

Programmable temperature transmitter PT100, thermocouple 4-20mA current loop powered

CNL25D

LOREME

- **Input :** Pt100 RTD, thermocouple
- **Low profile:** 17 mm width
- **Pluggable terminal blocks**
- **2 wires technology :**
powered by the 4-20mA current loop
- **Fully configurable :** Usb-RS232 link



The CNL25D is a DIN rail mounted, loop powered, programmable temperature transmitter. This entry level product cover all temperature measurement applications (PT100 and Thermocouple).

DESCRIPTION:

Temperature measurement:

- Thermocouples (B,E,J,K,R,S,T,....)
- platinum PT100 RTD probe

Sensor correction:

- RTD and thermocouple linearization,
- Cold junction compensation for thermocouple,
- Line length compensation for RTD.

Signal processing:

- User defined sensor breaking security value,
- user defined response time, 0.2 to 60 seconds, (damping function)
- normal or reverse output,
- offset measure adjustment,
- low sensibility to thermal ambient variations.

Features:

- DIN rail mounting (symmetrical)
- Wiring on stainless screw terminal (1.5 mm² wire gauge)
- Loop current control LED
- Reverse polarity protected
- Protection rating (case/terminal) : ip20

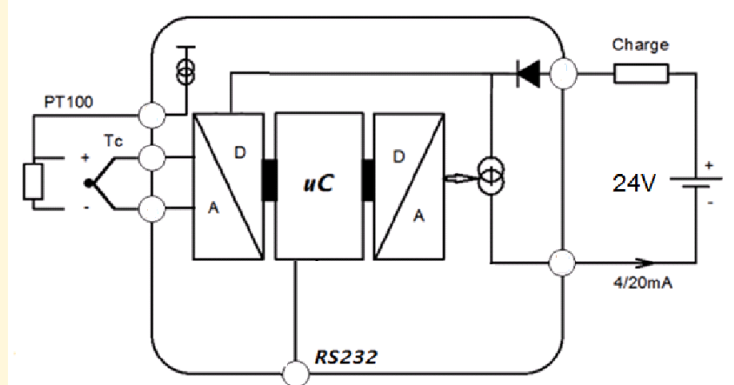
Performance / Environment :

- Long-term stability 0.1 % / years.
- Operating temperature up to 85°C
- Excellent EMC performance.
- Resistant, protected against shock and vibration (conformal coating)

Configuration:

- setting by RS232 link (terminal mode without specific software)
- USB - RS232 cable supplied separately .

Synoptic:



Version and order code:

- CNL25D :** standard version, high accuracy
- CNL25DL :** "low cost" version

INPUT				OUTPUT / POWER SUPPLY (14bits resolution)		
TYPE	RANGE	ACCURACY		TYPE	RANGE	ACCURACY
		(24bits Resol.) CNL25D	(20bits Resol.) CNL25DL			
Tc B	200 / 1800 °C	± 2 °C	± 2 °C	Current	4 / 20 mA	± 0.01 mA
Tc E	-250 / 1000 °C	± 0.4 °C	± 0.7 °C	Loop powered:	10 to 40 Vdc	
Tc J	-200 / 600 °C	± 0.4 °C	± 0.7 °C	Programmable Security current value		3.3 to 23 mA
Tc K	-200 / 1350 °C	± 0.4 °C	± 0.7 °C	Load @ 24 Vdc		650 Ohms
Tc R	0 / 1750 °C	± 1 °C	± 1.5 °C	Load influence		0.004 % / 100 Ohms
Tc S	0 / 1600 °C	± 1.5 °C	± 1.5 °C	Power supply influence		0.002 % / V
Tc T	-250 / 400 °C	± 0.5 °C	± 0.7 °C	Programmable response time		200 ms to 60 s
				Intrinsic power consumption		< 3.6 mA
Input impedance				ENVIRONMENT		
				Dielectric strength (input / output):		
				Operating temperature:		
				Storage temperature:		
				influence:		
				Humidity:		
				Weight :		
				MTBF (IEC 62380)		
				Life time		
				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
				EN 61000-4-3 RF	EN 61000-4-9 pulse MF	group 1 class A
				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:

