

- **temperature, voltage and current input**

platinum RTD, thermocouple,

- **High voltage galvanic isolation**

dielectric strength of 10kVac / 15kVdc continuous

- **Fully configurable**

RS232 link

- **Universal power supply Ac / Dc**



CNL34DHig is a transmitter for applications on high voltage environment (energy distribution, railway, transformers, motors, alternators,...). Environment needing a maximal safety.

DESCRIPTION:

Temperature inputs:

- Thermocouples with linearization and internal cold junction compensation,
- platinum RTD probe (2 or 3 wires mount) with linearization and line length compensation.

Process inputs:

- voltage (mV), from current measure shunt.
- voltage (V), direct or from voltage sensor.

Signal processing:

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

Implementation:

- Symmetrical DIN rail mounting,
- pluggable screw terminal block (2.5 mm²),
- universal power supply Ac / Dc,
- RS232 link for configuration,
- parameters saving on Flash, data retention > 30 years,
- input / output / power supply galvanic isolation (creepage distance for input circuit > 25mm),
dielectric strength of 15kVac, 20kVdc for 1 minute,
- High voltage conformal coating,
- protection class (house/terminal block) : IP20.

CONFIGURATION:

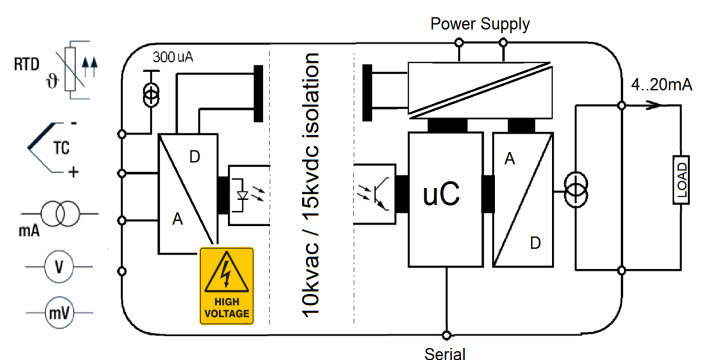
The device is configurable via the RS 232 serial link (jack 3.5mm) with any system emulating terminal.

- No specific software required.
- USB cable available separately.

Through terminal, user will be able to:

- visualize measure,
- setup device,
- adjust the offset measure.

Synoptic:



Version and order code:

CNL34DHig Temperature and mV input
isolation 10kVac/15kVdc, response time 200ms
Universal power supply

INPUT (24 bits resolution)		
TYPE	RANGE	ACCURACY
Thermocouple B	200 / 1800 °C	+/- 2 °C
Thermocouple E	-250 / 1000 °C	+/- 0.4 °C
Thermocouple J	-200 / 600 °C	+/- 0.4 °C
Thermocouple K	-200 / 1350 °C	+/- 0.4 °C
Thermocouple R	0 / 1750 °C	+/- 1 °C
Thermocouple S	0 / 1600 °C	+/- 1.5 °C
Thermocouple T	-250 / 400 °C	+/- 0.5 °C
Thermocouple W5	0 / 2300 °C	+/- 2 °C
Other thermocouple on request		
T° Compensation	-20 / 60 °C	+/- 0.3 °C
Input impedance	> 1 MOhms	
breaking current detection:		0.25µA
3 wires RTD	-200 / 800 °C	+/- 0.3 °C
Excitation current	300 µA	
Cable influence	< 0.03 °C / Ohms	
(maximum cable resistance: 10 ohms by wires)		
Voltage mV	0 / 120 mVdc	+/- 0,02 mV
Input impedance	1 KOhms	
Current	0 / 30 mA	+/- 0,015 mA
on external shunt	2,5 Ohms (provided on request)	

POWER SUPPLY
 standard : 20 to 265Vac/dc ; Low voltage : 9 to 30Vdc.
 Not polarized, consumption < 3 VA

OUTPUT (12 bits resolution)
Current 0...4...20 mA ± 20µA
 Permissible load: 0...850 Ohms
Voltage 0...10 V ± 10mV
 Output impedance: 500 Ohms (0.1% internal shunt)
 Programmable response time from 200ms to 60s

ENVIRONMENT
 Dielectric strength Input / Output 10kV rms continuous
 Dielectric strength Input / Supply 10kV rms continuous
 Dielectric strength Output / Supply 2.5kV rms continuous
 Operating temperature: -20 to 60 °C
 Storage temperature: -25 to 85 °C
 Influence: < 0.01 % / °C (% full scale)
 Humidity: 85 % not condensing
 Weight: 220 g

Electromagnetic compatibility 2004/108/CE / Low Voltage Directive 2006/95/EC

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	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:

