

# XP2i-DP Differential Pressure Gauge kPa

## DIFFERENTIAL PRESSURE ACCURACY

0 to 20% of Range:  $\pm(0.02\% \text{ of Full Scale} + \text{Static Line Effect}^*)$   
 20% to 110% of Range:  $\pm(0.1\% \text{ of Reading} + \text{Static Line Effect}^*)$

\*Static Line Effect: 0.002 kPa/kPa lowest static pressure.

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

For continuous vacuum use, connect to the right (-) port marked "Vacuum this side."

## OPERATING TEMPERATURE

Temperature Range:  $-10 \text{ to } 50^\circ \text{C}$  ( $14 \text{ to } 122^\circ \text{F}$ )

Non-condensing. No change in accuracy over operating temperature range. Gauge must be zeroed to achieve rated specification.

## DISPLAY

Screen: **5.5 digits, 16.9 mm (0.67") high**  
 Display Rate: **4 readings/second (standard)**  
**8 readings/second (PSV mode)**

LCD readable in sunlight with bright backlight.

PSV mode is intended for Pressure Safety Valve testing, and requires software to enable. (ConfigXP is a free download from [ametekcalibration.com](http://ametekcalibration.com).)

## POWER

3 x AA: **1500 hours, typical**  
 Ultra Low Power: **> 1 year, typical\*\***

Uses 3 alkaline AA (LR6) batteries. Use of backlight and/or RS232 reduces operating time.

Optional AC power supply available.

For hazardous location product warnings, refer to the operation manual.

\*\*20 minute recording interval or greater in LTS mode.

## DATA/COMMUNICATION

Digital Interface: **RS232, DB-9F**

Free Labview® drivers and programming instructions are available for download from website.

For hazardous location product warnings, refer to the operation manual.

## DATALOGGING

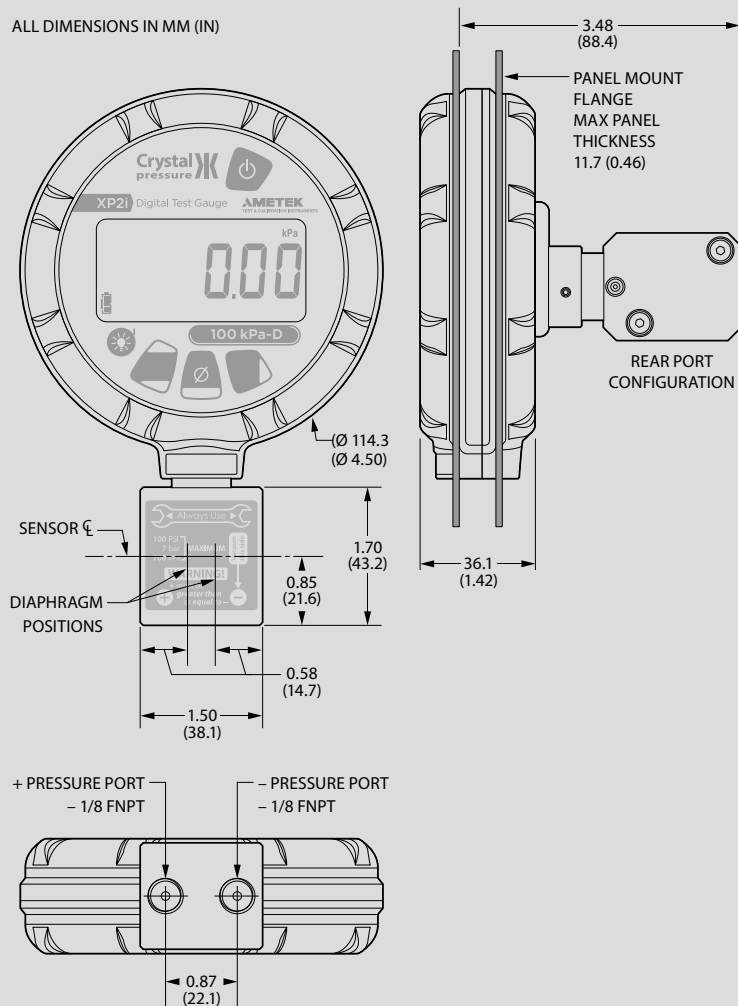
Capacity: **32 000 data points**  
 Storage Type: **Non-volatile flash memory**  
 Minimum Interval: **1 second**  
 Maximum Interval: **18 hours**  
 Min. Event Duration: **250 mS\*\*\***

DataLoggerXP Firmware Update may be purchased at time of order, or an Upgrade Package may be purchased afterward.

Software available for download from our website. Compatible with 32 & 64 bit Windows 7, Vista, and XP (32 bit only). Produces csv files, or uses Excel template files (samples included) to automatically format and graph data.

