Data Sheet: JET.430.R2.EN

www.aep.it

JET 2.0 — Digital Pressure Gauge

STANDARD version

Linearità - Isteresi
≤±0.20%
Linearity - Hysteresis

OPTION

Linearità - Isteresi
≤±0.10%
Linearity - Hysteresis

Smart

RECHARGEABLE Battery

Wireless (option)

SWITCH TEST (option)

CE RoHS

Data Logger
max 60.000 measures

Misura della temperatura del fluido
50°C
Measurement of fluid temperature

ACCREDIA
L'ENTE ITALIANO DI ACCREDITAMENTO
LAT N° 093
Calibration Centre
The products are NOT covered by accreditation

Certificato di Taratura ACCREDIA
A RICHIESTA

ACCREDIA Calibration Certificate
ON REQUEST

The JET series digital gauges are made according to the more modern technologies in order to provide a high level of reliability, versatility and inexpensiveness at the same time.
Its main applications include industrial fields where it is necessary to check processes or fields where a precision class better than **0,20%** (STANDARD version) or **0,10%** is required.
To increase the practicality and make the instrument completely autonomous, the pressure gauge is powered by an internal Li-Ion rechargeable battery that can be recharged directly by an USB port or by using a dedicated power supply.
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 (1, 2, 5, 10) and the measurement unit which can be changed into mbar, bar, kPa, MPa, psi, kg/cm2, mHg, mmHg, mH2O e mH2O.
Communication via the USB port and wireless (optional) and the functionality of Data Logger makes it particularly suitable for applications where it is necessary to elaborate the acquired measurements on a PC. The sensor, made entirely in stainless steel, is monolithic to ensure a long term high stability even in presence of highly dynamic pressures.
By selecting the TEMPERATURE function, the temperature of the fluid in contact with the pressure sensor will be displayed.

Main features:

- NORMALIZED PRESSURE FROM **100 mbar** TO **3000 bar**
- PROGRAMMABLE RESOLUTION, DIGITAL FILTER and BAUD RATE
- ZERO and PEAK (Active in PRESSURE and VACUUM) functions
- USB SERIAL OUTPUT
- DATA LOGGER
- DISPLAY BACK LIGHT
- Measure of TEMPERATURE
- KEY BLOCK function
- ANALOG PRESSURE INDICATION ALWAYS ACTIVE (Bar Graph)
- *Wireless* TRANSMISSION OF THE MEASURE (on request)
- PRESSURE SWITCH TEST (on request)
- VACUUM Calibration (on request)

Main characteristics:

ACCURACY (linearity and hysteresis)	≤ ± **0,20 % F.S.** STANDARD version
ACCURACY (linearity and hysteresis)	≤ ± **0,10 % F.S.** HIGH ACCURACY version
ABSOLUTE PRESSURE (A) Zero at pressure to absolute vacuum	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 MEASUREMENT UNITS TEMPERATURE UNITS	bar – mbar – psi – Mpa – kPa - kg/cm^2 mHg – mmHg - mmH_2O - mH_2O °C - °F
TEMPERATURE INDICATION a) Resolution b) Accuracy	 0,1 °C ± 1 °C
SERVICE TEMPERATURE STORAGE TEMPERATURE RELATIVE HUMIDITY	0 … +50 °C -10 … +50 °C < 90 % not condensed
TEMPERATURE EFFECT (1°C) a) on zero b) on sensitivity	 ≤ ± 0,002 % ≤ ± 0,002 %
INTERNAL RESOLUTION READINGS PER SECOND (0 filter) **DIGITAL FILTER** PROGRAMMABLE **RESOLUTION** PROGRAMMABLE **ZERO** FUNCTION **PEAK** FUNCTION USB PROGRAMMABLE BAUD RATE	16 bit 10 (100ms) 0 … 99 1, 2, 5, 10 Active up to 100% F.S. Active in PRESSURE and VACUUM 19200, 9600, 4800
DATA LOGGER FUNCTION Max Storing Frequency Max storing pressure measures Max storing pressure+ temperature	 1 measure for second 60.000 Records 30.000 Records
COMMUNICATION Max Distance	USB 2.0 5m
DISPLAY BACKLIGHT FUNCTION	13 mm (custom LCD) Programmable from 1s to 60s (0 disabled)
POWER SUPPLY AUTONOMY RECHARGE BATTERY TIME RECHERGE	RECHARGEABLE inside BATTERY ~ 3 months (Backlight and wireless disabled) Li-Ion 3.7V 1100mA/h ~ 8 hours (With PC or USB power supply)

Main characteristics:

MECHANICAL LIMIT VALUES: a) service pressure b) max. permissible 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
RECOMMENDED GASKET	USIT A 63-18
TIGHTENING WRENCH TIGHTENING TORQUE	27 mm 28 Nm
PROTECTION CLASS (EN 60529) SENSOR EXECUTION MATERIAL CASE EXECUTION MATERIAL	IP40 17-4 PH STAINLESS STEEL ALUMINUM

Included accessories:

Shock-resistant silicon COVER.

