Digitron

Pressure

2000 series pressure instruments

Setting new standards in pressure measurement

Datalogging

Hand-held digital manometers **2000 Series**

Pressure meters

A new industrial standard is set!

When it comes to performance under pressure, Digitron's 2000 Series of hand-held digital manometers are in a league of their own! Easy to operate, reliable and built to last, the 2000 Series has been specifically developed in order to meet the performance and cost demands of today's industrial and HVAC professionals.

- Pressure ranges from 1mbar to 10bar (0.0004" H_20 to 4021.8PSI)
- Pressure range to 500bar with an external transducer (not supplied)
- Scales in mbar, bar, PSI, inH_2O, inHg, mmH_2O, mH_2O, mm/cm/mHg, Pa and kPa
- Long battery life: typically 200 hours
- Automatic zero calibration for added accuracy
- Logging mode for storage, retrieval and output of readings
- Autoranging displays for precise readings
- Selectable auto switch-off
- 2 year warranty
- Overrange protection
- IP67 (1m depth 30 mins) BSI Cert 229/000132

Built to last

With its ergonomic design, positive action key pad and magnified display, the 2000 Series is a pleasure to operate. To maximise the instruments' useful life, the series features IP65 or IP67 protection, silicone rubber key pads with hard plastic coated on/off buttons and fully isolated battery compartment.

Protective Boot

A high impact protective rubber boot is available to enhance even further the durability of these instruments.

Performance you can rely on

Over 20 years experience, combined with extensive customer research, has given Digitron a thorough understanding of industrial applications and enabled us to design instruments that meet real needs.

The 2000 Series of pressure instruments offers the widest range of hand-held manometers in the world. Representing a new standard in pressure measurement, the series features a number of new, innovative functions designed to make the operator's job easier than ever before.

Automatic leak testing

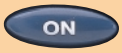
The 2000 Series can test for leaks over a variety of applications. Getting started couldn't be easier: simply prime the instrument with the relevant pre-stress pressure level, start pressure, test time, and the allowable pressure change, and you're ready to go!

Once the pre-stress pressure has been applied to the system, the instrument will run the test until the specified time has elapsed. It will then display a pass or fail message and log the results into its memory with a real-time reference.

User defined scale

A custom scale can be created by the user by entering a scale percentage, the value of which is multiplied into the current display.

All models feature:



Backlight
Enables readings to be taken easily in the dark

Display hold
Freezes the reading – when watching the equipment is more important than watching the instrument.

Set-up Retention
The instrument switches on with the last settings used.

Other selected models feature:

Smoothing
Averages measurements for a more stable reading

Units of pressure
For maximum flexibility, choose between 10 units of pressure

Range lock
Enables the operator to set the instrument to the lower resolution only.

Max/Min recorder
Enables maximum and minimum pressures to be determined as well as current operating pressure. Averaging is also available on some models within this mode.

Logging on demand
Allows readings to be stored as and when required

Pre-Set interval logging
Allows readings to be stored automatically at a pre-set time interval

Stores data
Also enables four digit reference number, with decimal point.

User defined scale
Allows custom scale setup

Zeroing
For maximum accuracy, zero the instrument in the reading orientation selected.

Zeroing absolute
The correct local barometric pressure can be keyed into the instrument for zeroing reference.

Leak testing
Enables pressure systems to be thoroughly tested for leaks

Common specification

Operating Temperature:	-10°C to +50°C/+14°F to 122°F (ambient)
Battery Type:	Two AA or equivalent cells (not supplied)
Battery Life:	Typically 200 hours
Low Battery Check:	" ▭ " symbol appears on display
Display:	12.7mm / 0.5" custom L.C.D.
Overrange/Underrange:	'Out' shows on display
Environmental Specifications:	IP65 (IP67 optional) with hose connected
Auto Switch-Off Time:	12 minutes
Dimensions:	155 x 67 x 40mm/6.1 x 2.6 x 1.6"
Weight:	180g/6.4oz

