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# Digital Pressure Gauge

# PROFESSIONAL DIGITAL PRESSURE GAUGE for PRESSURE and TEMPERATURE measurement





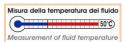




















**PGE2** is a professional digital pressure gauge made according to the most modern technologies to guarantee a high level of reliability, versatility and practicality at the same time.

The sturdiness and a high stability over time are guaranteed by a monolithic sensor made entirely of stainless steel capable of working even in the presence of highly dynamic pressures, and by a robust housing made of painted aluminum.

Designed to be used in metrological laboratories, calibration systems, automation in general and process controls where it is necessary to monitor, record and transmit data.

During the production cycle the pressure gauge is calibrated to guarantee a measurement uncertainty better than 0.50% in 28 different pressure ranges, **RELATIVE**, **ABSOLUTE** and in **VACUUM**.

With this instrument it is possible to simultaneously measure the **PRESSURE** generated by air, gas, oil, water or any other type of non-corrosive fluid and the **TEMPERATURE** of the fluid that generates the pressure.

The pressure gauge is powered by 2 internal non-rechargeable AAA batteries that provide approximately 1 year's autonomy.

In the programming menu accessible from the keyboard it is possible to customize the behavior of the pressure gauge by adjusting various functions such as the **DIGITAL FILTER**, which allows to keep the measurement stable even in the presence of unsteady pressures, resolution, unit of measurement, Auto power off etc ...

Using the keyboard it is possible to set the positive and negative **PEAK** function to record the maximum and minimum pressures detected during the test.

On the display there is an analogue indication with pressure bar always active even within the programming menu.

#### Main features:

- Normalized pressures from 100 mbar to 3000 bar ABSOLUTE, RELATIVE and VACUUM.
- Measurement of fluid PRESSURE and TEMPERATURE.
- Autonomy of about 1 year without recharging.
- 5-digit LCD display.
- Resolution, digital filter, conversions in units of measurement.
- Functions of ZERO, PEAK max. and min.
- KEY LOCK function 6 to protect the use parameters from unauthorized changes.
- LOOP function switches between PRESSURE and TEMPERATURE measurements on the display.
- Analogue pressure display always active (bar graph).
- Impact-resistant silicone cover.

#### **OPTIONS:**

- USB communication port.
- External power supply from 12Vdc to 24Vdc.
- Built-in container.

## **DATI TECNICI**

ACCURACY (linearity and hysteresis)	≤± 0,50 % F.S.
ABSOLUTE PRESSURE Zero to the absolute vacuum pressure.	1 – 2.5 – 5 – 10 bar
RELATIVE PRESSURE (R) Zero at atmospheric pressure.	100 – 250 - 500 mbar 1 – 2,5 – 5 – 10 – 20 – 50 – 100 bar 250 - 350 – 500 – 700 bar 1000 – 1500 - 2000 – 2500 – 3000 bar
RELATIVE VACUUM (V)	-1 1 bar -1 2.5 bar -1 5 bar
PRESSURE UNITS	-1 10 bar -1 20 bar bar – mbar – psi – Mpa – kPa – kg/cm <sub>2</sub> mHg – mmHg – mmH <sub>2</sub> O – mH <sub>2</sub> O
TEMPERATURE INDICATION  a) Resolution  b) Accuracy REFERENCE TEMPERATURE OPERATING TEMPERATURE RELATIVE UMIDITY	Unit °C - °F 0.1 °C ± 1 °C 0 +50 °C -10 +60 °C < 90 % not condensed
TEMPERATURE EFFECT (1 °C) a) on zero b) on sensitivity	≤ ± 0,002% ≤ ± 0,002%
INTERNAL RESOLUTION CONVERSIONS PER SECONDS	16 bit 10 (100ms)
DISPLAY LCD BACKLIGHT DISPLAY HEIGHT	CUSTOM 7 segment 13mm
RESOLUTION FUNCTION DIGITAL FILTER FUNCTION ZERO FUNCTION PEAK FUNCTION LOOP FUNCTION LOCK (LOC)	1, 2, 5, 10 from 0 to 5 100 % F.S. Positive / Negative (VACUUM) Switch between pressure and temperature To protect parameters change
POWER SUPPLY Autonomy Battery recharge	NON rechargeable batteries ~ 1 YEAR 2 x 1.5V AAA batteries
mechanical limit values: a) service pressure b) limit pressure c) breaking pressure d) highly dynamic pressure	100% F.S. 150% F.S. >300% F.S. 75% F.S.

PROCESS COUPLING	1/2" G Male
SEAL RECOMMENDED	USIT A 63-18
TIGHTENING WRENCH	27 mm
TIGHTENING TORQUE	28 Nm
PROTECTION CLASS (EN 60529)	IP65
MATERIAL SENSOR	17-4 PH STAINLESS STEEL
CONTAINER MATERIAL	ALUMINUM

## **OPTIONS:** (to be purchased separately)

USB OUTPUT	USB 2.0		
TRANSMISSION TYPE	On DEMAND		
TRANSMISSION MAX. RATE	10 values per second		
MAX DISTANCE	5 m		
PROTECTION CLASS (EN 60529)	IP40		
EXTERNAL POWER SUPPLY (without battery)	from 12 to 24Vdc		
BUILT-IN VERSION	Case for panel mounting		
	case for parter mounting		
MATERIAL	Glass-fiber reinforced technopolymer		

## Supplied accessories for STANDARD version:

Impact-resistant silicone cover.