Carrying case.

USB power supply (5VDC @700mA).

USB cable.

Carrying case.

CD with the User Guide and USB driver.

Nr. 2 mordant cones for high-pressure from 1000 bar to 3000 bar pressure gauges.

Optionals:

SWITCH TEST to test PRESSURE SWITCH.
CONTACT INPUT:
CONNECTOR MALE 2 pin:
POWER JACK 5,5 x 2,1mm

Wireless TRANSMISSION

RF FREQUENCY: 433MHz.
RF TRANSMISSION: 100m in Free Air.
MAX DATA TRANSMISSION RATE.
10Hz (10 transmission for seconds).

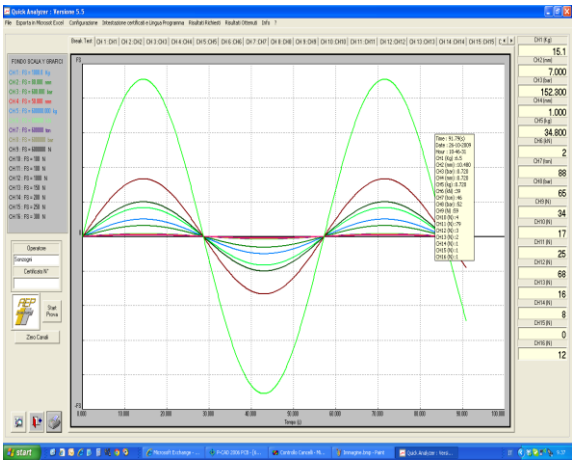
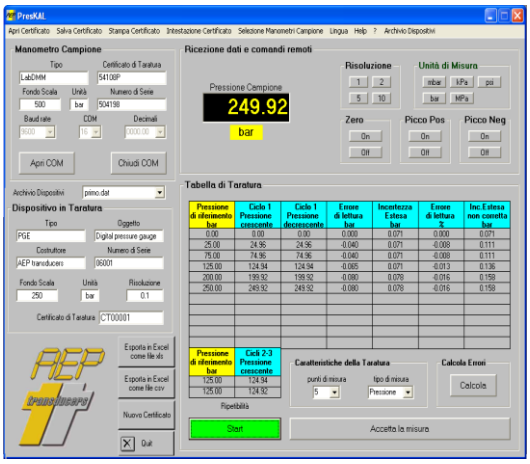
WARNING: When WIRELESS function is enabled, the USB serial transmission is not available.

Wireless *Applications:*

For wireless communication, you can use up to 5 possible receiving systems:

	❶ Software WINWIMOD + RXWIMOD receiver module with USB interface (one per system) suitable for communicating with a PC and allowing to connect up to 32 JET pressure gauges or other AEP wireless transducers.
	❷ **PC + RXWIMOD-USB** receiver module with USB interface, with a simple communication protocol it allows a point to point connection with a JET pressure gauge. It is ideal for customers willing to develop a dedicated software.
	❸ **WIP2Eplus** panel indicator with wireless communication to connect 1, 2, 3 or 4 JET pressure gauge at the same time.
	❹ **RXWIMOD-RS232C**: RS232C receiver module for a point to point communication. Ideal for customers willing to interface the JET pressure gauge with a PLC or other dedicated electronic systems.
	❺ **WISTAR handheld receiver**: it allows you to connect up to 4 JET pressure gauges simultaneously. Ideal for customers willing to work in different locations.

Accessories (purchased separately)

To complete the measurement system, AEP has developed the **Quick Analyzer Light** software that works directly with the JET manometer and supports the operator in the various test functions like, analysis, over time monitoring, data storage, management, Data Logger, transferring data to Microsoft Excel and so on ...	
PresKAL: Software dedicated to the calibration and metrology confirmation of pressure gauges, pressure transducers, pressure transmitters and pressure switches.	
Calibration Report. Codice: **TRM** ACCREDIA certificate.	 

Manual pressure generators used to compare the measurements between the sample pressure gauge and the instrument calibration.
Ideal for performing calibration and metrological confirmation of pressure gauges, pressure transducers, pressure transmitters and pressure switches.

DIMENSIONS (mm):

STANDARD indications:

	Nominal Pressure	Display	Resol.	Display	Resol.	Display	Resol.	Display	Resol.
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
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

Purchase codes:

TJET	Pressure	Full Scale				OPTION
	R = Relative	0B1	5B	250B	1KB5	**W** = Wireless
	A = Absolute [2]	0B2	10B	350B	2KB	**ST** = Switch Test
		0B5	20B	500B	2KB5 [2]	
		1B	50B	700B	3KB [2]	
		2B5	100B	1KB		

Exsample: **TJETR50BST**

TDMMV	Relative VACUUM version

AC01	Accuracy 0,10%

[2] ACCREDIA certification can NOT be performed by LAT n° 93 Laboratory, on request it can be ordered to other Accredited Laboratories.

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