Instrument accuracies

From +20°C to +30°C/+68°F to +86°F:	0.1%rdg +0.1%fs +1 digit
From -10°C to +50°C/+14°F to +122°F:	0.15%rdg +0.15%fs +1 digit

The overall performance of the instrument is obtained by combining the stated accuracy and any uncertainty due to the measurement process

	20x0P	20x1P	20x2P	20x3P	20x5P	20x6P
mbar	0 - 1999 µbar + 0.00 - 25.00 mbar	0.00 - 19.99 mbar + 0.0 - 130.0 mbar	0.0 - 199.9 mbar + 0 - 1999 mbar	0 - 1999 mbar + 0.00 - 7.00 bar	0.0 - 199.9 mbar + 0 - 1999 mbar	0 - 1999 mbar + 0.00 - 10.00 bar
Pa	0.0 - 199.9 Pa + 0 Pa - 2500 Pa	0.00 - 13.00 kPa	0.00 - 19.99 kPa + 0.0 - 199.9 kPa	0.0 - 199.9 kPa + 0 - 700 kPa	0.00 - 19.99 kPa + 0.0 - 199.9 kPa	0.0 - 199.9 kPa + 0 - 1000 kPa
in H_2O	0.00 - 10.05"	0.00 - 52.28"	0.0 - 199.9" + 0 - 804"	0.0 - 199.9" + 0 - 2815"	0.0 - 199.9" + 0 - 804"	0.0 - 199.9" + 0 - 4022"
m H_2O	0.00 - 19.99 mm + 0.0 - 255.3 mm	0.0 - 199.9 mm + 0 - 1320 mm	0.00 - 20.43 m	0.00 - 19.99 m + 0.0 - 71.5 m	0.00 - 20.43 m	0.00 - 19.99 m + 0.0 - 102.2 m
in Hg	0.00 - 0.73"	0.00 - 3.83"	0.00 - 59.00"	0.00 - 19.99" + 0.0 - 206.7"	0.00 - 59.00"	0.00 - 19.99" + 0 - 295.3"
m Hg	0.00 - 18.75 mm	0.00 - 19.99 mm + 0.0 - 97.5 mm	0.00 - 19.99 cm + 0.0 - 150.0 cm	0.00 - 5.25 m	0.00 - 19.99 cm + 0.0 - 150.0 cm	0.00 - 7.50m
PSI	0.00 - 0.36 psi	0.00 - 1.88 psi	0.00 - 29.00 psi	0.00 - 19.99 psi + 0.0 - 101.5 psi	0.00 - 29.00 psi	0.00 - 19.99 psi + 0.0 - 145.0 psi

2000P Series option table

	2000P	2001P	2002P	2003P	2005P	2020P	2021P	2022P	2023P	2024P†	2025P	2026P	2080P	2081P	2082P	2083P	2084P†	2085P	2086P
Operating Range:	25mbar	130mbar	2bar	7bar	2bar absolute	25mbar	130mbar	2bar	7bar	External transducer	2bar absolute	0-10bar	25mbar	130mbar	2bar	7bar	External transducer	2bar absolute	0-10bar
Overrange:	350mbar	750mbar	4bar	10bar	4bar absolute	350mbar	750mbar	4bar	10bar	*	4bar absolute	21bar	350mbar	750mbar	4bar	10bar	*	4bar absolute	21bar
Backlight:	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Out of range:	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Zeroing:	●	●	●	●		●	●	●	●	●		●	●	●	●	●	●		●
Hold:	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Smoothing:						●	●	●	●	●	●	●	●	●	●	●	●	●	●
Units of Pressure:						●	●	●	●	●	●	●	●	●	●	●	●	●	●
Range Lock:						●	●	●	●	●	●	●	●	●	●	●	●	●	●
Max/Min:						●	●	●	●	●	●	●	●	●	●	●	●	●	●
Zeroing Absolute:					●						●							●	
Averaging:													●	●	●	●	●	●	●
Leak Testing:													●	●	●	●	●	●	●
Logging:													●	●	●	●	●	●	●

** Depends on external pressure transducer (not supplied with instrument). Power supplied: +5 Volts (±0.25 Volts equivalent to 5%) †10.00 to 50.00 bar (in 5 bar steps) with 1 to 50mV (in 1mV steps). 55.0 to 500.0 bar (in 5 bar steps) with 10 to 50 mV (in 1mV steps).*

Taking the pressure out of data collection and analysis

The 2000 Series models 2080P, 2081P, 2082P, 2083P, 2084P, 2085P and 2086P feature special logging functions that enable readings to be taken, stored, retrieved and downloaded in the shortest possible time. This reduces the risk of clerical errors and saves writing and keying-in time when analysis is needed.

Logging on Demand

Logging On Demand allows readings to be stored when required, with the ability to add a four digit reference number (including decimal point) to each reading, and record the date and time each reading is taken. This function is excellent for helping you cut down on paperwork and clerical errors. It is ideally suited to tasks where you wish to maintain a record of the time and date when a pressure was taken.

Preset Interval Logging

Preset Interval Logging lets you determine the frequency at which readings are taken. Once the instrument has been set, readings are taken automatically at the interval you decide (from once every minute, to once every 24 hours), providing an excellent means of trouble-shooting and examining trends over a given period of time.

With Preset Interval Logging, you really can "set it, forget it", as the instrument will continue logging until a maximum of 250 readings are taken or your data is downloaded.

Data Analysis

Data can be viewed and analysed direct from the magnified display. By simply pressing a few keys you can scroll through your readings with ease.

You may then download the data to a PC or Epson compatible printer via Digitron's DigiLink (see over for further details). Data can then be analysed using our DigiLog Windows™ software.

DigiLink

Intrinsically safe digital manometer **P200IS**

P200IS

- Certified to EEx ia IIC T5
- High accuracy
- Choice of pressure ranges
- Robust case
- Clear, digital display
- Battery life 300 hours plus
- Battery low indication
- Auto-range
- Case proven! Tough enclosure construction adds to durability
- Quality electronics give excellent reliability
- Easy to use

Intrinsically Safe digital manometers

Five of the Digitron manometer range can be supplied IS certified as individual units or in kits complete with carry case, handpump (generating either 5bar gauge or 750mbar vacuum) and hose. All instruments are certified for use in inflammable or explosive atmospheres up to and including Zone 0.

Model	Lo Range	Hi Range
P200UL	0-19.99mbar	0-100mbar
P200L	0-199.9mbar	0-500mbar
P200M	0-199.9mbar	0-1000mbar
P200H	0-199.9mbar	0-2000mbar
P200AH	0-199.9mbar	0-2000mbar absolute

Ex - actly! where safety and accuracy matter

The P200IS is the best in pressure measurement technology for the user involved with dangerous environments.

Certified by BASEEFA (EECS), the UK's leading Intrinsic Safety approvals house, the units are classified as EEx ia IIC T5.

This certification is equivalent to EN 50 014 (1977) +A1 to A5, and EN50 020 (1977) +a1 and A2. The units are ready for site use anywhere, immediately.

P200 instruments are suitable for use with non-corrosive, non-ionic liquids and gases. Liquid pressure can be measured using an air buffer.

Case proven

Their tough construction makes them extremely durable and, therefore, functional in not only hazardous atmospheres but also rough environments. The rubber boot may be used to enhance the instruments' durability.

