

# IDROSCAN2

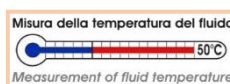
## PROFESSIONAL DIGITAL PRESSURE GAUGE for PRESSURE and TEMPERATURE measurement



LCD DISPLAY



Linearità - Isteresi  
 $\leq \pm 0.20\%$   
Linearity - Hysteresis



IP65



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 **Ⓚ** 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


<b>ACCURACY</b> (linearity and hysteresis)	$\leq \pm 0.20 \% \text{ F.S.}$
<b>ABSOLUTE PRESSURE (A)</b> Absolute vacuum pressure zero	1 – 2,5 – 5 – 10 bar
<b>RELATIVE PRESSURE (R)</b> 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
<b>RELATIVE VACUUM (V)</b> Zero at atmospheric pressure	-1 ... 1 bar    -1 ... 2.5 bar    -1 ... 5 bar -1 ... 10 bar    -1 ... 20 bar
<b>PRESSURE UNITS</b>	bar – mbar – psi – Mpa – kPa – kg/cm <sup>2</sup> – mHg mmHg – mmH <sub>2</sub> O – mH <sub>2</sub> O
<b>TEMPERATURE INDICATION</b> a) Resolution b) Accuracy OPERATING TEMPERATURE STORAGE TEMPERATURE RELATIVE HUMIDITY	Units of Measure °C - °F 0.1 °C $\pm 1$ °C 0 ... +50 °C -10 ... +60 °C < 90 % not condensed
<b>TEMPERATURE EFFECT (1 ° C)</b> a) on zero b) on sensitivity	$\leq \pm 0.005\%$ $\leq \pm 0.005\%$
<b>INTERNAL RESOLUTION</b> <b>READINGS PER SECOND (0 filter)</b>	16 bit 10 (100ms)
<b>LCD DISPLAY</b> <b>CHARACTER HEIGHT</b>	CUSTOM 7 segments 13 mm
<b>RESOLUTION</b> PROGRAMMABLE <b>DIGITAL FILTER</b> PROGRAMMABLE <b>ZERO</b> FUNCTION <b>PEAK</b> FUNCTION <b>LOOP</b> FUNCTION <b>MENU LOCK</b> FUNCTION (LOC) 	1, 2, 5, 10 from 0 to 10 100 % F.S. Positive / Negative ( VACUUM) Switching pressure and temperature Programming Protection
<b>POWER SUPPLY</b> <b>AUTONOMY</b> <b>BATTERY</b>	NOT RECHARGEABLE inside BATTERY ~ 1 YEAR n° 2 to 1,5V size AAA
<b>MECHANICAL LIMIT VALUES:</b> 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.
<b>PROCESS COUPLING</b> <b>SEAL RECOMMENDED</b>	1/2" G Male USIT A 63-18

TIGHTENING WRENCH	27 mm
TIGHTENING TORQUE	28 Nm
PROTECTION CLASS (EN 60529)	<b>IP65</b>
SENSOR EXECUTION MATERIAL	INOX 17-4 PH
CASE EXECUTION MATERIAL	ABS

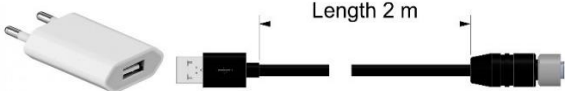
### **OPTIONALS:** (purchased separately)

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

### **Included Accessories:**

Operating Manual.  Nr. 2 mordant cones for high-pressure from 1000 bar to 3000 bar pressure gauges.	 The image shows the operating manual for the AEP Transducers, which includes a digital pressure gauge and a USB cable. Next to it are two mordant cones, which are used for high-pressure measurements.
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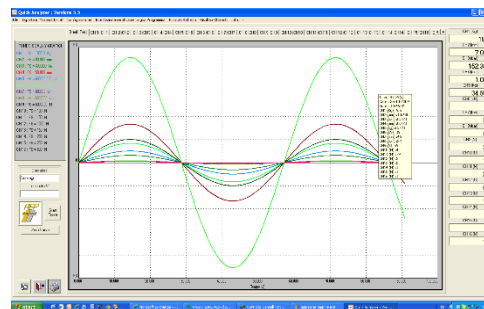
### **Accessories:** (purchased separately)

EXTERNAL POWER SUPPLY from 220V to 5Vdc. Code: <b>TALDMM</b> USB cable Code: <b>TCAVOUSB</b>	 The image shows a white external power supply unit and a black USB cable. The cable is labeled "Length 2 m".
Shock-resistant silicon COVER. Code: <b>TCOV</b>  Carrying case.	 The image shows a black shock-resistant silicon cover for the digital pressure gauge and a black carrying case for the device.
Calibration Report. Codice: <b>TRM</b>  ACCREDIA certificate.	 The image shows two documents: a Calibration Report (TRM) and an ACCREDIA certificate.

