

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
B

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

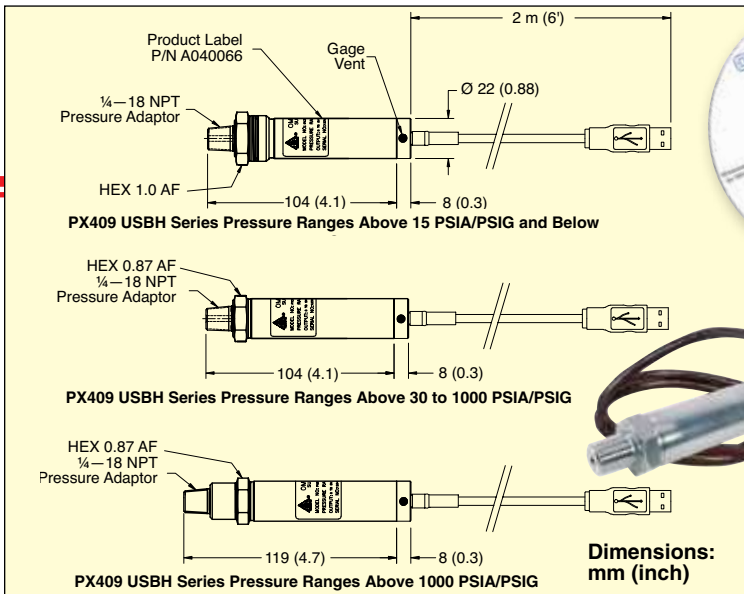
Operating Temperature Range: -40 to 85°C (-40 to 185°F)

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



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 spreadsheet for review and graphing. Also included are .NET and Labview drivers, and a command set for command line access.

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: ¼-18 NPT male



To Order

RANGE		
psi	bar	MODEL NO.
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

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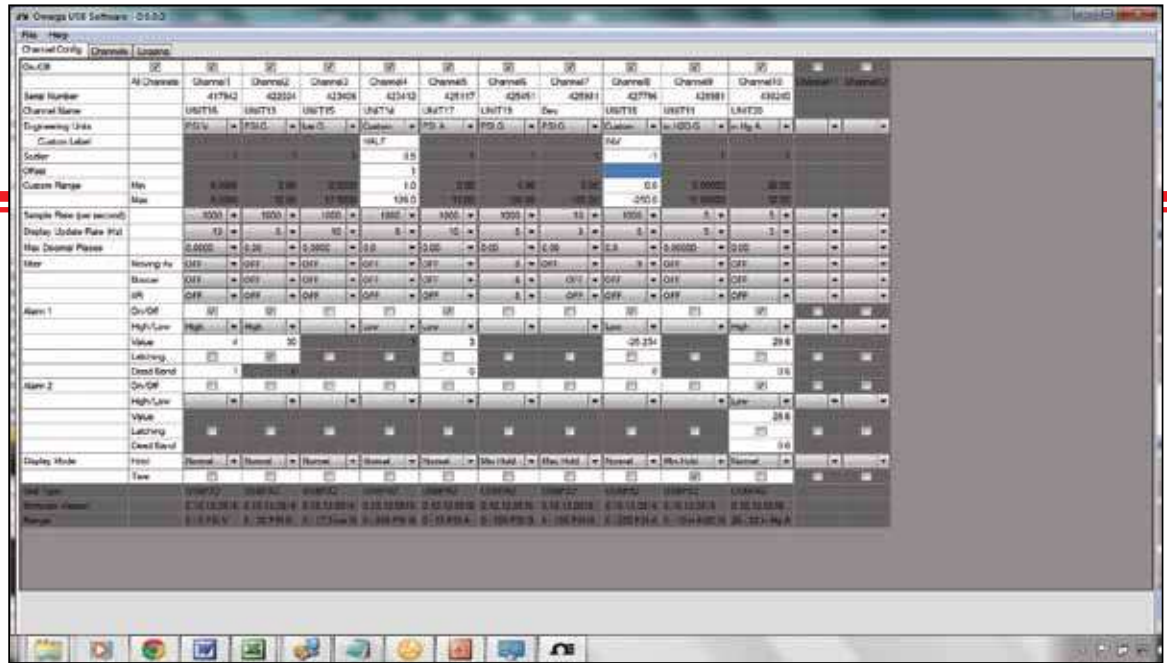
Ordering Examples: PX409-100DDUUSBH, Wet/Dry 0 to 100 psi differential high speed USB output transducer.

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

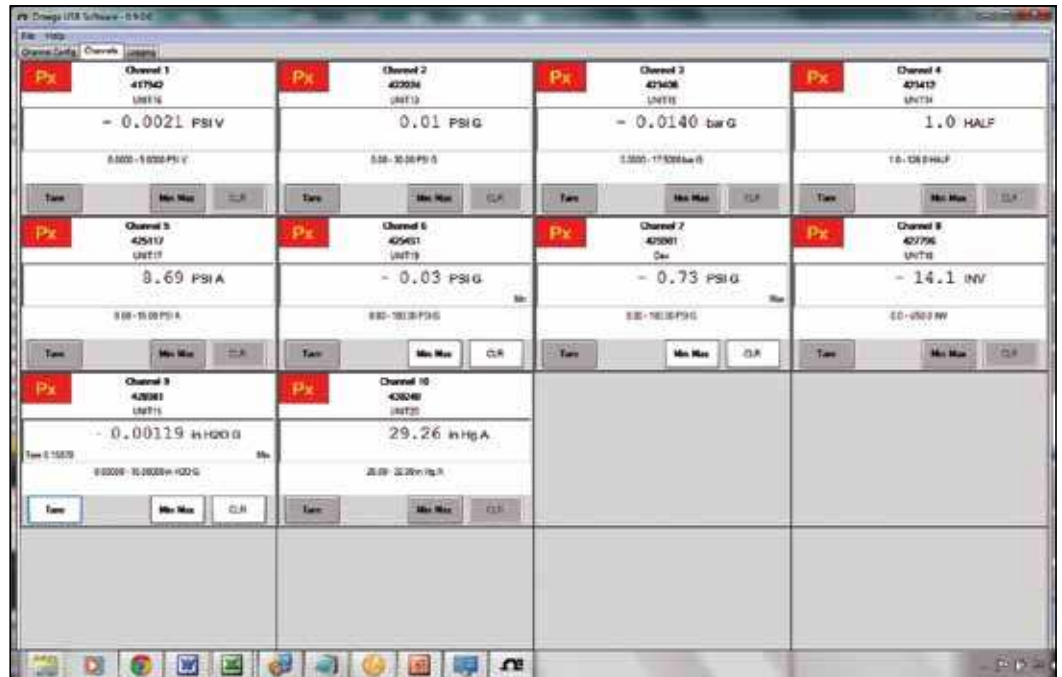
PRESSURE TRANSDUCERS USB OUTPUT B



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.