Operating MANUAL IT/EN

N° 2 mordant cones ONLY for high pressure gauges from 1000 bar to 3000 bar.



### Accessories supplied in the BUILT-IN version:

N° 2 mounting brackets

Operating MANUAL IT/EN

N° 2 mordant cones only for high pressure gauges from 1000 bar to 3000 bar.



## Accessories: (to be purchased separately)

Case for transport.

Codice: VALIGIADFIBIT



EXTERNAL POWER SUPPLY from 220V to

12Vdc

Code: TALDMM

USB cable

Code: TCAVOUSB

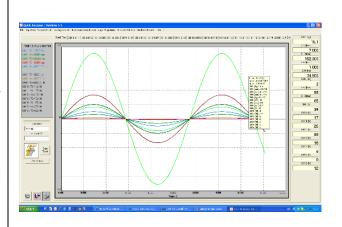


#### WinTEST1

#### Quick analyzer

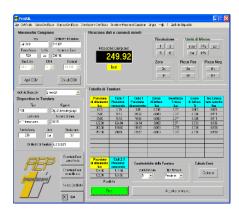
#### **Quick analyzer Light**

Application software that interface directly to the pressure gauge and support the operator in the various functions of testing, analysis, time monitoring, data storage, data logger management and measurement transfer on Microsoft Excel etc ...



#### **PressKAL**

Software dedicated to the calibration and metrological confirmation of pressure gauges such as pressure gauges, transducers and pressure transmitters and pressure switches.



**Calibration Report.** 

Code: TRM

**ACCREDIA** certificate.







Manual pressure generators used to compare the measurements between the sample manometer and the instrument being calibrated.

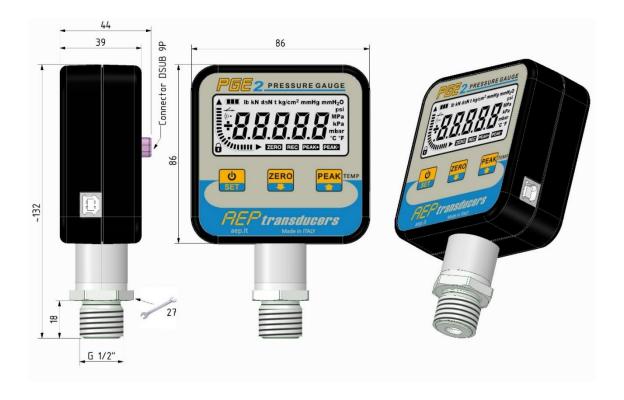
Ideal for calibrations and metrological confirmations of pressure gauges such as pressure gauges, transducers and pressure transmitters and pressure switches.

## **STANDARD Indications**

	Full Scale	Display	Resolution	Display	Resolution	Display	Resolution	Display	Resolution
TYPE <sup>(1)</sup>	bar	bar	bar	mbar	mbar	psi	psi	MPa	MPa
RV	0,1	0,1000	0,0001	100,0	0,1	1,450	0,002	0,0100	0,0001
RV	0,25	0,2500	0,0001	250,0	0,1	3,620	0,002	0,0250	0,0001
RV	0,5	0,5000	0,0001	500,0	0,1	7,200	0,002	0,0500	0,0001
ARV	1,0	1,000	0,001	1000	1	14,50	0,02	0,1000	0,0001
ARV	2,5	2,500	0,001	2500	1	36,20	0,02	0,2500	0,0001
ARV	5	5,000	0,001	5000	1	72,50	0,02	0,5000	0,0001
ARV	10	10,00	0,01	10000	10	145,0	0,2	1,000	0,001
RV	20	20,00	0,01	20000	10	290,0	0,2	2,000	0,001
R	50	50,00	0,01	50000	10	725,0	0,2	5,000	0,001
R	100	100,0	0,1	99900	100	1450	2	10,00	0,01
R	250	250,0	0,1	99900	100	3620	2	25,00	0,01
R	350	350,0	0,1	99900	100	5000	2	35,00	0,01
R	500	500,0	0,1	99900	100	7250	2	50,00	0,01
R	700	700,0	0,1	99900	100	10000	2	70,00	0,01
R	1000	1000	1	99000	1000	14500	20	100,0	0,1
R	1500	1500	1	99000	1000	21700	20	150,0	0,1
R	2000	2000	1	99000	1000	29000	20	200,0	0,1
R	2500	2500	1	99000	1000	36250	20	250,0	0,1
R	3000	3000	1	99000	1000	43500	20	300,0	0,1

(1) A = Absolute R = Relative V = Vacuum

## Dimensions (mm) standard version



## Dimensions (mm) built-in version 42.5 38 MAX. THICKNESS 3.5 D-SUB 25P FEMALE Hole for built-in 001 83 case 2 FIXING **HOOKS** 83 87.5 **Purchasing codes**

TPGE2	Full Scale				Pressure	OPTION
	0B1	5B	250B	1KB5	/ = RELATIVO	U = USB
	0B2	10B	350B	2KB	A = ASSOLUTA	
	0B5	20B	500B	2KB5		
	1B	50B	700B	3KB		
	2B5	100B	1KB		•	

Example: TPGE250B U

TDMMV	Relative VACUUM version	
TCINC	Built-in case	
OPZALIMEST	External power supply	









LAT N° 093 Dasa-Rägister Calibration Centre The products are NOT covered by accreditation **Production Quality** Assurance Certified n° TÜV CY 17 ATEX 0205891 Q