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# IDROSCAN2

# PROFESSIONAL DIGITAL PRESSURE GAUGE for PRESSURE and TEMPERATURE measurement





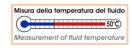
























Certificato di Taratura ACCREDIA

A RICHIESTA

ACCREDIA Calibration Certificate
ON REQUEST

**IDROSCAN2** 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 ABS.

Designed to be used in 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 **ABSOLUTE**, **RELATIVE** 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 Internal batteries provide a range of **1 year**, thanks to the function of AUTO POWER OFF which occurs when there are no changes in the measurements for more than 30 minutes.

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.

An **OPTION**, it is possible to have the **DATA LOGGER** function that permits the storage of up to 60,000 measurement points with programmable time intervals and the **USB** output to transmit and download recorded measurements to a PC.

#### Main features:

- Normalized pressures from 100 mbar to 3000 bar, ABSOLUTE, RELATIVE and VACUUM.
- TEMPERATURE measurement in ° C or ° F
- 1 year autonomy without changing batteries.
- 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.

#### **OPTIONS**:

- Internal DATA LOGGER with clock and calendar.
- USB communication port.
- External power supply from 5Vdc through a USB port.
- VACUUM CALIBRATION.
- Protection COVER.

# **TECHNICAL INFORMATION**

ACCURACY (linearity and hysteresis)	≤± 0.20 % F.S.
ABSOLUTE PRESSURE (A) Absolute vacuum pressure zero	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 20 bar
PRESSURE UNITS	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 OPERATING TEMPERATURE STORAGE TEMPERATURE RELATIVE HUMIDITY	Units of Measure °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	≤± 0.005% ≤± 0.005%
INTERNAL RESOLUTION READINGS PER SECOND (0 filter)	16 bit 10 (100ms)
LCD DISPLAY CHARACTER HEIGHT	CUSTOM 7 segments 13 mm
RESOLUTION PROGRAMMABLE DIGITAL FILTER PROGRAMMABLE ZERO FUNCTION PEAK FUNCTION LOOP FUNCTION MENU LOCK FUNCTION (LOC) 6	1, 2, 5, 10 from 0 to 10 100 % F.S. Positive / Negative ( VACUUM) Switching pressure and temperature Programming Protection
POWER SUPPLY AUTONOMY BATTERY	NOT RECHARGEABLE inside BATTERY ~ 1 YEAR n° 2 to 1,5V size AAA
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	27 mm
TIGHTENING TORQUE	28 Nm
PROTECTION CLASS (EN 60529)	IP65
SENSOR EXECUTION MATERIAL	INOX 17-4 PH
CASE EXECUTION MATERIAL	ABS

# **OPTIONALS:** (purchased separately)

DATA LOGGER FUNCTION	With clock and calendar
Max Storing Frequency	1 measure for second
Max storing pressure measures	60.000 Records
Max storing pressure+ temperature	30.000 Records
COMMUNICATION PORT	USB 2.0
BAUD RATE PROGRAMMABLE	9600 – 19200 - 38400
TIPO DI TRASMISSIONE	on REQUEST
EXTERNAL CONNECTOR	M12 5 poli male
MAX. DISTANCE	5 m
CLASSE PROTEZIONE (EN 60529)	IP65 with connector plugged
	or with screwed-on protective cap
EXTERNAL POWER SUPPLY	5Vdc via USB port
without internal battery	Power supply and USB cable

# **Included Accessories:**

Operating Manual.

ACCREDIA certificate.

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





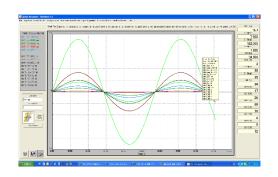


#### Accessories: (nurchased senarately)

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EXTERNAL POWER SUPPLY from 220V to 5Vdc. Code: TALDMM USB cable Code: TCAVOUSB	Length 2 m
Shock-resistant silicon COVER. Code: <b>TCOV</b> Carrying case.	Constant Con
Calibration Report. Codice: <b>TRM</b>	The state of the s

# 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 ...



### Data Logger:

The Data Logger can store up to 60,000 measurement points in steps ranging from 1 s to 24 hours.

Data stored during the last data logging are permanently saved on an internal nonvolatile memory so that the measures will always be accessible until the creation of a new cycle of record. It is possible to Start and Stop a cycle, set all the parameters and view, point by point, all the raw data.