\*\*\* Logging Type - Average with Peaks.

ALL DIMENSIONS IN MM (IN)



# XP2i-DP Differential Pressure Gauge kPa

## ENCLOSURE

Weight: **915 g (2.0 lbs)**  
Rating: **IP67**  
Housing: **Diecast aluminum**  
Keypad and Labels: **UV Resistant Polyester**

*Weight includes batteries.*  
*Submersible to 1 m for 30 minutes [IEC 60529].*  
*Nickel plating over low copper, marine grade aluminum.*  
*LCD protected from impact damage by 1.5 mm (0.06") thick polycarbonate lens under polyester window.*  
*Skydrol® compatible.*  
*U.S. Patent D612277*

## SENSOR

Wetted Materials: **300 Series stainless steel and buna-n (internal o-ring)**  
Diaphragm Seal Fluid: **Dow Corning® 200**  
Connection: **1/8" Female NPT**  
Max. Static Line Pressure: **700 kPa**

*All welded, with a permanently filled diaphragm seal.*  
*Optional connection on back.*

## STORAGE TEMPERATURE

Temperature Range: **-40 to 75° C (-40 to 167° F)**

*Batteries should be removed if stored for more than one month.*

## SPECIAL FEATURES

The following requires the use of our free **ConfigXP** software

User Defined Unit: **Allows the user to define and display any pressure units not included, or to use the gauge to display force, level, or other pressure related parameters. Reduce or increase displayed resolution.**

PSV Mode: **Intended for pressure safety valve / burst disk testing, 8 readings per second. Captures point at which valve opens, as well as reseal pressure.**

Averaging: **Smooths unsteady readings (1 to 10 samples).**

Remove: **Unwanted pressure units from Units button.**

Disable: **Peak pressure button.**

Limit or Disable: **Zero button.**

Password Protect: **Changes to configuration or calibration factor(s).**

Save: **Configuration to a file.**

Copy: **Configuration can be copied to other gauges.**

## CERTIFICATIONS



**II 1G Ex ia IIC T4/T3 Ga**  
**FTZU 12 ATEX 0048X**



**Ex ia IIC T4/T3 Ga**  
**IECEx FTZU 12.0009X**



Exia Intrinsically Safe and Non-incendive for Hazardous Locations: Class I, Division 1, Groups A, B, C and D, Temperature Code T4 or T3C. For hazardous location product warnings, refer to the operation manual.



XP2i-DP complies with the Electromagnetic Compatibility and the Pressure Equipment Directives.



XP2i-DP complies with the Australian Radiocommunications (Electromagnetic Compatibility) Standard 2008.



XP2i-DP is approved for use as a portable test instrument for Marine use and complies with Det Norsjke Veritas' Rules for Classification of Ships, High Speed & Light Craft and Offshore Standards.

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Page 2 of 3

**AMETEK®**  
SENSORS, TEST & CALIBRATION

## RANGE & RESOLUTION TABLE

P/N	Over pressure (+/- ports)	Display Resolution			
		kPa	MPa	bar	mbar
100KPA	6.5 x / 3.0x	0.01	0.00001	0.0001	0.1
700KPA	2.0x / 2.0x	0.01	0.00001	0.0001	0.1

## ORDERING INFORMATION

P/N	Model	Connection: Location	Panel Mount?	Data-logging?
_____	XP2i-DP	_____	_____	_____
	Standard:	Bottom: (omit)	No: (omit)	No: (omit)
	Options:	Back: -RP	Yes: -F4	Yes: -DL
		"omit" for -F4 panel mount	Includes -RP option	

### SAMPLE PART NUMBERS

100KPAXP2i-DP . . . . . 100 kPa differential gauge

700KPAXP2i-DP-DL . . . . . 700 kPa differential gauge, with the DataLoggerXP option

## STANDARD DELIVERY

- XP2i-DP Gauge
- Online Manual
- ISO 17025 Accredited Calibration Certificate, NIST Traceable
- Velcro Strap (except the -RP and -F4 options)
- 3 x AA Batteries
- DB9 Cover
- CPF Connection Fitting (ranges 10 000 psi and lower)

## ACCESSORIES

Protective Boot P/N 3696  
Magnetic Hanging Strap P/N 5203  
AC Adapter Kit P/N 2984  
USB B to RS232 DB9M Cable P/N 3313  
Waterproof Carrying Case P/N 2888

## COMPLEMENTARY PRODUCTS

Crystal Engineering offers a wide range of products that work with the XP2i-DP:

- [Fittings that connect without tools, safely and without leaks](#)
- [Lightweight, super flexible high pressure hoses](#)
- [Pneumatic hand pumps](#)
- [Hydraulic hand pumps](#)
- [Portable pressure comparators](#)
- [Software, for the quickest way to calibrate pressure transmitters and gauges](#)

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