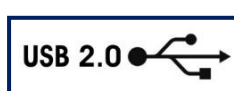
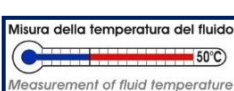


PROFESSIONAL DIGITAL MANOMETER for PRESSURE and TEMPERATURE measurement



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 technopolymer.

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 **0.10%** or **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.

For easier mounting and improved visibility, the display can be **ORIENTED**.


Main features:

- Normalized pressures from **100 mbar** to **3000 bar** ABSOLUTE, RELATIVE and VACUUM.
- Measurement of fluid PRESSURE and TEMPERATURE.
- TEMPERATURE measurement in ° C or ° F.
- 5 digit LCD display
- **ORIENTABLE display.**
- Resolution, digital filter, conversions in units of measurement.
- Functions of ZERO, PEAK max. and min.
- KEY LOCK function **⓪** to protect the use parameters from unauthorized changes.
- LOOP function in which the measurement of pressure and temperature are alternated on the display.
- Impact-resistant silicone cover.

OPTIONS:

- USB communication port via M12 connector
- RS232 communication port (as an alternative to USB communication).
- External power supply 12 Vdc via DSUB connector.
- Built-in case.

TECHNICAL DATA

ACCURACY linearity, hysteresis and repeatability	STANDARD $\leq \pm 0,20 \% \text{ F.S.}$	OPTION $\leq \pm 0,10 \% \text{ F.S.}$
ABSOLUTE PRESSURE (bar) Zero to the absolute vacuum pressure.	1 – 2.5 – 5 – 10 bar	
RELATIVE PRESSURE (bar) 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 (bar) Zero at atmospheric pressure	-1 ... 1 bar -1 ... 2.5 bar -1 ... 5 bar -1 ... 10 bar -1 ... 20 bar	
PRESSURE UNITS	bar – mbar – psi – Mpa – kPa – kg/cm ₂ – mHg mmHg – mmH ₂ O – mH ₂ O	
TEMPERATURE INDICATION a) Resolution b) Accuracy	Unit °C - °F 0.1 °C $\pm 1 ^\circ \text{C}$	
TEMPERATURE EFFECT (1 °C) a) on zero b) on sensitivity	$\leq \pm 0,002\%$ $\leq \pm 0,002\%$	
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 (1) Autonomy Battery recharge	NON rechargeable batteries ~ 1 YEAR 2 x 1.5V AAA alkaline 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 SEAL RECOMMENDED	1/2" G Male USIT A 63-18	
TIGHTENING WRENCH TIGHTENING TORQUE	27 mm 28 Nm	

WEIGHT	~0.5 kg
PROTECTION CLASS (EN 60529)	IP65 with connector attached or with screwed-on protective cap
MATERIAL SENSOR	17-4 PH STAINLESS STEEL
CASE MATERIAL	technopolymer



(1) In case of non-use or prolonged storage, we recommend to remove batteries

OPTIONS: (to be purchased separately)

ACCURACY (Linearity and Hysteresis)	$\leq \pm 0,10 \% \text{ F.S.}$
USB OUTPUT	USB 2.0
TRANSMISSION TYPE	On DEMAND
TRANSMISSION MAX. RATE	10 values per second
MAX DISTANCE	5 m
SERIAL PORT (2)	RS232C
BAUD RATE	Fixed at 9600 baud
TYPE OF TRANSMISSION	On DEMAND or CONTINUOUS
EXTERNAL POWER SUPPLY (without battery) via DSUB connector	12 Vdc
PROTECTION CLASS (EN 60529)	IP40
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



(2) Serial communication RS232C excludes USB communication

Accessories supplied in the STANDARD version:

Shock resistant silicone COVER.

Operating manual (ITA/ENG)

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



Accessories supplied in the BUILT-IN version:

2 mounting brackets

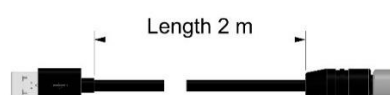
Operating manual (ITA/ENG).

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



Accessory supplied with the USB output version:

Connecting cable M12 to USB
Code: **TCAVOIDRO2**



Accessories supplied in the DIFFERENTIAL version:

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)

Case for transport.

Code: **VALIGIADFIBIT**



EXTERNAL POWER SUPPLY from 220V to 12Vdc.

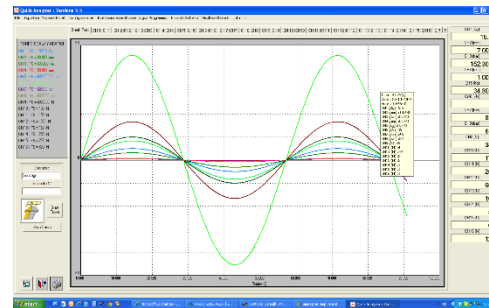
Code: **TALDMM** (built-in version only)

RS232 cable code: **TCAVOSERIALE**



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.

