idroscan

Digital Pressure Gauge

COVER on request

Made in ITALY

Smart

Data Logger max 60,000 measures

Batteries INCLUDED — Battery

IP65

CE RoHS

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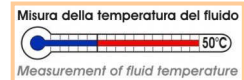L'ENTE ITALIANO DI ACCREDITAMENTO
LAT N° 093
Calibration Centre
The products are NOT
covered by accreditation

Certificato di Taratura ACCREDIA
A RICHIESTA
ACCREDIA Calibration Certificate
ON REQUEST

Linearità - Isteresi
≤ ± 0.20%
Linearity - Hysteresis

Misura della temperatura del fluido
50℃
Measurement of fluid temperature

Idroscan is a digital manometer controlled by a microprocessor. It is a practical and economical solution to perform measurements of pressure and temperature while maintaining a good accuracy and reliability.

The idroscan comes as standard with the DATA LOGGER function which allows you to store up to 60,000 measurement points in regular time steps from 1s to 10 hours per point.

To increase the level of integration of components, traditional and SMT technologies have been used, making the indicator resistant to vibration and mechanical stress as well as ensuring the reliability of the circuit.

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.

By selecting the reading of the TEMPERATURE it is also possible to show on the display the temperature of the fluid that is in contact with the pressure sensor

The indicator has a setting menu which allows to choose the resolution and the digital filter depending on the measurement to be performed.

The sensor, entirely executed in stainless steel is monolithic to ensure a long term high stability even in presence of highly dynamic pressures.

Main features:

- NORMALIZED PRESSURE FROM **1 bar** TO **3000 bar**

- MEASURES FLUID **PRESSURE** and **TEMPERATURE**

- ~ 1 YEAR AUTONOMY WITHOUT RECHARGING

- PROGRAMMABLE RESOLUTION, DIGITAL FILTER and BAUD RATE

- ZERO and PEAK functions

- EXTERNAL POWER SUPPLY (optional)

- RS232 OUTPUT (optional)

- **VACUUM** CALIBRATION (optional)

Main characteristics:

ACCURACY (linearity and hysteresis)	**≤ ± 0.20 % F.S.** STANDARD version
RELATIVE PRESSURE (R) Zero at atmospheric pressure	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 TEMPERATURE UNIT	bar (°C
TEMPERATURE INDICATION a) Resolution b) Accuracy	 0.1 °C ± 1 °C
OPERATING TEMPERATURE STORAGE TEMPERATURE RELATIVE HUMIDITY	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) **DIGITAL FILTER** PROGRAMMABLE **RESOLUTION** PROGRAMMABLE **ZERO** FUNCTION **PEAK** FUNCTION BAUD RATE PROGRAMMABLE RS232C CONNECTION (option)	16 bit 10 (100ms) 0 … 99 1, 2, 5, 10 Active up to 50% F.S. 125 readings per second (8ms) 19200, 9600, 4800 DB9 female connector
DISPLAY	16 mm (custom LCD)
POWER SUPPLY AUTONOMY BATTERY	NOT RECHARGEABLE inside BATTERY ~ 1 YEAR n° 2 to 1,5V size AAA
DATA LOGGER FUNCTION Max Storing Frequency Max storing pressure measures Max storing pressure+ temperature	 1 measure for second 60.000 Records 30.000 Records

Main characteristics:

MECHANICAL LIMIT VALUES:	
a) service pressure	100% F.S.
b) limit pressure	150% F.S.
c) breaking pressure	>300% F.S.
d) highly dynamic pressure	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)	IP40
SENSOR EXECUTION MATERIAL	INOX 17-4 PH
CASE EXECUTION MATERIAL	ABS

Included Accessories:

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

Optionals:

EXTERNAL POWER 12Vdc without batteries. Code: **OPZALIMEST** EXTERNAL POWER SUPPLY from 220V to 12Vdc. Code: **TALDMM** ⚠️ **WARNING**: Protection class IP40	
SERIAL OUTPUT RS232C. Cable RS232. code: **TCAVOSERIALE** USB adapter. code: **CAVO-RS232-USB** ⚠️ **WARNING**: Protection class IP40.	

Accessories: (purchased separately)

Shock-resistant silicon COVER. Code: **TCOV**	

Carrying case.	
Calibration Report. Codice: **TRM** ACCREDIA certificate.	

Data Logger:

The Idroscan Data Logger can store up to 60,000 measurement points in steps ranging from 1s to 10hours.