## 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).

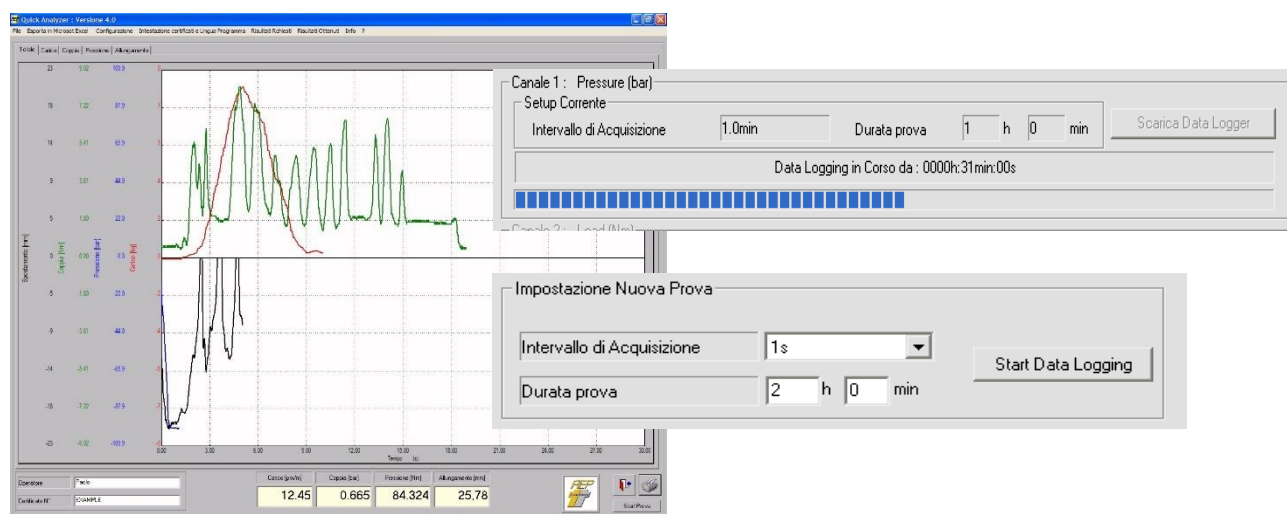
Alternatively, it is possible to use the **Quick Analyzer Light** software running on a PC.

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

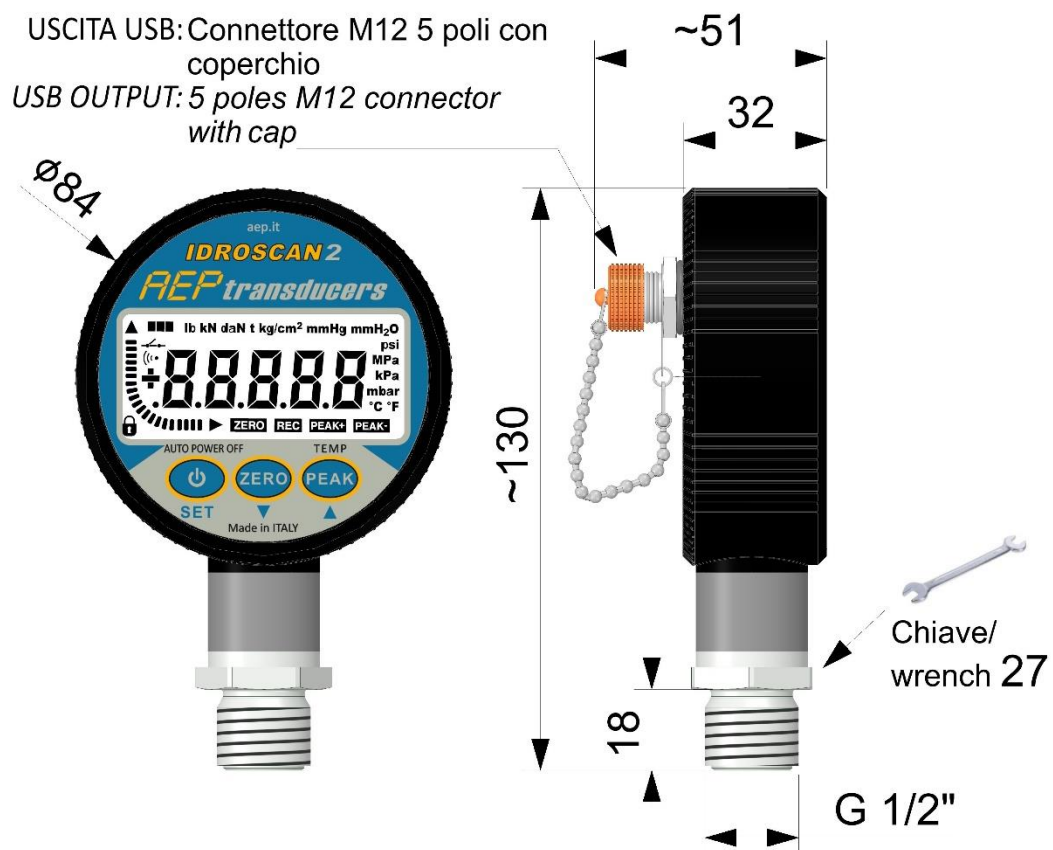
Quick Analyzer allows a full and easy control of all Data Logger features.

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**

<b>TDMMV</b>	Relative VACUUM version
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Measurements of WEIGHT, FORCE, PRESSURE and TORQUE since 1974

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Dasa-Rägister  
EN ISO 9001:2015  
IQ-1100-01Production Quality  
Assurance Notification  
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.