

SM-LABDMM

HIGH ACCURACY DIGITAL MANOMETER

LabDMM is a digital pressure gauge recommended as **first-line-sample** employed in industrial fields for a direct test on the plants.

It can be used in laboratories for performing calibrations or metrological comparison on manometers, pressure transmitters and transducers or pressure switches.

To increase the practicality and make the instrument completely autonomous, the pressure gauge is fed by internal batteries which ensure 1 year autonomy.

In the programming menu reachable through the keyboard it is possible to adjust different functions such as : digital filter that allows to maintain the measurement steady even in presence of unsteady pressures, the display resolution which allows to increase the measurement at fixed steps (2,5,10) the measurement unit which can be changed into mbar, bar, kPa, MPa and psi.

The sensor, entirely executed in stainless steel is monolithic to ensure a long term high stability even in presence of highly dynamic pressures.

During the production cycle the digital pressure gauge is calibrated and ACCREDIA certified to guarantee the exact measurement uncertainty which is always ensured better than 0,05%.

MAIN FEATURES:

- ~ 1 YEAR AUTONOMY WITHOUT RECHARGING
- DISPLAY WITH ANALOGUE BAR (always active)
- PROGRAMMABLE RESOLUTION
- PROGRAMMABLE DIGITAL FILTER
- PROGRAMMABLE UNITS OF MEASUREMENT
- ZERO FUNCTION
- PEAK FUNCTION (positive and negative)
- RS232 OUTPUT (optional)
- BUILT-IN CASE (optional)
- VACUUM READING (optional)
- EXTERNAL POWER SUPPLY (optional)

ACCESSORIES:

- **GPM**: manual pump pressure generator for calibrations by comparison.
- **PressKAL**: utility software for calibrating pressure gauges, pressure transducers and transmitters with data acquisition, errors processing and printing of certificate traceable to a ACCREDIA one.
- **DEMO1**: demonstration software for instrument connection to the PC, complete with DATA LOGGER and measurement export on an EXCEL file.

Smart

LCD DISPLAY

IP65

Batteries INCLUDED



CE RoHS

DYNAMIC STRESSES

≤ ± 0.05%
Linearity - Hysteresis

ACCREDIA
LENITE ITALIANO DI ACCREDITAMENTO

LAT N° 093
Calibration Centre
The products are NOT covered by accreditation



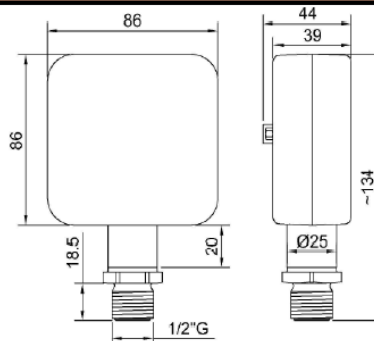
COMPLETE WHIT
ACCREDIA Calibration Certificate

Standard indications

Pressure	Display (bar)		Resol.
	Positive	Vacuum	
100 mbar	100,00	-100,00	0,01
250 mbar	250,00	-250,00	0,02
500 mbar	500,00	-500,00	0,05
1 bar	1,0000	-1,0000	0,0001
2,5 bar	2,5000	-1,0000	0,0005
5 bar	5,0000	-1,0000	0,0005
10 bar	10,000	/	0,001
20 bar	20,000	/	0,002
50 bar	50,000	/	0,005
100 bar	100,00	/	0,01
250 bar	250,00	/	0,02
350 bar	350,00	/	0,05
500 bar	500,00	/	0,05
700 bar	700,00	/	0,05
1000 bar	1000,0	/	0,1
1500 bar	1500,0	/	0,2
2000 bar	2000,0	/	0,2

Dimensions

[mm]



SENSEL MEASUREMENT

41, rue des laitieres – 94300 VINCENNES - FRANCE

Tél. : 01 56 88 25 78 - www.sensel-measurement.fr - contact@sensel-measurement.com

