



# USB OUTPUT PRESSURE TRANSDUCER CONNECT DIRECTLY TO YOUR COMPUTER

High Speed  
1000 Updates/per  
Second

**Gage and Absolute Pressures**  
**10 inH<sub>2</sub>O to 5000 psi**  
**(25 mb to 345 bar)**  
**Vacuum and Compound Ranges**  
**10 inH<sub>2</sub>O to 15 psi**  
**Barometric Ranges**

## PX409 USB Series



Standard

- ✓ 1000 Updates per second
- ✓ Micro-Machined Silicon Sensor
- ✓ 316L SS Wetted Parts
- ✓ High  $\pm 0.08\%$  Accuracy FS
- ✓ Fast Delivery! Stock to 1-Week on Most Models
- ✓ Excellent Long Term Stability
- ✓ USB 2.0 and Below Compatible
- ✓ Standard USB Connector Termination
- ✓ Shock and Vibration Rated
- ✓ Ruggedized with Secondary Containment

The PX409 USB Series connects directly to your computer. Free software makes data logging and charting your readings a simple task. Also included are drivers for popular laboratory programs plus some web applications. 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  $\pm 0.08\%$  typical 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 typical (linearity, hysteresis and repeatability combined)

**Temperature Compensation (Over Compensated Range):**

**Span:** Range > 5 psi:  $\pm 0.5\%$   
Range  $\leq 5$  psi:  $\pm 1.0\%$

**Zero:** Range > 5 psi:  $\pm 0.5\%$   
Range  $\leq 5$  psi:  $\pm 1.0\%$

**Minimum Isolation Between Case and, Output Terminations:**  
100 M $\Omega$  @ 50 Vdc (2 M $\Omega$  after EMI filter)

**Pressure Cycles:** 1 million, minimum

**Long Term Stability (1-Year):**  $\pm 0.1\%$  FS typical

**A to D Conversion:** 24-bit

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

PX409-015VUSB  
shown actual size.

Cable style.

Metric thread  
adaptors available

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

### FREE SOFTWARE INCLUDED!

Each unit includes free software that converts your PC into a strip chart recorder or data logger so readings can be saved and later printed or exported to a spreadsheet file. Also included are software drivers for some of the most popular Laboratory programs.

**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

**CE Compliant:** Meets industrial emissions and immunity EN61326

**Environmental Protection:** IP65

**Secondary Containment Vacuum and Pressure:**

10 inH<sub>2</sub>O 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 SS

**Weight:** 200 g (7 oz)

**Overpressure Gage Pressure:**

10 inH<sub>2</sub>O: 10 times span

1 psi: 6 times span

2.5 psi to 3500 psi: 4 times span

5000 psi: 15,000 psi max

**Overpressure Absolute Pressure:**

5 psia: 6 times span

15 psia to 3500 psia: 4 times span

5000 psia: 15000 psi max

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

**Compensated Temperature:**

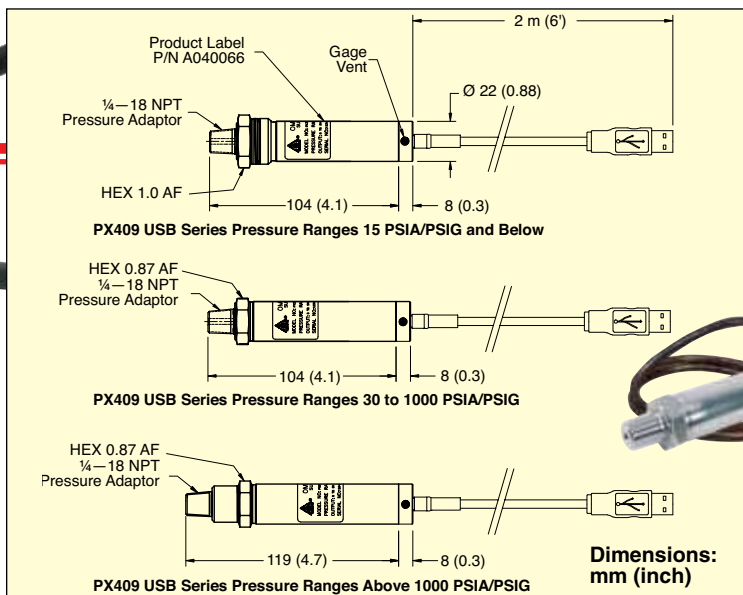
Ranges >5 psi: -29 to 85°C (-20 to 185°F)

