

- **Universal input:** mV, V, mA, Ohms, Hz, Pt100, Thermocouples, potentiometer, sensor power supply.
- **95000:** Without relays version.
- **INL50:** 2 relays version
- **option** /S: analog output
/C: digital link
- **Display:** 4 digits 10000 points available in red, green, yellow, blue



INL50/95000 allows a wide range of applications thanks to various of measurable inputs and outputs options. (regulation, security, measure, ...).

FUNCTIONALITY:

Measure:

- temperature, thermocouples linearized with cold junction compensation (internal or external), Pt100 RTD probes linearized with line length compensation,
- process, mA, mV, V, Ohms, Hz, sensor power supply, potentiometer.

Calculation functions:

- measure range conversion,
- square root extraction,
- configurable special linearization on 26 points maximum,
- maximum value memorization.

Outputs / communication:

- 2 configurables relays in sensor breaking detection and/or threshold detection with direction, threshold, hysteresis, safety and delay choice.
- 1 configurable mA or V analog output, insulated or not, with output type, output range, burn out value, response time, limitation choice.
- 1 insulated RS485 MODBUS /JBUS digital link,
 - address, speed, and parity configurable,
 - measure and alarm reading, data format in float 32 bits IEEE, integer 16 bits (%scale),
- 1 insulated RS485 PROFIBUS -DP digital link,
 - address, speed, and parity configurable,
 - measure of the alarm states,
 - measure reading in 32 bits float IEEE format.

Display and adjustment:

- resolution 10000 points, 4 LED digits of 14.2 mm,
- automatic or manual decimal point positioning,
- alarm and special functions indicators
- display value limitation "Hi" and "Lo",
- sensor breaking indication "Er",
- displayed value filtering,
- alarm threshold adjustment by front-side buttons, possibility to lock the threshold adjustment in RS232 configuration,

General characteristics:

- wiring with screw-terminal, plug-in connector (optional),
- tightness IP20, IP54 or IP65 (supply separately) in option,
- 1500 V insulation power supply / input / relays, 1000 V insulation for analog output,
- saving of the configuration parameters in EEPROM, safety of data holding > 10 years,
- noise immunity, filtering of measure and analog output,
- offset measure adjustable.
- watchdog supervising the program process,
- regeneration of internal parameters at each measure,
- stability towards ambient temperature variation,

DIALOGUE-CONFIGURATION:

The device can interact via the RS232 link with any system emulating a terminal. Example: HyperTerminal in Windows. Free supply on single request of RS232 cable

Warning: the RS232 link is not insulated from input measures. Check if there is no dangerous potential on inputs before any configuration.

Through the terminal, the user will be able to:

- visualize the measure,
- shift the measure,
- configure the device,

Version and order code :

- 95000:** Basic version, 4 digits display, without output.
- INL50:** 4 digits display, 2 configurable relay.
- /S** + 1 configurable analog output.
- /C** + LIAISON MODBUS/PROFIBUS option can not be held concurrently

INPUT		
TYPE	RANGE	ACCURACY
Voltage mV	-15 / 140 mV	+/- 20 µV
Voltage V	-15 / 60 V	+/- 2 mV
Current	0 / 30 mA	+/- 20 µA
Resistance	0 / 360 Ohms	+/- 0.1 Ohms
Polarisation	0.4 mA	
Frequency	0.8 Hz / 35 kHz	+/- 0.3 %
Voltage mini	3 V p.t.p.	
Pt100	-200 / 800 °C	+/- 0.3 °C
Tc B	200 / 1800 °C	+/- 2 °C
Tc E	-250 / 1000 °C	+/- 0.3 °C
Tc J	-200 / 600 °C	+/- 0.4 °C
Tc K	-200 / 1350 °C	+/- 0.5 °C
Tc R	0 / 1750 °C	+/- 1.5 °C
Tc S	0 / 1700 °C	+/- 1.5 °C
Tc T	-250 / 400 °C	+/- 0.4 °C
T° compensation	-10 / 60 °C	+/- 0.2 °C
Other couples on request		
Impedance	1.5 MOhms 500 kOhms 50 Ohms 100 KOhms	mV input V input mA input Hz input
Sampling rates	6 / s 0.6 / s	every inputs in Hz < 10Hz
AUXILIARY		
Sensor power supply		20 V smoothed
for power supply voltage rating		
Potentiometer reference		5 V
RELAYS		
Insulated reverser contact 1 RT		1500 Vac
Switching power		1 A / 250 V
Switching		5.10 ₇ to 100 mA 1.10 ₆ to 1A

ANALOGIC OUTPUT		
TYPE	RANGE	ACCURACY
Current	0 to 20 mA	+/- 10 µA
Load with GI	800 Ohms	
Load without GI	865 Ohms	
Voltage	0 / 10 V	+/- 5 mV
on external shunt	500 Ohms	
Response time	200 ms to 60 s	
POWER SUPPLY		
(to specify at the order)		
230 Vac 50-60 Hz +/- 10 %, 3 VA		
20 to 70 Vac / Vdc, 3 VA		
80 to 265 Vac / Vdc, 3 VA		
9 to 30 Vdc, 3 W		
RECOMMENDED OPERATING CONDITIONS		
Operating temperature	-10 to 60 °C	
Storage temperature	-20 to +85 °C	
Influence	< 0.005 % / °C (% full scale)	
Relative humidity	85 % (not condensed)	
Weight	~ 310 g	
Tightness	IP20, IP54 in option or IP65 with separated kit	
Dielectric strength		
Input / Pwr.Supply / Relay	1500 Veff continuous	
Analog output	1000 Veff continuous	
DIGITAL LINK		
Modbus	from 1.2 to 38.4 kbps	
Pofibus -DP	from 9600 to 1.5M bds	
Wiring	2 wires screw-terminal.	
Electromagnetic compatibility		
Generic standards: NFEN50081-2 / NFEN50082-2		
		
EN55011	meet	group 1 / class A
EN61000-4-2	no influence	B ENV50140 < +/- 5 % A
EN61000-4-4	< +/- 5 %	B ENV50141 < +/- 10 % A
EN61000-4-5	< +/- 5 %	B ENV50204 no influence A
EN61000-4-8	no influence	A
EN61000-4-11	< +/- 5 %	B DBT 73/23/CEE

WIRING AND OUTLINE DIMENSIONS:

Format w x h x d: 96 X48 X 85 mm
Cut Off w x h: 92 X 42 mm