Specification

Resolution	'Lo' denotes low range/high resolution 'Hi' denotes high range/low resolution	
Accuracy (Combined Hysterisis and linearity)	0.2% F.S. (15-25°C / 59°F to 77°F) 0.3% F.S. (0-15°C, 25-50°C / 32°F to 59°F, 77°F to 122°F)	
Maximum Over Pressure (Max line pressure)	P200UL.is P200L.is & P200M.is P200H. is P200AH. is	1000mbar 2000mbar 4000mbar 4000mbar
Operating Temperature (ambient)	0°C to +40°C / +32°F to +104°F	
Temperature Compensation	0°C to +40°C / +32°F to +104°F	
Battery Type	9V 6F22 (PP3S) or other zinc carbon equivalents with I.S. approval	
Battery Life	300 hours +	
Display	12.7mm / 0.5" custom LCD with automatic legend display	
Low Battery Check	'BAT' shows on display	
Environmental Specifications	IP64 Standard	
Dimensions	140 x 70 x 26mm / 5.5 x 2.8 x 1.0"	
Weight	250g / 8.8oz	
Other Features	Zero control. Engineering units show on display (standard calibrations). Connections: Push fit plastic tubing 4mm / 0.157" I.D., 6mm / 0.236" O.D. nominal, retaining nut supplied.	

Digitron. The professional's choice.

Data download with DigiLink

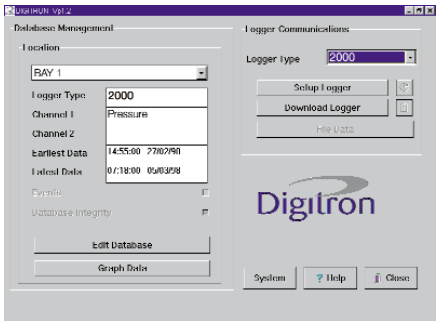
Access to stored information is gained via Digitron's infrared DigiLink, which is designed to give users of the 2000 Series a quick and simple means of retrieving and downloading data,

Information can be output direct to either an Epson compatible printer for immediate study, or downloaded to a PC for more detailed analysis.

Data analysis with DigiLog for Windows™

Digitron have created a Windows™ software package, DigiLog, (suitable for all Digitron logging instruments) enabling information to be put into spreadsheets and charts for incorporating into reports and other documents. Even separate reports from different units can be merged to produce one report.

PC analysis really couldn't be any simpler. By following the software's simple menu instructions, you will find it easy to view and manipulate information to your individual requirements. For example, once a logging session is complete, all you need do in order to gain access to information stored within the instrument is position the PC's cursor over the "Retrieve Data" menu icon, click once and press a button on the instrument. Information is then automatically transferred, via the infrared link and stored within the computer.



You may display the retrieved information in graph format by positioning the cursor over the "Display As Graphical Data" menu icon and click again. You can access the graph produced to highlight certain areas or key data points, prior to printing or exporting the graph into other software packages.

Furthermore, all graphs show the identification number of the instrument used, enabling data to be cross-checked against calibration records helping to ensure full traceability.

* *Minimum PC requirements: 66Mhz, 486, 8Mb RAM, Windows 3.1X, Windows 95 or Windows 98.*

Complete logging and measurement solutions

SIFAM Instruments Limited manufacture a world class range of instruments that measure, monitor and calibrate; pressure, airflow, temperature, humidity, gas emissions, volts, amps and strain. There is a range of catalogues that give the full story – just ask for the one that covers your area of interest, ie Temperature, Pressure, RH, and Probes.

Globally, we work in partnership with an ever-increasing variety of customers to protect the public from everyday hazards and improve the environment.

This concern for the environment is continued through to biodegradable packaging. Furthermore, our products are manufactured in plants where the use of ozone depleting substances, such as CFC's, have been eliminated ahead of internationally-set target dates.
All Digitron products are manufactured to the highest quality and carry a minimum of one year's warranty.
Our Quality Management System is assessed to ISO 9001 and all products carry the CE mark.

If you require more information on our products please contact the Digitron Sales team.

LLOYD'S REGISTER QUALITY ASSURANCE ISO9001

As part of our policy of continuous product improvement we reserve the right to change specifications at any time.

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