

PROGRAMMABLE PROCESS INDICATOR INL50L, 95000L



- **Process input:** mA, V, Hz, potentiometer and sensor power supply
- **95000L:** Without relays version
- **INL50L:** 2 relays version
- **Options:** Analog output
Integrator function
- **Display:** 4 digits 10000 points available in red, green, yellow, blue
- **Option:** 5-digits display
- **INL50LI8:** 8-digits integrating
- **INL50LF:** Low frequency version



4 digits



5 digits



8 digits

INL50L/95000L are programmable indicators for process inputs, fully programmable per the user.

FUNCTIONALITY:

Measure:

- voltage +/- 10 V, +/- 100 V, current +/- 20 mA, frequency,
- potentiometer, sensor power supply.

Calculation functions:

- measure range conversion,
- square root extraction,
- special linearization, 26 points max.,
- third degree polynomial calculation,
- integrating function.

Outputs:

- 2 configurable relays in alarm with selection and adjustment of directions, thresholds, hysteresis, security, delay or in counting with pulse unit choice.
- 1 mA or V configurable analog output, insulated or not, with output type, output range, response time and limitation choice.

Display and adjustment:

- standard: 4 LED digits of 14,2 mm (10000 points),
- L5 version: 5 LED digits of 14,2 mm (100000 points),
- LI8 version: 8 LED digits of 7,62 mm (10⁷ points),
- automatic or manual positioning of decimal point,
- alarm, configuration, integration indicators,
- alarm threshold adjustment by front-side buttons, possibility to lock the threshold adjustment in RS232 configuration,
- displayed value selection, integrated or instantaneous value, reset of integrated value in LI version.

Generality:

- connection 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, integrating in NOVRAM, 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,
- access code in configuration mode (in option) ...

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,
- configurate the device,
- input, display range,
- special functions, output,
- relay password...

Version and order code:

95000L:	Basic version, 4 digits display, no output,
INL50L:	4 digits display, 2 configurable relays,
95000L/S:	4 digits display, 1 configurable analog output,
INL50L/S:	4 digits display, 2 configurable relays, 1 configurable analog output,
95000L/I :	4 digits display, integrating function
INL50L/I :	4 digits display, 2 configurable relays, integrating function,
95000L5 :	5 digits display,
INL50L5:	5 digits display, 2 configurable relays
INL50LI8:	8 digits display, 2 configurable relays, integrating function
INL50LF:	Low frequency input for flow application, accepted range at 0.5 s to 13 mn.
Note:	All the options can be held concurrently.

INPUT			
TYPE	CALIBER	MEASURE	ACCURACY
		(without warranty)	
Voltage	+/- 10 V	+/- 20 V	+/- 20 mV
Voltage	+/- 100 V	+/- 200 V	+/- 0.2 V
Current	+/- 20 mA	+/- 40 mA	+/- 20 µA
Frequency	0.8 Hz / 35 kHz		+/- 0.2 %
Sampling rates	5 / s in V, mA 31 / s in Hz > to 65 Hz 10 / s in Hz > to 15 Hz 1 / s in Hz < to 15 Hz		
Input resistance	10 MOhms, input +/-100 V 1 MOhms, input +/- 10 V 25 Ohms, input +/- 20 mA		
AUXILIARY			
Sensor power supply	24 V smoothed		
for power supply voltage rating			
Potentiometer reference	5 V regulated		
ANALOG OUTPUT			
TYPE	RANGE	ACCURACY	
Current	0 ... 20 mA	+/- 10 µA	
Load, with GI	500 Ohms		
Load, without GI	630 Ohms		
Voltage	0 / 10 V	+/- 5 mV	
On external shunt	500 Ohms		
Response time	200 ms to 60 s		

RELAYS	
Insulated reverse contact relay	1500 Vac
Switching power	1 A / 250 V
Impulse width in counting	200 ms
POWER SUPPLY	
(to specify at the order)	
230 Vac 50-60 Hz +/- 10 %, 2.3 VA	
115 Vac 50-60 Hz +/- 10 %, 2.3 VA	
20 to 70 Vac / Vdc, 2.3 VA	
80 to 265 Vac / Vdc, 2.3 VA	
9 to 30 Vdc, 2.3 W	
RECOMMENDED OPERATING CONDITIONS	
Temperature	
Operating	-10 to +60 °C
Storage	-20 to +85 °C
Influence	< 0.005 % / °C
	(% of the full scale)
Relative humidity	85 % (not condensed)
Weight	~ 310 g
Tightness	IP20 or option IP54 or kit IP65, supplied separately
Dielectric strength	
Pwr. Supply / input / Relays	1500 Veff continuous
Analog output	1000 Veff continuous

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:

