

HIGH SPEED USB OUTPUT PRESSURE TRANSDUCER CONNECT DIRECTLY TO YOUR COMPUTER

High Speed
1000 Updates/per
Second



Gage and Absolute Pressures

10 inH₂O to 5000 psi (25 mb to 345 bar)

Vacuum and Compound Ranges

10 inH₂O to 15 psi

Barometric and Differential Pressure Ranges

PX409-USBH Series



Standard

- ✓ 1000 Readings/Second
- ✓ Micro-Machined Silicon Sensor
- ✓ 316L SS Wetted Parts
- ✓ High $\pm 0.08\%$ BSL Accuracy
- ✓ Excellent Long Term Stability
- ✓ USB 2.0 and Below Compatible
- ✓ Standard USB Connector Termination
- ✓ Shock and Vibration Rated
- ✓ Ruggedized with Secondary Containment

The PX409 High Speed USBH Series connects directly to your computer. Free PC software makes data logging and charting your readings a simple task. Also included are .NET and Labview drivers and a command set for command line access. The micro-machined silicon design are ideal for pressure or level applications in laboratory, test platforms, or bio/pharmaceutical applications as well as industrial applications that require a rugged, high accuracy transducer. The micro-machined silicon sensor provides a very stable transducer with exceptional high accuracy of $\pm 0.08\%$ and a broad compensated range of -29 to 85°C (-20 to 185°F). The modular construction allows for fast delivery of most configurations and fittings. Delivery is typically stock to 1 week!

SPECIFICATIONS

Accuracy: 0.08% BSL (linearity, hysteresis and repeatability combined)

Resolution: Up to 5.5 significant figures

Temperature Compensation (Over Compensated Range):

Span: Range > 5 psi: $\pm 0.5\%$

Range ≤ 5 psi: $\pm 1.0\%$

Zero: Range > 5 psi: $\pm 0.5\%$

Range ≤ 5 psi: $\pm 1.0\%$

Minimum Isolation:

100 M Ω @ 50 Vdc case to sensor

2 M Ω @ 50 Vdc case to output terminations

Pressure Cycles: 1 million, minimum

Long Term Stability (1-Year): $\pm 0.1\%$ full scale typical

A to D Conversion: 24-bit

Shock: 50 g, 11 mS half sine, vertical and horizontal axis

Vibration: 5-2000-5 Hz, 30 minute cycle, Curve L, Mil-Spec 810 figure 514-2-2, vertical and horizontal axis

Bandwidth: DC to 1000 updates per second typical ($\pm 3\%$)

Power Consumption: 0.35 W typical

Fast
Delivery!

PX409-015GUSBH
shown actual size.

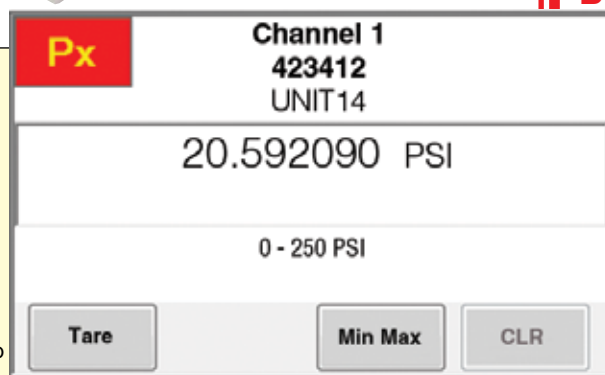


USB OUTPUT
PRESSURE TRANSDUCERS

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FREE SOFTWARE INCLUDED!

Each unit includes free software that converts your PC into a datalogger so readings can be saved and later exported to a spread sheet for review and graphing. Also included are .NET and Labview drivers, and a command set for command line access.



CE Compliant: Meets industrial emissions and immunity EN61326

Environmental Protection: IP65

Secondary Containment Vacuum and Pressure:

10 inH₂O to 5 psi: to 1000 psi

15 to 1000 psi: to 3000 psi

1500 to 5000 psi: to 15,000 psi

Secondary Containment Absolute Pressure:

5 to 1000 psi: to 6000 psi

1500 to 5000 psi: to 15,000 psi

Wetted Parts: 316L stainless steel

Weight: 200 g (7 oz)

Overpressure Gage Pressure:

10 inH₂O: 10 times span

1 psi: 6 times span

2.5 psi to 3500 psi: 4 times span

5000 psi: 15,000 psi maximum

Overpressure Absolute Pressure:

5 psia: 6 times span

15 psia to 3500 psia: 4 times span

5000 psia: 15000 psi maximum

Operating Temperature Range: -40 to 85°C (-40 to 185°F)