Each recording cycle can be repeated five times (sub-cycles).

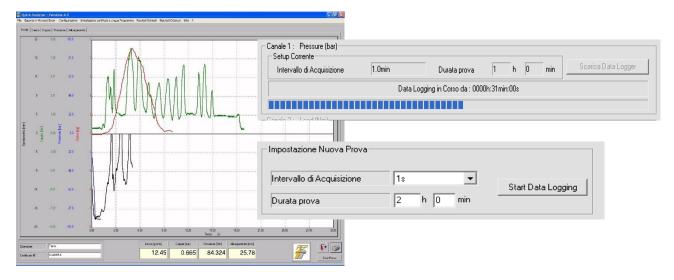
Alternatively, it is possible to use the Quick Analyzer Light software running on a PC.

Using Quick Analyzer, you can download trough the fast USB all points and create graphic curves using up to 4 IDROSCAN2 at the same time.

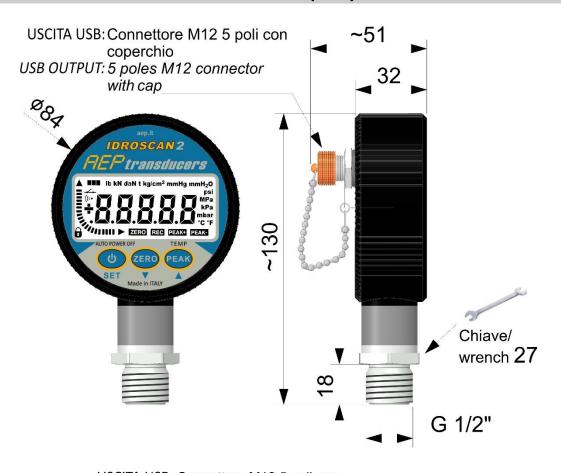
Quick Analyzer allows a full and easy control of all Data Logger features.

It allows to:

- View the status of the current cycle.
- Download all the measurements.
- Save all measurements on a file.
- Display the test curve.
- Print the test curve.
- Export to Microsoft Excel the test curve.
- Make the START / STOP of a cycle.
- Configure the Data Logger parameters (test time and acquisition time between points).



# Dimensions (mm):





# **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	0,00002	100.00	0,02	1.450	0,0002	0.0100	0,000002
RV	0.25	0.2500	0,00005	250.00	0,05	3.620	0,0005	0.0250	0,000005
RV	0.5	0.5000	0,0001	500.00	0,1	7.200	0,001	0.0500	0,00001
ARV	1.0	1.0000	0,0002	1000.0	0,2	14.500	0,002	0.1000	0,00002
ARV	2.5	2.5000	0,0005	2500.0	0,5	36.200	0,005	0.2500	0,00005
ARV	5	5.0000	0,001	5000.0	1	72.500	0,01	0.5000	0,0001
ARV	10	10.000	0,002	10000	2	145.00	0,02	1.0000	0,0002
RV	20	20.000	0,005	20000	5	290.00	0,05	20000	0,0005
R	50	50.000	0,01	50000	10	725.00	0,1	5.0000	0,001
R	100	100.00	0,02	99900	20	1450.0	0,2	10.000	0,002
R	250	250.00	0,05	99900	50	3620.0	0,5	25.000	0,005
R	350	350.00	0,05	99900	50	5000.0	1	35.000	0,005
R	500	500.00	0,1	99900	100	7250.0	1	50.000	0,01
R	700	700.00	0,1	99900	100	10000	2	70.000	0,01
R	1000	1000.0	0,2	99000	200	14500	2	100.00	0,02
R	1500	1500.0	0,5	99000	500	21700	5	150.00	0,05
R	2000	2000.0	0,5	99000	500	29000	5	200.00	0,05
R	2500	2500.0	0,5	99000	500	36250	5	250.00	0,05
R	3000	3000.0	0,5	99000	500	43500	10	300.00	0,05

<sup>(1)</sup> A = Absolute R = Relative V = Vacuum

# **Purchase codes:**

TIDRO2	Full Scale				OPTION
	0B1	5B	250B	1KB5	U = USB
	0B2	10B	350B	2KB	UD = Data Logger + USB
	0B5	20B	500B	2KB5	
	1B	50B	700B	3KB	
	2B5	100B	1KB		

Exsample: TIDRO 50B UD

Relative VACUUM version **TDMMV** 









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