The screenshot shows the PressKAL software interface. It displays a large numerical display for pressure, currently showing 249.92. Below this, there are several tables and sections for calibration data, including a table for pressure points and a section for calibration results. The interface is designed for detailed calibration and metrological confirmation.

**Rapporto di Taratura.
Codice: TRM****Certificato ACCREDIA.**

This is a sample of a calibration report form (Rapporto di Taratura). It contains fields for device information, calibration data, and a section for the calibration results. The form is designed to be filled out by the operator during the calibration process.

This is a sample of a certificate form (Certificato ACCREDIA). It contains fields for accreditation details, calibration data, and a section for the calibration results. The form is designed to be filled out by the operator during the calibration process.

Manual pressure generators

The manual pressure generators of the GPM and GPG series are designed to perform calibrations and metrological confirmations of pressure gauges such as pressure gauges, pressure transducers and transmitters, and pressure switches.

Manually, they can generate and check pressures in OIL, WATER or AIR quickly, accurately and effortlessly.

Their ease of use and light weight allow measurements to be made in the field or laboratory. A high measuring range from VACUUM up to 3000 bar can be managed.



Adapters and fittings (to be purchased separately)

To connect the various pressure gauges and sensors to the generators, the following adapters made of AISI 316 stainless steel are available with a maximum working pressure of 1000 bar.