S.A.R.L au capital de 7500 Euros - SIRET 502 277 908 00013 - APE 7490 - N° TVA : FR40502277908

Technical Data



ABSOLUTE PRESSURE (A) Zero at pressure to absolute vacuum	1 - 2.5 - 5 - 10 bar ⁽¹⁾
RELATIVE PRESSURE (R) Zero at atmospheric pressure	100 - 250 - 500 mbar 1 - 2.5 - 5 - 10 - 20 bar 50 - 100 - 250 - 350 - 500 bar 700 - 1000 - 1500 - 2000 bar
LINEARITY and HYSTERESIS	≤ ± 0.05 % F.S.
INTERNAL RESOLUTION	65.000 div.
READINGS PER SEC. (0 filter)	10 (100ms)
REFERENCE TEMPERATURE	+23°C
WORKING TEMPERATURE RANGE	0/+50°C
STORAGE TEMPERATURE RANGE	-10/+60°C
TEMPERATURE EFFECT (1°C)	
a) on zero	≤ ± 0.002%
b) on sensitivity	≤ ± 0.002%
ZERO FUNCTION	50%
PROGRAMMABLE DIGITAL FILTER	0 ÷ 99
PROGRAMMABLE RESOLUTION	1, 2, 5, 10
PROGRAMMABLE UNITS OF MEASUREMENT	mbar, bar, MPa, kPa, psi
PROGRAMMABLE BAUD RATE	19200, 9600, 4800
PEAK FUNCTION	Pos. (+) and Neg. (-)
DISPLAY	custom LCD
DISPLAY HEIGHT	16mm
POWER SUPPLY	BATTERIES
AUTONOMY	~1 YEAR
ALKALINE BATTERIES	n°4 to 1.5V size AA
MECHANICAL LIMIT VALUES:	
a) service pressure	100% F.S.
b) max. permissible pressure	150% F.S.
c) breaking pressure	>300% F.S.
d) high dynamic pressure	75% F.S.
STANDARD PROCESS COUPLING	1/2" Gas MALE
RECOMMENDED GASKET	USIT A 63-18
TIGHTENING WRENCH	27mm
TIGHTENING TORQUE	28Nm
PROTECTION CLASS (EN60529)	IP65
SENSOR EXECUTION MATERIAL	INOX 17-4 PH
CASE EXECUTION MATERIAL	ALUMINIUM
ELECTRICAL CONNECTION (RS232C)	tank SUB D 9 pole FEMALE

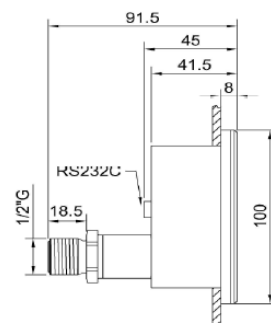
Options:

- EXTERNAL POWER without batteries, protection IP40. ORDER CODE: **OPZALIMEST**
- EXTERNAL POWER SUPPLY from 220V to 12Vdc. ORDER CODE: **TALDMM**
- SERIAL OUTPUT RS232C (protection IP40).
- VACUUM Relative press. (-0.5..+0.5bar)(-1..+1bar)(-1..+2.5bar)(-1..+5bar) ORDER CODE: **TLDMMV**
- ALUMINIUM BUILT-IN CASE hole gauge 83 x 83 mm protection IP65 front panel. ORDER CODE: **TCINC**



ORDER CODE :

TLDMM	Pres.	CX41	Nominal pressure			Serial output
	R= Rel.		0B1	10B	500B	S=RS232
	⁽¹⁾ A= Abs.		0B2	20B	700B	
			0B5	50B	1KB	
			1B	100B	1KB5	
			2B5	250B	2KB	
			5B	350B		



⁽¹⁾ ACCREDIA certificate in RELATIVE mode.

ACCREDIA certification in ABSOLUTE mode can NOT be performed by LAT n° 93 Laboratory, on request it can be ordered to other Accredited Laboratories.

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