

- **IPL50L:** Voltage measure, current, frequency,
- **IPL50L/R:** 2 alarm relays
- **IPL50L/R3:** 3 alarm relays
- **IPL50L/S:** Analog output
- **IPL50L/C:** MODBUS RS485 link

- **Continuous and alternative** (40 to 100 Hz)
- **Fully insulated**

- **Display:** 10 000 points available in Red, Green, Yellow, Blue



The IPL50L is an electrical network indicator allowing the display, the supervision and the recopy of a voltage or a current as well as its frequency. Fast make use with single programming of input calibers and transformer ratios. Its various options allows a wide range of applications : measure, regulation, alarm, ...

**Measure:**

- continuous current or voltage (+/- 5 A, +/- 700 V),
- alternative RMS current or voltage (5 Aac,500 Vac),
- frequency (40 to 100 Hz),
- configurable voltage or current transformation ratio.

**Front face:**

- 10 000 points resolution, 4 LED digits of 14,2 mm,
- alarm control leds, measure display leds,
- displayed value selection (U, I, F) by push-button, (locking by RS232 configuration),
- automatic decimal point position and unit change (kilo),
- alarms thresholds adjustment by push-button, (locking by RS232 configuration),

**General characteristics / specification:**

- connecting by screw terminals,
- slot-in box: 96 x 48 (89 mm depth),
- in option, connecting of current input on threaded rod,
- universal AC and DC power supply.
- input / outputs / power supply / relays galvanic insulation,
- saving of the configuration parameters saved in EEPROM,
- watchdog supervising the program process,
- regeneration of the internal parameters on each measure,
- stability towards ambient temperature variations,

**CONFIGURATION:**

The device is configurate via the RS232 serial link, with any system emulating a terminal.

(no specific software to install on computer)

Example: Hyperterminal program in Windows.

By the intermediary of the terminal, the user will be able to :

- visualize the measure,

or configurate :

- the type of measure,
- the relay operating mode,
- the operating mode of the analog output,
- the operating mode of the RS485 digital output.

**Version and order command :**

**IPL50L/S:** 1 configurable analog output:

- measure type (U, I, F),
- measure scale,
- output type (current, voltage),
- output scale,
- response time,
- limitation.

**IPL50L/C:** Configurable digital output RS485:

- address (1 to 255),
- transmission speed (600 to 19200 bauds),
- parity (even, odd, without),
- MODBUS/JBUS protocol,
- data format in floating 32 bits IEEE, integers 16 bits, integers 32 bits.

**IPL50L/R:** 2 relays configurable in alarm:

- measure type,
- alarm type,
- threshold,
- hysteresis,
- security,
- temporization.

**Note :** The different options above can be held concurrently.

**IPL50L/R3:** 3 relays configurable in alarm:

- measure type,
- alarm type,
- threshold,
- hysteresis,
- security,
- temporization.

**Note :** Specific model without option

INPUT		
TYPE	RANGE	ACCURACY
Alternative voltage	500 V (direct)	+/- 1.5 V
Continuous voltage and	+/- 700 V (direct)	+/- 1.5 V
Alternative voltage	125 V (direct)	+/- 0.37 V
Continuous voltage	+/- 180 V (direct)	+/- 0.37 V
Input impedance	2 MOhms / 600 kOhms	
Overload	3 x UN during 3 s = 1500 V / 375 V	
Measure threshold	5 V / 1.2 V	
Absorbed power	0.125 W / 0.026 W	
Alternative current	5 A (direct)	+/- 15 mA
Continuous current	+/- 5 A (direct)	+/- 15 mA
Input impedance	0.05 Ohms	
Overload	6 x IN during 3 s = 30 A	
Measure threshold	0.05 A	
Absorbed power	1.25 W	
Other calibers on request,		
Current	1 A ...	+/- 0.3 %
Frequency	35 to 100 Hz	+/- 0.2 %
measures / response time: 14 measures per second programmable response time from 200 ms to 60 s on the analog output		
RELAYS		
Commutation capacity:		1 A / 250 V,
Insulated reverser contact:		1500 Vac.

ANALOG OUPUT (IPL50L/S)		
TYPE	RANGE	ACCURACY
Current	0 ... 4 ... 20 mA	+/- 10 µA
Load	780 Ohms	
Voltage	0 / 10 V	+/- 5 mV
External shunt	500 Ohms	
POWER SUPPLY		
(to be specified on order)		
20 to 70 Vac, 2 VA		
80 to 265 Vac, 2 VA		
9 to 30 Vdc, 2 W		
polarity indifferent		
RECOMMENDED OPERATING CONDITIONS		
Temperature		
Operating	-10 to 60 °C	
Storage	- 20 to 85 °C	
Influence	< 0.03 % / °C	
( % of the full scale)		
Relative humidity	85 % (not condensed)	
Weight	300 g	
Tightness	IP20, IP54 and IP65 optional, supplied separately	
Dielectric strength	1500 Veff continuous (Input/Pwr/Outputs/Relays)	

**Electromagnetic compatibility**

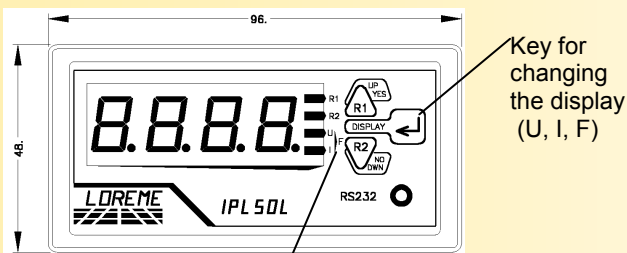
Generic standards: **NFEN50081-2 / NFEN50082-2**



<b>EN55011</b>	meet	group 1 / class A		
<b>EN61000-4-2</b>	no influence	B	<b>ENV50140</b>	< +/- 5 % A
<b>EN61000-4-4</b>	< +/- 5 %	B	<b>ENV50141</b>	< +/- 10 % A
<b>EN61000-4-5</b>	< +/- 5 %	B	<b>ENV50204</b>	no influence A
<b>EN61000-4-8</b>	no influence	A		
<b>EN61000-4-11</b>	< +/- 5 %	B	DBT	73/23/CEE

**WIRING AND OUTLINE DIMENSIONS:**

CUT-OFF FORMAT: 92 x 42



Keys for access to the configuration and the alarm threshold adjustment.

