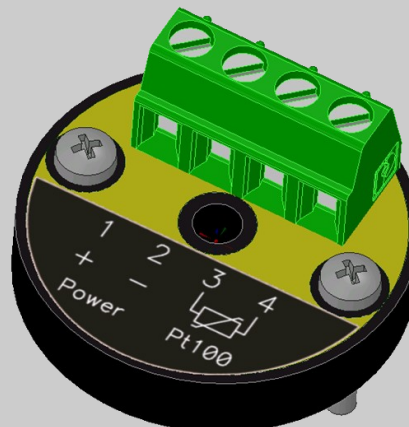


- **Miniature head mounting**
25mm diameter, 19mm mounting hole spacing
- **RTD 100ohms input**
2 wires
- **Configurable measure range**
communication on the current loop
- **2 wires technique**
powered by the 4-20mA current loop without insulation
- **Application**
Tertiary sector, air-conditioning



The CNL27 is an universal miniature in-head mounting temperature sensor transmitter. Dedicated for low cost applications in air-conditioning or tertiary domains. The CNL27 cover all measure range with an unique device.

DESCRIPTION :

Temperature measurement

- RTD 100ohms 2wires

Signal conditioning

- Linearity correction of platinum sensors,
- programmable sensor breaking safety value, (default value of 22mA)
- programmable response time from 0.2 to 60 sec, (measure filtering function)
- measure offset adjustment,
- neutralization of ambient thermal variation effects.

Realization, mounting and wiring

- Temperature sensor in-head mounting, (19mm mounting hole spacing, M3 or M2.5 screws according to the head)
- central hole for wire tunnel (3mm diameter),
- wiring on spring terminals (stainless) (1mm² wire gauge),
- reverse polarity protected,
- loop voltage presence indicated by green Led,
- protection class (enclosure/terminal): IP68 / IP20

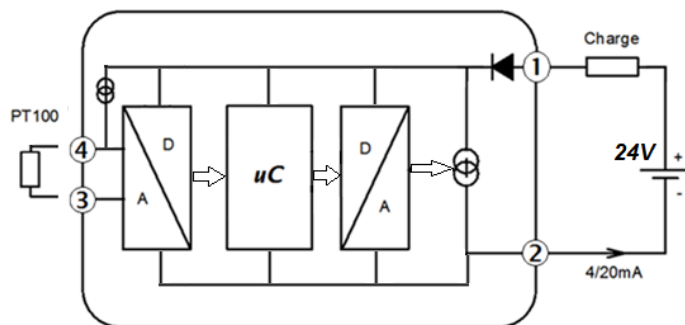
Performance / Environment:

- Long-term stability 0.1 %/year,
- extended operating temperature,
- excellent EMC performance,
- resistant, protected against collisions and vibrations (polyurethane bonding resin)

Configuration (measure range):

- setting by RS232 serial link (terminal mode without specific software),
- The adaptation cable USB->4-20mA current loop is supply separately.

Synoptic:



Versions and ordering codes:

[Request a quote](#)

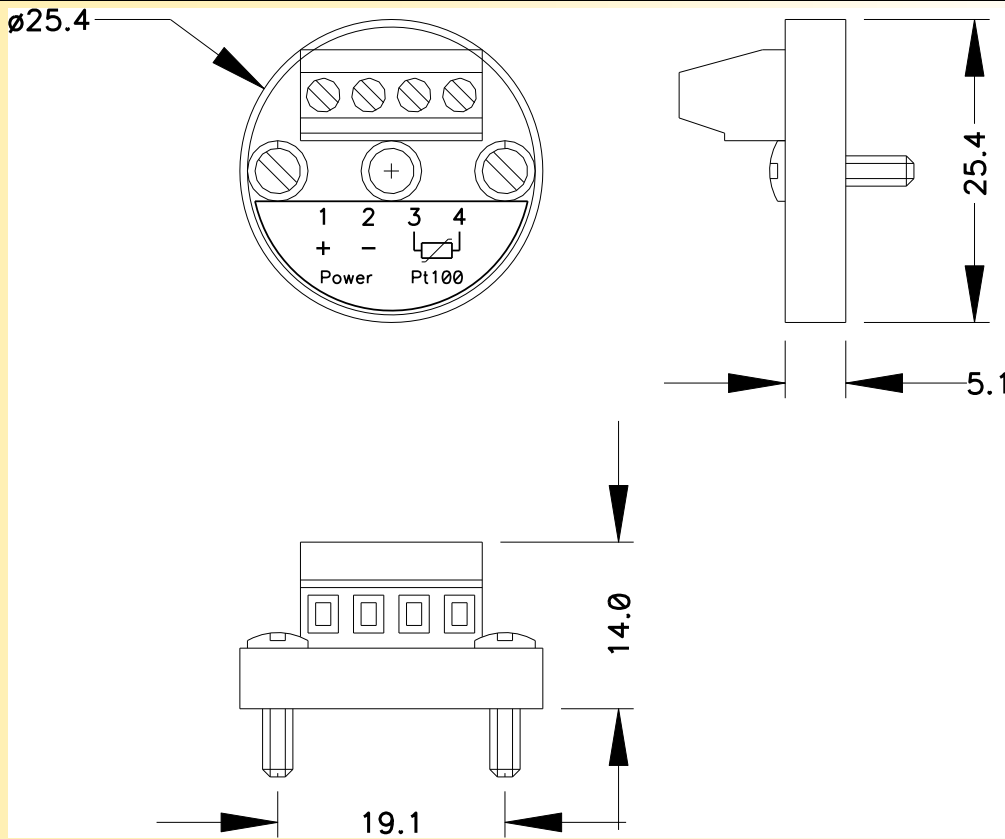
CNL27: PT100 input, not isolated,
 (Factory default setting: range: 0-100°C, 22mA sensor breaking current)
 other range on request

CDN27: Adapter cable (USB->4-20mA) for measure range adjustment.
 (need an calibrator)

INPUT			ENVIRONMENT	
TYPE	RANGE max.	ACCURACY	Operating temperature	-30 to +65 °C
RTD (2 wires)	-200 / 400°C	± 0.75 °C	Storage temperature	-30 to +85 °C
RTD bias current	2.5 mA		Influence (% of full scale)	< 0.01 % / °C
Line influence	Not applicable		Relative humidity	85 % not condensed
Response time	~ 1000 ms @ 63%		Weight	10 g
Sampling rate	10 per second		MTBF (IEC 62380)	> 3 000 000 Hrs @ 30°C
			Lifetime	> 250 000 Hrs @ 30°C
POWER SUPPLY / OUTPUT (10 bits resolution)			<i>Electromagnetic compatibility 2004/108/CE / Low Voltage Directive 2006/95/EC</i>	
TYPE	RANGE	ACCURACY	Immunity standard for industrial environments EN 61000-6-2	Emission standard for industrial environments EN 61000-6-4
Current	4 / 20 mA	± 0.02 mA	<i>EN 61000-4-2 ESD</i>	<i>EN 61000-4-8 AC MF</i>
Load @ 24Vdc	750 Ohms		<i>EN 61000-4-3 RF</i>	<i>EN 61000-4-9 pulse MF</i>
Loop powered	9 to 30Vdc		<i>EN 61000-4-4 EFT</i>	<i>EN 61000-4-11 AC dips</i>
Power supply influence	0.002 % / V		<i>EN 61000-4-5 CWG</i>	<i>EN 61000-4-12 ring wave</i>
Load influence :	0.004 % / 100 Ohms		<i>EN 61000-4-6 RF</i>	<i>EN 61000-4-29 DC dips</i>
Intrinsic power consumption	<3.6 mA			group 1
default current	> 22mA			class A



WIRING AND OUTLINE DIMENSIONS:



miniature head for CNL27 implementation

