

# LEO 1 / LEO 1 Ei



## DIGITAL MANOMETER

**PEAK MEASURING RATE: 5 kHz / ACCURACY: 0,2%**

LEO 1 is a micro-processor controlled, accurate and versatile digital pressure measuring instrument with integrated fast peak-, max.- and min.-function.

The instrument is used in two modes:

### MANO-Mode:

The pressure is measured twice per second and displayed. The top display indicates the actual pressure, the bottom display shows the MAX.- or MIN- pressure since the last RESET.

### PEAK-Mode:

The pressure is measured 5'000 times per second and is brought to the display twice per second. The top display shows the actual pressure, the bottom display the peak- (MAX.) or trough-pressure (MIN.).

LEO 1 has two operating keys. The left key is to turn the instrument on, to select the functions and the pressure units. The right key executes the selected function or unit. The right key is also used to switch between the MAX.- and MIN.-value in both modes.

The instrument has the following functions:

### RESET:

With the RESET-function, the MAX.- and MIN.-value is set to the actual pressure value.

### ZERO:

The ZERO-function allows to set any value as a new Zero reference. Barometric pressure variations can thus be compensated. The factory setting of the Zero for the ranges -1...3 bar or -1...30 bar is at 0 bar absolute. For sealed gauge pressure measurements, activate "ZERO SET" at ambient pressure. Instruments with the ranges 0...300 bar, 0...700 bar or 0...1000 bar are calibrated in a sealed gauge mode with 1 bar absolute pressure as a Zero reference.

### CONT:

The instrument turns off 15 Min. after the last key function. Activating CONT (Continuous) deactivates this automatic turn-off.

### UNITS:

All standard instruments are calibrated in bar. The pressure can be indicated in the following units: bar, mbar/hPa, kPa, MPa, PSI, kp/cm<sup>2</sup>

Accessories (optional): Protective rubber covering and carrying bag.



Display Segments LEO 1



## SPECIFICATIONS

Pressure Ranges, Resolution, Overpressure:	Range	Resolution	Overpressure
	-1...3 bar	1 mbar	10 bar
	-1...30 bar	10 mbar	60 bar
	0...300 bar	100 mbar	400 bar
	0...700 bar	200 mbar	700 bar
	0...1000 bar	200 mbar	1000 bar
Accuracy *	< 0,2% FS		
Storage- / Operating Temperature	-20...70 °C / 0...50 °C		
Compensated Temperature Range	0...50 °C		
Supply	3 V battery, type CR 2430		
Battery Life	<ul style="list-style-type: none"> <li>• 1'000 hours continuous operation in Mano-Mode</li> <li>• 150 hours continuous operation in Peak-Mode</li> </ul>		
Pressure Connection	G 1/4"		
Protection, CEI 529	IP 65		
Diameter x Height x Depth	76 x 118 x 42 mm		
Weight	210 g		

\* Including linearity, repeatability and hysteresis.

Subject to alterations

## LEO 1 Ei

**Intrinsically safe version, 94/9/CE (ATEX 100a)**

Classification: I G EEx ia IIC T6 or T5  
Certification File: LCIE 01 ATEX 6001 X

The EEx ia version of LEO 1 incorporates an additional protection switch. Functions, ranges and accuracy are identical to the standard version.