Ranges  $\leq 5$  psi: -17 to 85°C (0 to 185°F)

# USB OUTPUT PRESSURE TRANSDUCER



**Free Software Included!**



Laptop not included.

USB OUTPUT  
PRESSURE TRANSDUCERS

**B**

**To Order Visit [newportUS.com/px409-usb](http://newportUS.com/px409-usb) for Pricing and Details**

RANGE/RESOLUTION		GAGE PRESSURE MODEL NO.	ABSOLUTE PRESSURE MODEL NO.
psi	bar		
GAGE PRESSURE			
0 to 10.00 inH <sub>2</sub> O	0 to 25.00 mb	PX409-10WGUSB	—
0 to 1.000	0 to 69.00 mb	PX409-001GUSB	—
0 to 2.500	0 to 172.0 mb	PX409-2.5GUSB	—
0 to 5.000	0 to 345.0 mb	PX409-005GUSB	—
0 to 15.00	0 to 1.000	PX409-015GUSB	PX409-015AUSB
0 to 30.00	0 to 2.100	PX409-030GUSB	PX409-030AUSB
0 to 50.00	0 to 3.400	PX409-050GUSB	PX409-050AUSB
0 to 100.0	0 to 6.900	PX409-100GUSB	PX409-100AUSB
0 to 150.0	0 to 10.30	PX409-150GUSB	PX409-150AUSB
0 to 250.0	0 to 17.20	PX409-250GUSB	PX409-250AUSB
0 to 500.0	0 to 34.50	PX409-500GUSB	PX409-500AUSB
0 to 750.0	0 to 51.70	PX409-600GUSB	PX409-600AUSB
0 to 1000	0 to 69.00	PX409-1.0KGUSB	PX409-1.0KAUSB
0 to 1500	0 to 103.0	PX409-1.5KGUSB	PX409-1.5KAUSB
0 to 2500	0 to 172.0	PX409-2.5KGUSB	PX409-2.5KAUSB
0 to 3500	0 to 241.0	PX409-3.5KGUSB	PX409-3.5KAUSB
0 to 5000	0 to 345.0	PX409-5.0KGUSB	PX409-5.0KAUSB
VACUUM RANGES (NEGATIVE GAGE PRESSURE)			
0 to -10.00 inH <sub>2</sub> O	0 to -25.00 mb	PX409-10WVUSB	—
0 to -1.00 psi	0 to -69.00 mb	PX409-001VUSB	—
0 to -2.500 psi	0 to -172.0 mb	PX409-2.5VUSB	—
0 to -5.00 psi	0 to -345.0 mb	PX409-005VUSB	—
0 to -15.00 psi	0 to -1.000	PX409-015VUSB	—
COMPOUND GAGE RANGES			
± 10.00 inH <sub>2</sub> O	± 25.00 mb	PX409-10WCGUSB	—
± 1.000 psi	± 69.00 mb	PX409-001CGUSB	—
± 2.500 psi	± 172.0 mb	PX409-2.5CGUSB	—
± 5.000 psi	± 345.0 mb	PX409-005CGUSB	—
± 15.00 psi	± 1.000	PX409-015CGUSB	—
BAROMETRIC RANGES (ABSOLUTE PRESSURE)			
0 to 32.00 inHg	0 to 1100 mb	—	PX409-32BUSB
16.00 to 32.00 inHg	550.0 to 1100 mb	—	PX409-16BUSB
26.00 to 32.00 inHg	880.0 to 1100 mb	—	PX409-26BUSB

Comes complete with 5-point NIST traceable calibration certificate, CD with charting and graphic software plus drivers.

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

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