

## MODEL · LP4

# LOOP POWERED PROCESS METER



### Loop powered, process meter, excellent reading

Loop powered digital panel meter, in 96x48 mm housing (1/8 DIN standard), to connect to 4/20 mA loop signals. The instrument is powered from the signal loop. Excellent reading with 7 segment red color leds. Configurable scaling from -1999 up to 9999, with decimal point.

Front protection IP50 with optional IP65. Connections with plug-in screw terminals.

Configurable fast access menu at front key 'UP' (▲) to access maximum and minimum memories, and 'measure' function to read the actual 'mA' input signal at terminals. 'Square root' function to work with differential pressure flow meters. 'Field correction' function and several display filters to tune reading stability. Configuration with simplified scaling. 'Password' function to block access to the configuration menu.

Designed for industrial environment, for a wide range of applications, reduced cost, excellent quality and optional customization.

## 1. TECHNICAL SPECIFICATIONS

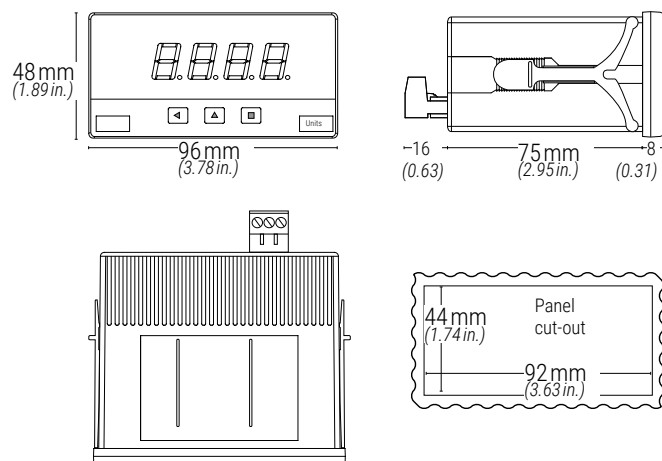
Digits and reading	
number of digits	4
type	7 segment led
color	red
digit height	14 mm
reading	9999 / -1999
decimal point	configurable X.X.X.X.
overrange / underrange	flash on display
display refresh	2 times / second
acquisition per second	2 acquisitions / second
memory retention	values for max. and min. reading are stored every 10 minutes
Input signal	
signals accepted	4/20 mA (2 wire)
maximum oversignal	30 mA (signals above this value can destroy the input circuit)
accuracy	±0.1 % F.S. (±1 count)
thermal drift	<150 ppm / °C
step response	1500 mSec. (0% to 99% signal)
Power supply	
type	loop powered from the input signal
minimum current to power-up	3.8 mA
voltage drop at terminals	<11 Vdc maximum
wires	0.5 mm <sup>2</sup> to 2.0 mm <sup>2</sup> (AWG20 to AWG14)
Configuration	
front keypad	3 push buttons
Mechanical	
mounting	panel mount
IP front protection	IP50 standard (IP65 optional)
IK impact protection	IK06
connections	plug-in screw terminals (pitch 5.08 mm)
housing material	ABS, polycarbonate (V2)
weight	<110 grams
front size	96 x 48 mm (1/8 DIN standard)
panel cut-out	92 x 44 mm
deep	91 mm including terminals

Temperature	
operation	from 0 to +50 °C
storage	from -20 to +70 °C
'warm-up' time	15 minutes
Packaging	
size	116 x 114 x 50 mm
material	cardboard
weight	<150 grams

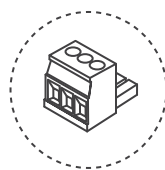
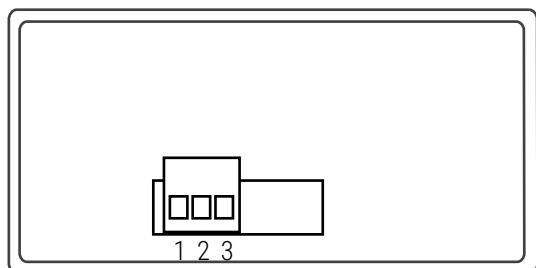
## 2. HOW TO ORDER

MODEL	OPTIONS	CUSTOMIZATION
LP4	-NBT (no front keypad) -65 (front IP65) - (empty)	.XXXX (customized execution)

## 3. DIMENSIONS (mm / inches)



## 4. CONNECTIONS: INPUT SIGNAL



Detail of the plug-in screw terminals provided with the instrument. The instrument is provided with all terminals needed, both male and female.

Table 1 | INPUT signal connections

INPUT signal	Input terminals			Connections
	1	2	3	
4/20 mA active	mA+ (in)	not connected	mA- (out)	

## 6. FUNCTIONS INCLUDED

### 'Square root'

Apply a square root to the reading, for example when working with differential pressure flow meters.

### 'Fast access'

Use front key 'UP' (▲) to have a fast access to memory of maximum and minimum, and to 'measure' function.

### 'Field correction'

Apply the actual input signal to the 'display low' or 'display high' parameter.

### 'Measure'

Visualize the actual signal at the input, directly in milliamperes, without scaling, for example for troubleshooting purposes.

### 'Memory of maximum and minimum.'

Visualize the memory of maximum and minimum reading since the last reset.

### 'Simplified scaling'

Simplified scaling, only with 'display low' and 'display high' parameters. Access to 'input high' and 'input low' is still available at the 'tools' section.

### 'Password'

Block access to the configuration menu, to non authorized operators.

## 5. ADDITIONAL DOCUMENTATION

### User's manual

[www.fema.es/docs/5137\\_LP4\\_manual\\_en.pdf](http://www.fema.es/docs/5137_LP4_manual_en.pdf)

### Datasheet

[www.fema.es/docs/5139\\_LP4\\_datasheet\\_en.pdf](http://www.fema.es/docs/5139_LP4_datasheet_en.pdf)

### Quick installation guide

[www.fema.es/docs/5142\\_LP4\\_installation\\_en.pdf](http://www.fema.es/docs/5142_LP4_installation_en.pdf)

### Web

[www.fema.es/Series\\_LP4](http://www.fema.es/Series_LP4)

