Crystal pressure

XP2i-DP DifferentialPressure Gauge kPa

DIFFERENTIAL PRESSURE ACCURACY

0 to 20% of Range: **±(0.02% of Full Scale + Static Line Effect*)**

20% to 110% of Range: **±(0.1% of Reading + 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 to 50° C (14 to 122° 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 XP2i.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.
***WARNING:** Do not use AC power supply in hazardous locations.*

*****20 minute recording interval or greater in LT5 mode.*

DATA/COMMUNICATION

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

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

***WARNING:** Do not use RS232 in hazardous locations.*

DATALOGGING

Capacity: **32 000 data points**

Storage Type: **Non-volatile flash memory**

Minimum Interval: **1 second**

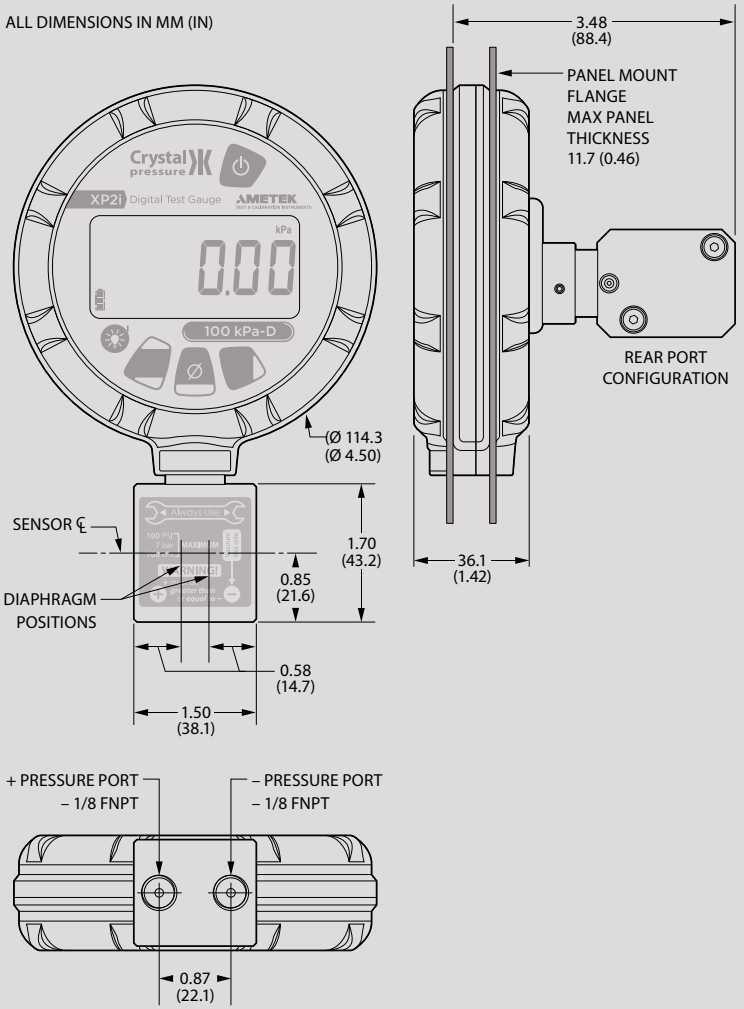
Maximum Interval: **18 hours**

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.*



ENCLOSURE

Weight:	**915 g (2.0 lbs)**	*Weight includes batteries.*
Rating:	**IP67**	*Submersible to 1 m for 30 minutes [IEC 60529].*
Housing:	**Diecast aluminum**	*Nickel plating over low copper, marine grade aluminum.*
Keypad and Labels:	**UV Resistant Polyester**	*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)**	*All welded, with a permanently filled diaphragm seal.*
		Optional connection on back.
Diaphragm Seal Fluid:	**Dow Corning® 200**	
Connection:	**1/8" Female NPT**	
Max. Static Line Pressure:	**700 kPa**	

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 reseat 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

This product conforms to:
EN 60079-0: 2009 | EN 60079-11: 2012 | EN 60079-26: 2007

Ex ia IIC T4/T3 Ga
IECEx FTZU 12.0009X

This product conforms to:
IEC 60079-0: 2011 | IEC 60079-11: 2011-06 | IEC 60079-26: 2006

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.

The instrument was tested against **AS/NZS 3584**, C-tick EMC/EMI requirements.

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.

RANGE & RESOLUTION TABLE

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

ACCESSORIES

Protective Boot P/N **3696**

Protect your XP2i-DP even more from harsh environments with our form fitting chemical resistant thermoplastic boot (Skydrol fluid compatible).

AC Adapter Kit P/N **2984**

For continous use applications without battery replacement concern. Input voltage: 100 - 240V, 50-60 Hz. Includes all available international plugs. (Not for use in hazardous locations.)

COMPLIMENTARY 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
- Complete Calibration Kits
- Pneumatic hand pump
- Hydraulic hand pump
- Portable pressure comparators
- Software, for the quickest way to calibrate pressure transmitters and gauges

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