www.aep.it



Digital Pressure Gauge

PROFESSIONAL DIGITAL PRESSURE GAUGE for PRESSURE and TEMPERATURE measurement





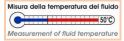




















covered by accreditation

Certificato di Taratura ACCREDIA
A RICHIESTA

ACCREDIA Calibration Certificate
ON REQUEST

BIT2 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 0.20% 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 with backlight.
- Resolution, digital filter, conversions in units of measurement.
- Functions of ZERO, PEAK max. and min.
- KEY LOCK function a 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).

OPTIONS:

- USB communication port.
- External power supply from 12Vdc to 24Vdc.
- Built-in container.
- Protective cover.
- Differential version with external pressure transducers.

DATI TECNICI

| ACCURACY (linearity and hysteresis) | ≤±0,20 % 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) Zero at atmospheric pressure | -1 1 bar -1 2.5 bar -1 5 bar -1 10 bar -1 20bar |
| PRESSURE UNITS | bar – mbar – psi – Mpa – kPa – kg/cm ₂ – mHg mmHg – mmH ₂ O – mH ₂ 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) û | 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 |
| MATERIAL | Glass-fiber reinforced technopolymer |
| PROTECTION CLASS (EN 60529) | IP65 front panel |
| DRILLING TEMPLATE | 83 x 83 mm |
| DIFFERENTIAL version | Combined with 2 transducers TP1 model |

Supplied accessories for STANDARD version:

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.



Accessori in dotazione per versione DIFFERENZIALE:

DIFFERENTIAL version consisting of 2 model **TP1** pressure transducers connected by a 3m cable to BIT2.

Full scale available from 10 to 700bar.

Code: **BIT2D**



Accessories: (to be purchased separately)

Impact-resistant silicone cover.

Code: **TCOVQ**



Case for transport.

Codice: VALIGIADFIBIT



EXTERNAL POWER SUPPLY from 220V to

12Vdc

Code: **TALDMM**

USB cable

Code: TCAVOUSB

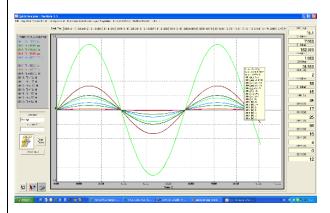


WinTEST1

Quick analyzer

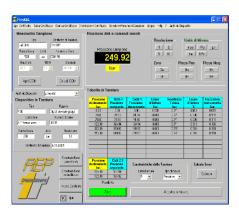
Quick analyzer Light

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 ⁽¹⁾ | 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 |
| ARDV | 10 | 10,00 | 0,01 | 10000 | 10 | 145,0 | 0,2 | 1,000 | 0,001 |
| RDV | 20 | 20,00 | 0,01 | 20000 | 10 | 290,0 | 0,2 | 2,000 | 0,001 |
| RD | 50 | 50,00 | 0,01 | 50000 | 10 | 725,0 | 0,2 | 5,000 | 0,001 |
| RD | 100 | 100,0 | 0,1 | 99900 | 100 | 1450 | 2 | 10,00 | 0,01 |
| RD | 250 | 250,0 | 0,1 | 99900 | 100 | 3620 | 2 | 25,00 | 0,01 |
| RD | 350 | 350,0 | 0,1 | 99900 | 100 | 5000 | 2 | 35,00 | 0,01 |
| RD | 500 | 500,0 | 0,1 | 99900 | 100 | 7250 | 2 | 50,00 | 0,01 |
| RD | 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 D = Differential V = Vacuum

Dimensions (mm) standard version



Dimensions (mm) built-in version



Purchasing codes

| TBIT2 | 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: BIT250B U

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





EN ISO 9001:2015 IQ-1100-01



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

In order to improve the technical performances of the product, the company reserves the right to make any change without notice.