LOOP POWERED PROCESS METER

Loop powered, process meter, excellent reading

Loop powered digital panel meter, in 96x48mm housing (1/8DIN standard), to connect to 4/20mA 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**' (**5**) 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.
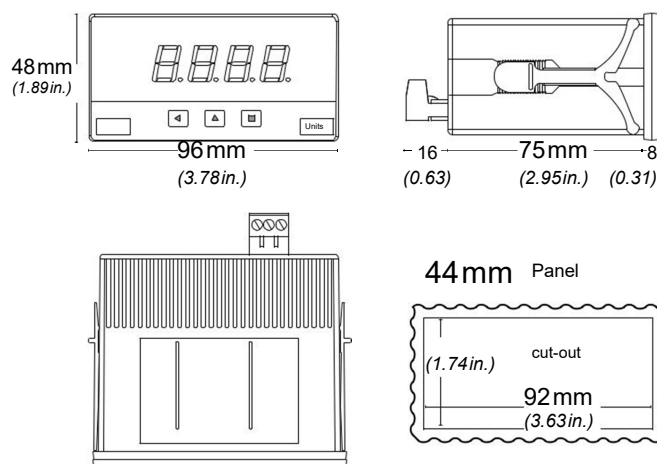
1. TECHNICAL SPECIFICATIONS

Digits and reading

number of digits	4
type	7 segment led
color	red
digit height	14mm
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	4/20mA (2wire)
maximum oversignal	30 mA (signals above this value can destroy the input circuit)
accuracy	±0.1% F.S. (±1count)
thermal drift	<150ppm/ºC
step response	1500mSec. (0% to 99% signal)

Power supply

type	loop powered from the input signal
minimum current to power-up	3.8mA
voltage drop at terminals	<11Vdc maximum
wires	0.5mm$_2$ to 2.0mm$_2$ (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 5.08mm)
housing material	ABS, polycarbonate (V2)
weight	<110 grams
front size	96x48mm (1/8DIN standard)
panel cut-out	92x44mm
deep	91 mm including terminals

Temperature

operation	from 0 to +50ºC
storage	from -20 to +70ºC
'warm-up' time	15 minutes

Packaging

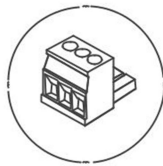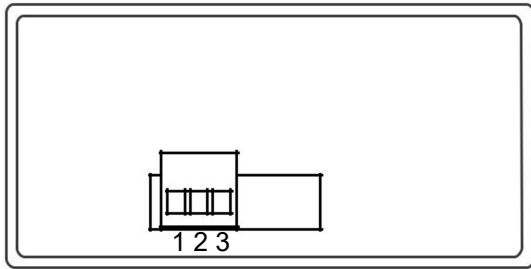|	
size	116x114x50mm
material	cardboard
weight	<150 grams

2. HOW TO ORDER

MODEL	OPTIONS	CUSTOMIZATION
LP4		

-NBT *(no front keypad)*   .XXXX *(customized execution)*
-65   *(front IP65)*
-     *(empty)*

3. DIMENSIONS (mm / *inches*)

48mm (*1.89in.*) — 96mm (*3.78in.*)
16 (*0.63*) — 75mm (*2.95in.*) — 8 (*0.31*)
44mm (*1.74in.*)   Panel   cut-out   92mm (*3.63in.*)

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)	1 2 3

mA-
mA+

5. 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**' (**5**) 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*' pa-rameter.

'**Measure**'

Visualize the actual signal at the input, directly in milliamperes, with-out 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*' parame-ters. 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.