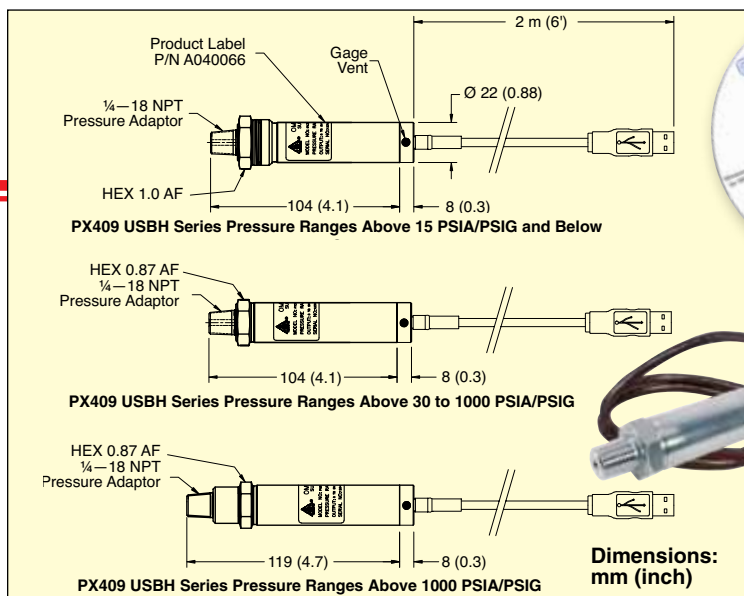
Compensated Temperature:

Ranges >5 psi: -29 to 85°C (-20 to 185°F)

Ranges ≤ 5 psi: -17 to 85°C (0 to 185°F)

Metric threads and
ranges available.

**Free PC
Software
Included!**



**Dimensions:
mm (inch)**

Laptop not included.

To Order

RANGE		GAGE PRESSURE MODEL NO.	ABSOLUTE PRESSURE MODEL NO.
psi	bar		
GAGE AND ABSOLUTE PRESSURE			
0 to 10 inH ₂ O	0 to 25 mb	PX409-10WGUSBH	—
0 to 1	0 to 69 mb	PX409-001GUSBH	—
0 to 2.5	0 to 172 mb	PX409-2.5GUSBH	—
0 to 5	0 to 345 mb	PX409-005GUSBH	—
0 to 15	0 to 1	PX409-015GUSBH	PX409-015AUSBH
0 to 30	0 to 2.1	PX409-030GUSBH	PX409-030AUSBH
0 to 50	0 to 3.4	PX409-050GUSBH	PX409-050AUSBH
0 to 100	0 to 6.9	PX409-100GUSBH	PX409-100AUSBH
0 to 150	0 to 10.3	PX409-150GUSBH	PX409-150AUSBH
0 to 250	0 to 17.2	PX409-250GUSBH	PX409-250AUSBH
0 to 500	0 to 34.5	PX409-500GUSBH	PX409-500AUSBH
0 to 750	0 to 51.7	PX409-750GUSBH	PX409-750AUSBH
0 to 1000	0 to 69	PX409-1.0KGUSBH	PX409-1.0KAUSBH
0 to 1500	0 to 103	PX409-1.5KGUSBH	PX409-1.5KAUSBH
0 to 2500	0 to 172	PX409-2.5KGUSBH	PX409-2.5KAUSBH
0 to 3500	0 to 241	PX409-3.5KGUSBH	PX409-3.5KAUSBH
0 to 5000	0 to 345	PX409-5.0KGUSBH	PX409-5.0KAUSBH
VACUUM RANGES (NEGATIVE GAGE PRESSURE)			
0 to -10 inH ₂ O	0 to -25 mb	PX409-10WVUSBH	—
0 to -1 psi	0 to -69 mb	PX409-001VUSBH	—
0 to -2.5 psi	0 to -172 mb	PX409-2.5VUSBH	—
0 to -5 psi	0 to -345 mb	PX409-005VUSBH	—
0 to -15 psi	0 to -1	PX409-015VUSBH	—
COMPOUND GAGE RANGES			
± 10 inH ₂ O	± 25 mb	PX409-10WCGUSBH	—
± 1 psi	± 69 mb	PX409-001CGUSBH	—
± 2.5 psi	± 172 mb	PX409-2.5CGUSBH	—
± 5 psi	± 345 mb	PX409-005CGUSBH	—
± 15 psi	± 1	PX409-015CGUSBH	—
BAROMETRIC RANGES (ABSOLUTE PRESSURE)			
0 to 32 inHg	0 to 1100 mb	—	PX409-32BUSBH
16 to 32 inHg	550 to 1100 mb	—	PX409-16BUSBH
26 to 32 inHg	880 to 1100 mb	—	PX409-26BUSBH

Comes complete with 5-point NIST traceable calibration certificate, CD with digital readout and logging software, Labview and .NET drivers, and command set.

Ordering Examples: PX409-100GUSBH, 2 m (6') cable with USB termination, 100 psig range, USB output.

