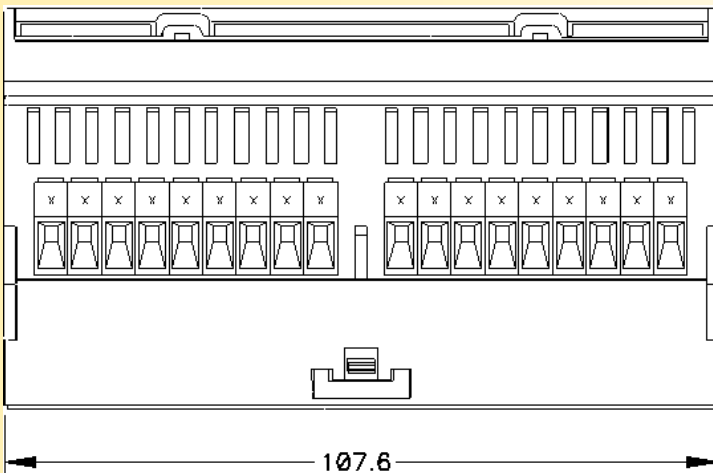
Operating temperature	-20 to 70 °C
Storage temperature	-20 to 85 °C
thermal influence	< 0.01 % / °C
Humidity	85 % non condensed
Weight	120 g
Protection rating	IP 20

*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