

# XP2i-DP

## A rugged Wet/Wet Differential!



### Features

**High accuracy, long term vacuum measurement**

**Wet/wet differential transducer**

Customizable for panel mounting or portable configurations

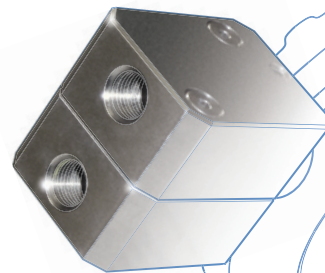
Programmable for custom engineering units

Optional pressure datalogging capability

Hardshell carrying case

Easy to use buttons

Backlit (LCD) display



#### High accuracy, long term vacuum measurement

The XP2i-DP is a combination of leading edge technology, double-sided isolated differential pressure sensing and rugged industrial design.

The unique design of the differential pressure sensor integrated into the XP2i-DP allows for long term vacuum use without fear of permanent damage to the sensing chip or sensing package.

#### Wet/wet differential transducer

Both sides of the sensor can withstand fluids. The differential pressure sensor is a double-sided, media compatible, piezoresistive silicon pressure sensor packaged in a stainless steel housing. The sensing package utilizes oil to transfer pressure from the two stainless steel diaphragms to the sensing element. It is designed for high performance, low pressure applications where differential pressure measurement is required. The stainless steel package makes it suitable for use with liquids and corrosive gases.

## ► Specifications, Options, Software & Accessories

### ► Differential Pressure Accuracy

20% to 100% of Full Scale:  $\pm(0.1\%$  of Reading).

0 to 20% of Full Scale:  $\pm(0.02\%$  of Full Scale).

Static line pressure effect is 0.0003 PSI per lowest applied test pressure.  
Continuous use at high vacuum permissible.

### ► Pressure Ranges

See Ordering Information below.

**Note:** Density of water conversion can be selected via the keypad: 4°C, 60°F or 20°C /68°F.

### ► Temperature

Operating & Compensated: -10°C to 50°C (14°F to 122°F).

Storage: -40°C to 75°C (-40°F to 167°F)

### ► Backlit Display

Description: 5 Full (seven segment) digits.

Display Rate: 3 readings per second.

Numerical Display Height: 16.5mm (0.65")  
single line display.

### ► Connections

Pressure Connections: 1/8" Female NPT

Electrical Connection: DB9, RS-232 (environmentally sealed)

Do not use the RS-232 connector in a hazardous area.

### ► Media Compatibility

Liquids and gases compatible with 300 Series stainless steel and buna-n (o-ring).

### ► Power

Battery: Three size AA (LR6) batteries.

Battery Life: 1500 hours typical (alkaline battery).

The unit is intrinsically safe only if powered by Rayovac Maximum Plus, Energizer E91, Energizer EN91, or Duracell MN 1500 batteries. Replace batteries only in non-hazardous locations.

### ► Enclosure

Description: Aluminum alloy.

Dimensions: 165.1 mm (6.5")H x 112 mm (4.4")W x 33 mm (1.3")D

Weight: 915g (2.0 lbs), including batteries.

## ► Ordering Information

PSI	bar	kPa	Over-pressure (+/- ports)	Pressure Units and Resolution								
				PSI	kg/cm <sup>2</sup>	inch Hg	inch H <sub>2</sub> O	mm Hg	mm H <sub>2</sub> O	kPa	bar	mbar
15PSI	1BAR	100KPA	6.5x / 3.0x	0.001	0.0001	0.001	0.01	0.01	1	0.01	0.0001	0.1
100PSI	7BAR	700KPA	2.0x / 2.0x	0.01	0.0001	0.01	0.1	0.1	1	0.01	0.0001	0.1

### ► Sample Part Number

1BARXP2I-DP-RP ..... ATEX/IECEX/CSA approved 1 bar gauge with differential pressure sensor and rear port fitting option.

### ► Sensor

Permanent fill dual diaphragm seal (filled with Dow Corning 200).

Max Static Line Pressure: 100 PSI

### ► Intrinsic Safety



Exia Intrinsically Safe, Class I, Division 1  
Groups A, B, C & D, Temperature Code T4



EEx ia IIC T4, KEMA 04 ATEX 1053 X  
CE 0344 Ex II 1 G



IECEX Scheme Compliant  
IECEX CSA 05.0001X

### ► Options

**Panel Mounting (option F4):** A panel mount flange allows an XP2i-DP to fit in a 4½" gauge cutout • An XP2i-DP with the F4 option can also be adapted to 6 or 8½" gauge cutouts.

**Rear Port Fitting (option RP):** The rear port fitting may be ordered separately, but is included automatically with the panel mount flange option (F4).

### ► Software

**ConfigXP:** Free gauge calibration software available as a download from our website at [www.xp2i.com](http://www.xp2i.com).

**DataLoggerXP:** A firmware upgrade to transform an intrinsically safe XP2i-DP into a pressure datalogging device.

### ► Accessories

RS232 Cable: 6' (2m) • P/N **2400**

USB to RS232 Adapter • P/N **3313**

Flange Adapter Kit: 6" (152mm) • P/N **2955**

Flange Adapter Kit: 8½" (216mm) • P/N **2956**

AC Adapter Kit • P/N **2984**

Protective Boot • P/N **3696**

**WARNING:** Not assessed for use in hazardous atmosphere.



Specifications include all effects of linearity, hysteresis, repeatability, temperature, and stability for one year.

Patent pending

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