# **PROGRAMMABLE NETWORK INDICATOR** IPL50L



- IPL50L: Voltage measure, current, frequency, 2 alarm relavs
- IPL50L/R:
- 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 programmation 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,
- DIN panel case: 96 x 48 (89 mm depth),
- in option, connecting of current input on threaded rod,
- universal AC and DC power supply.
- input / ouputs / 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

90 days accuracy (20 °C +/- 2 °C) DATA SHEET CAN BE DOWNLOADED ON WWW.LOREME.FI	TECHNICAL SPECIFICATIONS
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TYPE

Load

Current

Voltage

Relative humidity

**Dielectric strength** 

Weight

Tightness

IN	Pl	JT	

	TYPE	RANGE	ACCURACY			
	Alternative voltage Continuous voltage and	500 V (direct) +/- 700 V (direct)	+/- 1.5 V +/- 1.5 V			
	Alternative voltage Continuous voltage Input impedance Overload Measure threshold	125 V (direct) +/- 180 V (direct) 2 MOhms / 600 kOh 3 x UN during 3 s = 5 V / 1.2 V	nms			
	Absorbed power Alternative current Continuous current Input impedance Overload Measure threshold	0.125 W / 0.026 W 5 A (direct) +/- 5 A (direct) 0.05 Ohms 6 x IN during 3 s = 1 0.05 A	+/- 15 mA +/- 15 mA 30 A			
	Absorbed power Other calibers on reques Current	1.25 W st, 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					
		RELATS				
	Commutation capacity: Insulated reverser conta		A / 250 V, 500 Vac.			
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#### ANALOG OUPUT (IPL50L/S)

RANGE 0 ... 4 ... 20 mA 780 Ohms 0 / 10 V 500 Ohms External shunt

ACCURACY +/- 10 µA +/- 5 mV

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) 85 % (not condensed) 300 g IP20, IP54 and IP65 optional, supplied separately 1500 Veff continuous (Input/Pwr/Outputs/Relays)

#### Electromagnetic compatibility Generic standards: NFEN50081-2 / NFEN50082-2 EN55011 meet group 1 / class A EN61000-4-2 no influence В ENV50140 < +/- 5 % EN61000-4-4 < +/- 5 % В ENV50141 < +/- 10 % EN61000-4-5 < +/- 5 % ENV50204 R no influence EN61000-4-8 no influence Α < +/- 5 % EN61000-4-11 B DBT 73/23/CEE

## WIRING AND OUTLINE DIMENSIONS:

#### CUT-OFF FORMAT: 92 x 42 Key for changing the display (U, I, F) ģ ഹ 6 16 ð đ g Ξ 2 ñ 4 ŝ LOREME RS232 IPL SOL < m Pwr (+) Pwr (-) Ċ2 æ O + ı. د ک 8 125V 500V Analog. RS 485 20 ŧ S output Keys for access to the configuration and the I.G. 🗌 alarm threshold adjustment. ≤ Relay 2 Relay 1 ŝ Yes 🗌 Yes 🗌 No 🗌 ac/dc ac/dc Yes 🗌 Yes 🗌 Input Current input on threaded rod Rear panel No 🗌 No 🗌 No 🗌 option RS 232 link option 265v 70/ Voltage Current 20.. 85... Frequency 8/28 m4 Low 🗌 Low 🗌 Low: 2,5 VA Ac 🗌 ••• 4/28 m4 High 🗌 High 🗌 Dc 🗌 High: . . . @/16 v 🗌 Thres: Thres Œ тΡ:... Unit: . . . $\oslash$ Ratío ... 🗆 TI: Hyst: Hyst: 16 15 14 13 12 1 16 15 14 13 12 10 CE Dote: LOREME WWW.LOREME.FR 11 ₹ep.:

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