PX409-16BUSBH, 2 m (6') cable with USB termination, 16 to 32 inHg absolute barometric range, USB output.

HIGH SPEED USB DIFFERENTIAL PRESSURE TRANSDUCERS



SPECIFICATIONS DIFFERENTIAL MODELS

Ranges: Unidirectional 10 inH₂O to 1000 psi

Line/Static Pressure: 500 psi maximum applied to both sides simultaneously

Proof Pressure (Differential):

10 inH₂O range: 10 times range

1 psi range: 6 times range

2.5 to 750 psi ranges: 4 times range

1000 psi range: 3 times range

Hi Side Containment Pressure (Differential):

Ranges 10 inH₂O to 5 psi: to 1000 psi

Ranges 15 to 1000 psi: to 3000 psi

Weight: 227 g (8 oz)

Line Pressure: 500 psi maximum

Fitting: 1/4-18 NPT male



FREE SOFTWARE INCLUDED!

Each unit includes free software that converts your PC into a datalogger so readings can be saved and later exported to a spread sheet for review and graphing. Also included are .NET and Labview drivers, and a command set for command line access.

To Order

RANGE		MODEL NO.
psi	bar	
WET/DRY DIFFERENTIAL PRESSURE MODELS		
0 to 10 inH ₂ O	0 to 25.00 mb	PX409-10WDDUUSBH
0 to 1	0 to 69.00 mb	PX409-001DDUUSBH
0 to 2.5	0 to 172.0 mb	PX409-2.5DDUUSBH
0 to 5	0 to 345.0 mb	PX409-005DDUUSBH
0 to 15	0 to 1.000	PX409-015DDUUSBH
0 to 30	0 to 2.100	PX409-030DDUUSBH
0 to 50	0 to 3.400	PX409-050DDUUSBH
0 to 100	0 to 6.900	PX409-100DDUUSBH
0 to 150	0 to 10.30	PX409-150DDUUSBH
0 to 250	0 to 17.20	PX409-250DDUUSBH
0 to 500	0 to 34.50	PX409-500DDUUSBH
0 to 750	0 to 51.70	PX409-750DDUUSBH
0 to 1000	0 to 69.00	PX409-1.0KDDUUSBH
WET/WET DIFFERENTIAL PRESSURE MODELS		
0 to 10 inH ₂ O	0 to 25.00 mb	PX409-10WDWUUSBH
0 to 1	0 to 69.00 mb	PX409-001DWUUSBH
0 to 2.5	0 to 172.0 mb	PX409-2.5DWUUSBH
0 to 5	0 to 345.0 mb	PX409-005DWUUSBH
0 to 15	0 to 1.000	PX409-015DWUUSBH
0 to 30	0 to 2.100	PX409-030DWUUSBH
0 to 50	0 to 3.400	PX409-050DWUUSBH
0 to 100	0 to 6.900	PX409-100DWUUSBH
0 to 150	0 to 10.30	PX409-150DWUUSBH
0 to 250	0 to 17.20	PX409-250DWUUSBH
0 to 500	0 to 34.50	PX409-500DWUUSBH
0 to 750	0 to 51.70	PX409-750DWUUSBH
0 to 1000	0 to 69.00	PX409-1.0KDWUUSBH

2 m (6')
integral
USB cable
connects
directly to
your PC.

PX409-015DWUUSBH
15 psid range,
USB output,
shown smaller
than actual size.

See PX409 for dimensions.

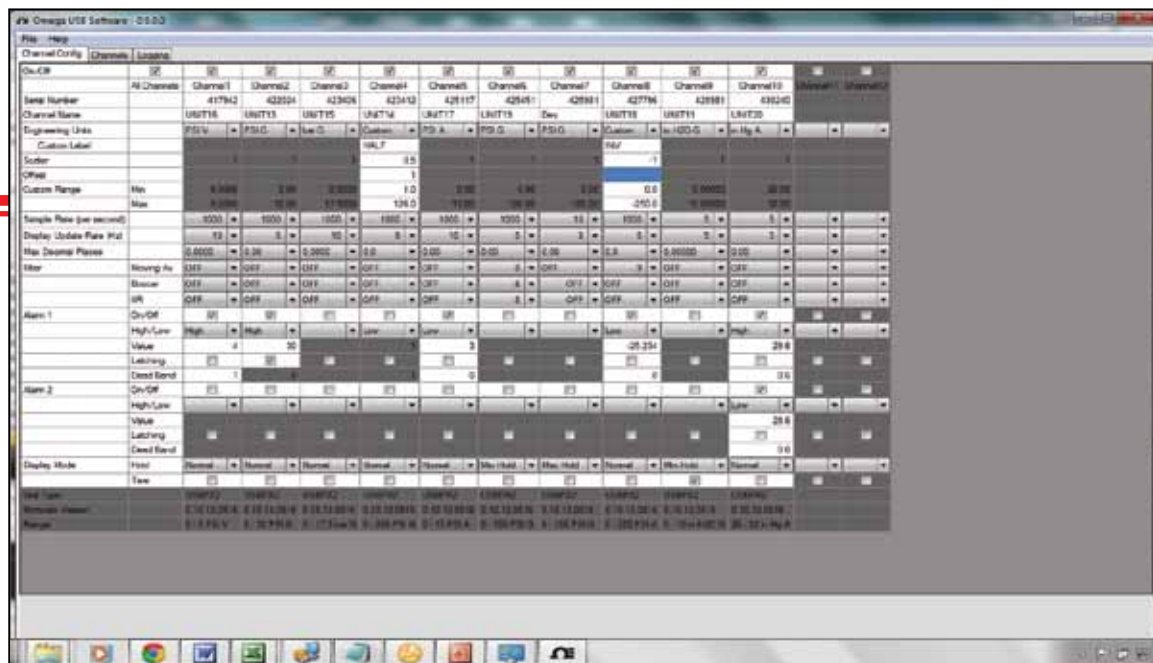
Comes complete with 5-point NIST traceable calibration certificate, CD with digital readout and logging software, Labview and .NET drivers, and command set.