From 1/4" Gas Male to 1/4" Gas Female

From 1/4" Gas Male to 1/4" Gas Male

From 1/4" Gas Male to 1/2" Gas Female

From 1/4" Gas Male to 3/8" Gas Female

From 1/4" Gas Male to 1/8" Gas Female

From 1/4" Gas Male to 1/8" Gas Male

From 1/4" Gas Male to 1/4 NPT Female

From 1/4" Gas Male to 1/2 NPT Female

From 1/4" Gas Male to /8 NPT Female

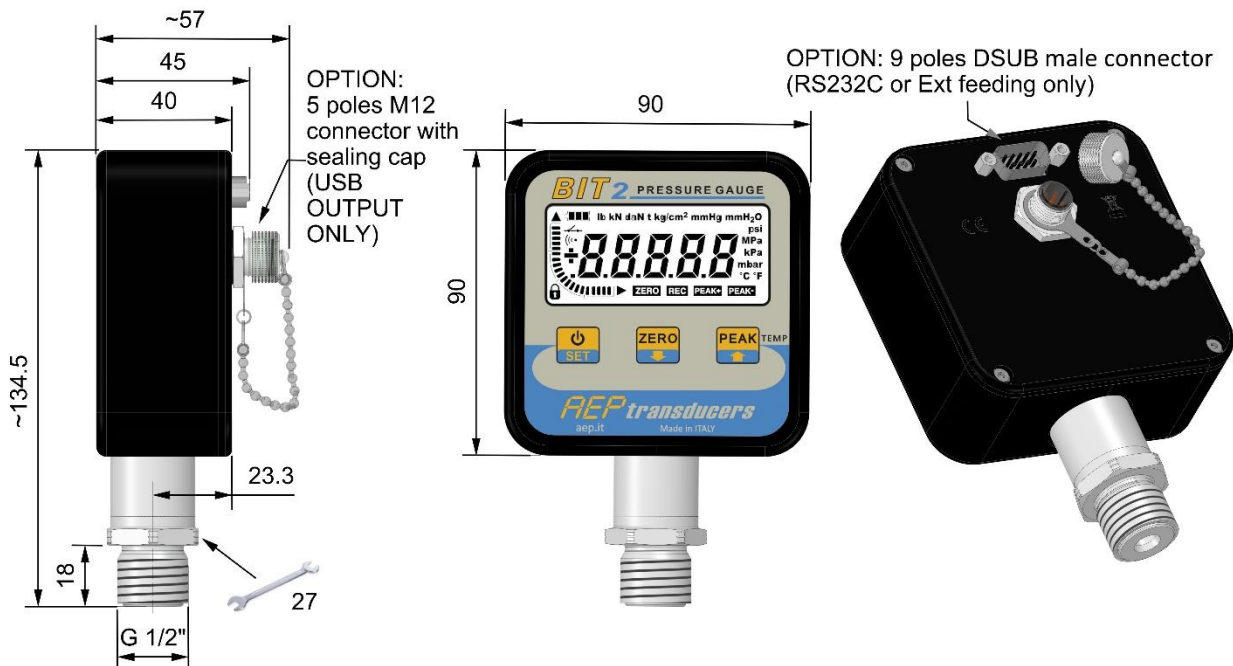
From 1/4" Gas Male to /8 NPT Female

STANDARD Indications

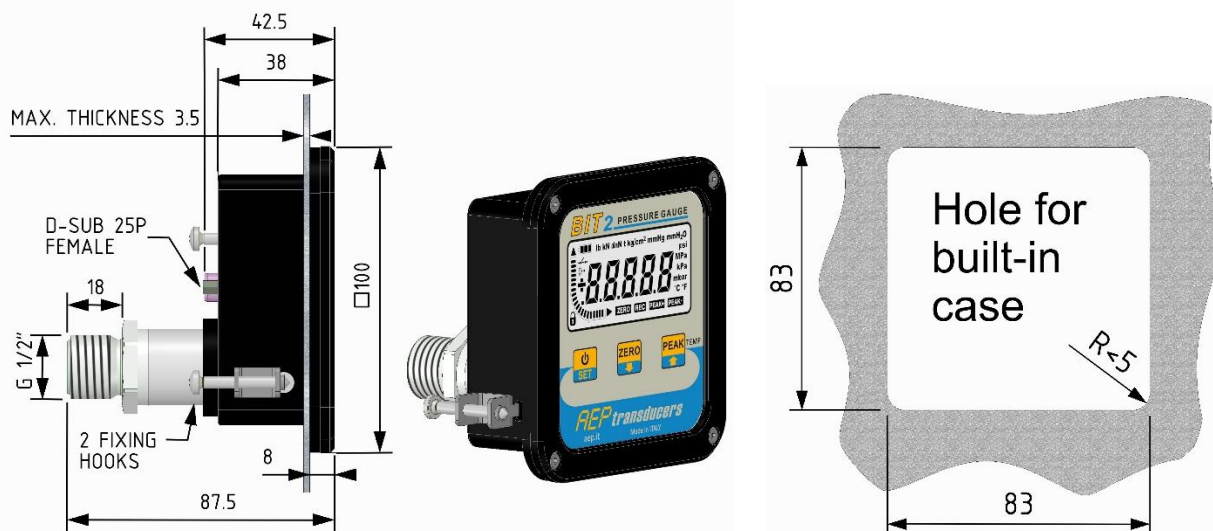
	Full Scale	Display	Resolution	Display	Resolution	Display	Resolution	Display	Resolution
TYPE ⁽¹⁾	bar	bar	bar	mbar	mbar	psi	psi	MPa	MPa
RV	0.1	0.1000	0.0001	100.00	0.01	1.450	0.002	0.0100	0.0001
RV	0.25	0.2500	0.0001	250.00	0.05	3.620	0.002	0.0250	0.0001
RV	0.5	0.5000	0.0001	500.00	0.05	7.200	0.002	0.0500	0.0001
ARV	1.0	1.0000	0.0001	1000.0	0.1	14.500	0.002	0.1000	0.0001
ARV	2.5	2.5000	0.0005	2500.0	0.5	36.200	0.005	0.2500	0.0001
ARV	5	5.0000	0.0005	5000.0	0.5	72.500	0.010	0.5000	0.0001
ARV	10	10.000	0.001	10000	1	145.00	0.02	1.0000	0.0001
RV	20	20.000	0.002	20000	2	290.00	0.02	20000	0.0002
R	50	50.000	0.005	50000	5	725.00	0.10	5.0000	0.0005
R	100	100.00	0.01	99900	10	1450.0	0.2	10.000	0.001
R	250	250.00	0.02	99900	20	3620.0	0.5	25.000	0.002
R	350	350.00	0.05	99900	50	5000.0	0.5	35.000	0.005
R	500	500.00	0.05	99900	50	7250.0	0.2	50.000	0.005
R	700	700.00	0.05	99900	50	10000	0.2	70.000	0.005
R	1000	1000.0	0.1	99000	100	14500	2	100.00	0.01
R	1500	1500.0	0.2	99000	200	21700	5	150.00	0.02
R	2000	2000.0	0.2	99000	200	29000	5	200.00	0.02
R	2500	2500.0	0.2	99000	200	36250	5	250.00	0.02
R	3000	3000.0	0.2	99000	200	43500	5	300.00	0.02

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

Dimensions (mm) standard version



Dimensions (mm) built-in version



Purchasing codes

TBIT2	FULL SCALE				PRESSURE	OPTION
	0B1	5B	250B	1KB5	/ = RELATIVE	U = USB
	0B2	10B	350B	2KB	A = ABSOLUTE	S = RS232C
	0B5	20B	500B	2KB5		
	1B	50B	700B	3KB		
	2B5	100B	1KB			

Example: **TBIT2 50B U**

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

AEP transducers

Measurements of WEIGHT, FORCE, PRESSURE and TORQUE since 1974

41126 Cognento (MODENA) Italy Via Bottego 33/A



Dasa-Rägister
EN ISO 9001:2015
IQ-1100-01



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