Data stored during the last Datalogging 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.
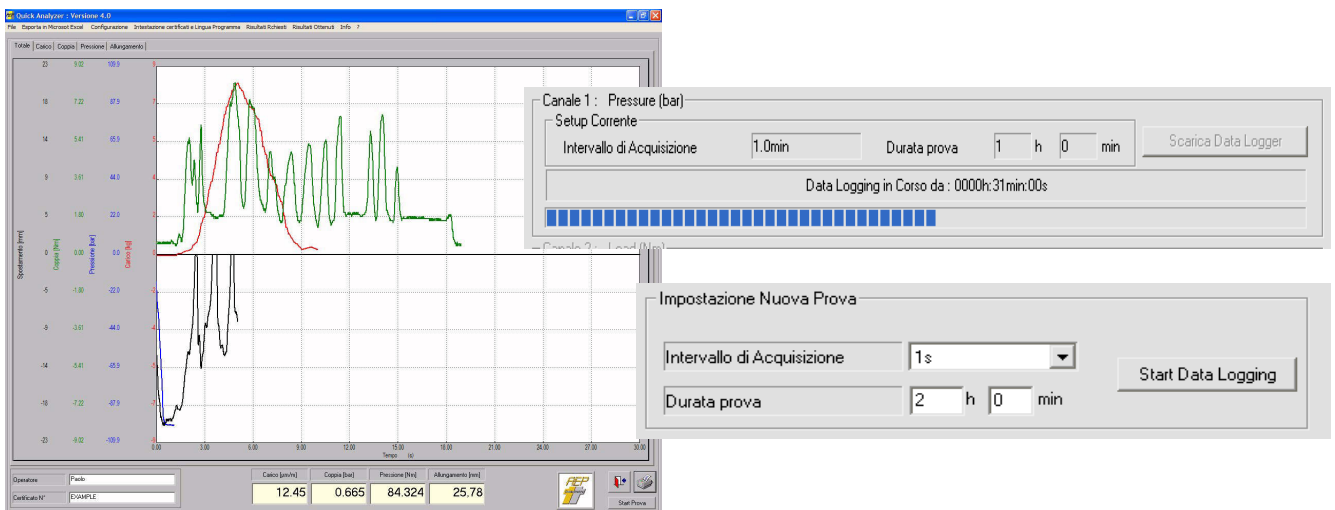
Idroscan has all the functionalities to manage directly the Data Logger. It is possible to Start and Stop a cycle, set all the parameters and view, point by point, all the raw data.

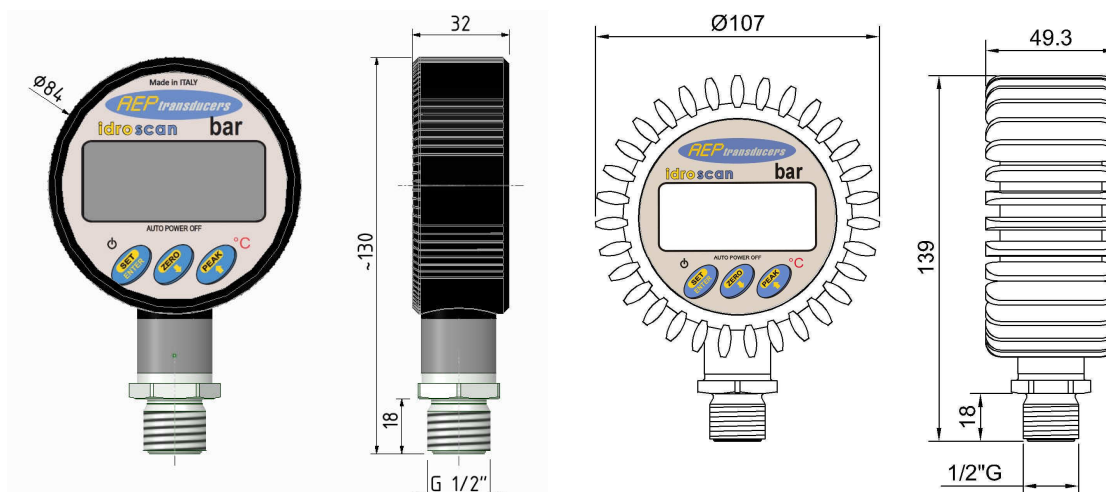Alternatively, it is possible to use the **Quick Analyzer Light** software running on a PC.

Using Quick Analyzer, you can download (trough the fast RS232C serial line – 38400 baud rate - of the Idroscan) all points and create graphic curves using up to 4 Idroscan 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:

TYPE[1]	Full Scale	Display	Resolution
	bar	bar	bar
RV	1,0	1,000	0,001
RV	2,5	2,500	0,001
RV	5	5,000	0,001
RV	10	10,00	0,01
RV	20	20,00	0,01
RV	50	50,00	0,01
RV	100	100,0	0,1
RV	250	250,0	0,1

[1] R = Relative   V = Vacuum

TYPE[1]	Full Scale	Display	Resolution
	bar	bar	bar
R	350	350,0	0,1
R	500	500,0	0,1
R	700	700,0	0,1
R	1000	1000	1
R	1500	1500	1
R	2000	2000	1
R	2500	2500	1
R	3000	3000	1

[1] R = Relative   V = Vacuum

Purchase codes:

TIDRO	Full Scale				OPTION
	1B	20B	350B	1KB5	S = RS232C
	2B5	50B	500B	2KB	
	5B	100B	700B	2KB5[2]	
	10B	250B	1KB	3KB [2]	

Exsample: **T I D R O   5 0B S**

TDMMV	Relative VACUUM version

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

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