Ordering Examples: PX409-100DDUUSBH, Wet/Dry 0 to 100 psi differential high speed USB output transducer.

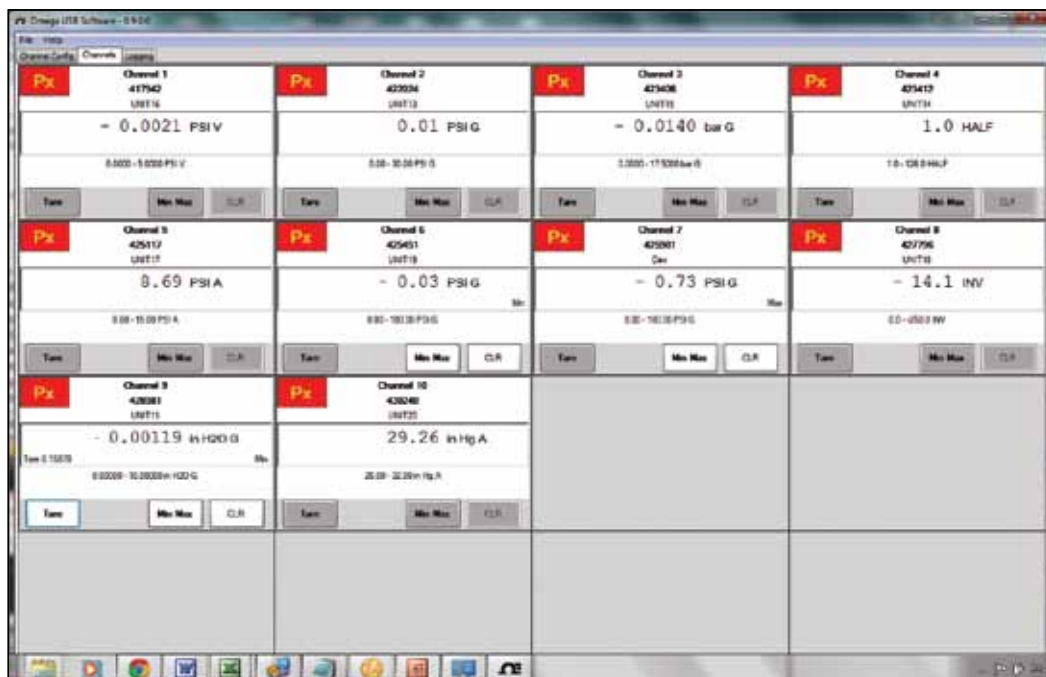
PX409-2.5DWUUSBH, Wet/Wet 0 to 2.5 psi differential high speed USB output transducer.



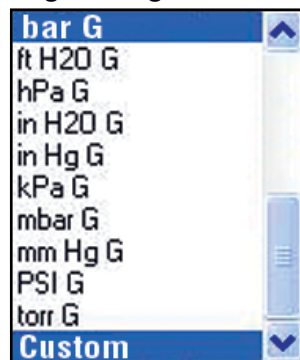
Channel Configure Window:
Quickly configure all parameters for all 12 channels on one screen. .NET drivers and Labview drivers and examples are included, as well as a command set for command line access.



Channels Window:
Display 12 channels of data simultaneously, each with two configurable user alarms, three data filters, tare, minimum/maximum and choice of sample rates.



Engineering Units:



Logging Window:
Log data for up to 12 channels simultaneously to .csv files, which can be viewed and manipulated with spreadsheet or analysis programs.

