BX8
8-CHANNEL DIGITAL AMPLIFIER

- 8-Channel Synchronized Sampling
- Internal Calculation of Axis Load Values for 6-Axis Sensors
- Active Scaling of Analog Outputs according to Internal Calculations
- ±5V, ±10V, 4-20mA, & 0-20 mA Outputs
- 48K Samples/Sec/Channel
- 24-Bit Internal Resolution
- USB Connection to PC
- Includes Graphing and Logging Software
- Strain Gage, mV/V, ±10VDC, and PT1000 Temperature Inputs
- Excitation Sense
- Full, ½, and ¼ Bridge Compatible with 120, 350, and 1000 ohm Bridge Completion
- TEDS Compatible
- ZERO Button for 8-Channel Simultaneous Tare
- 16 Digital I/O
- Galvanic Isolation: Analog Input, Analog Output, Digital I/O, USB

OPTIONS

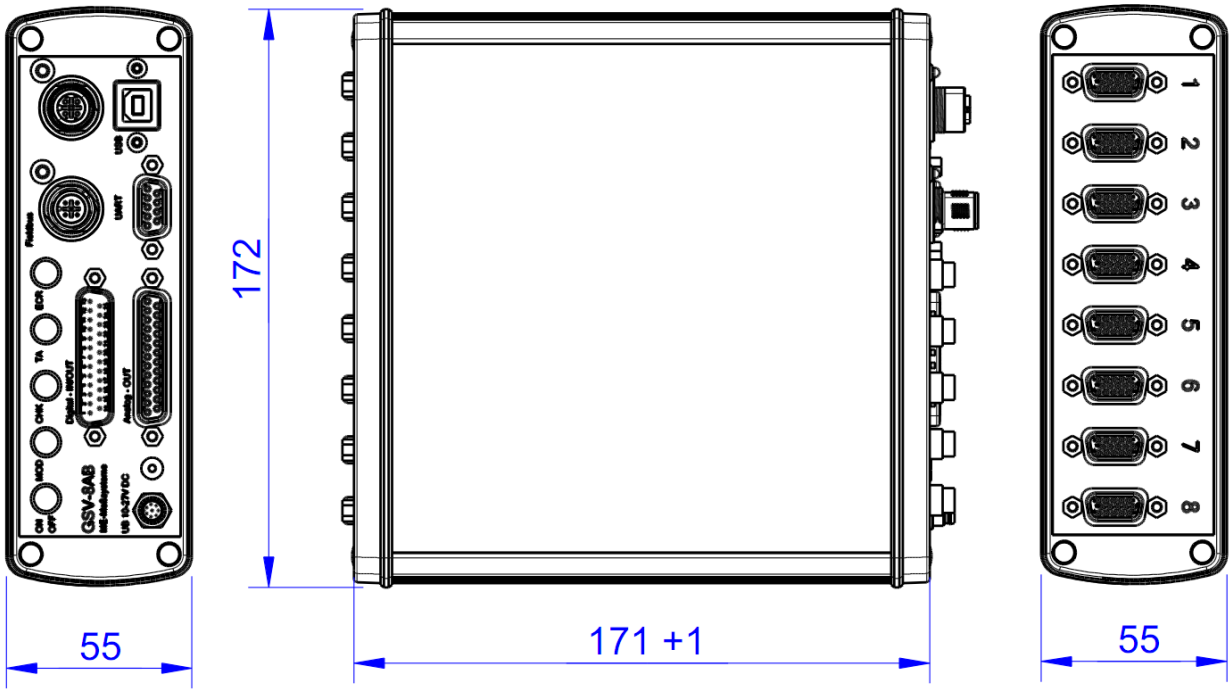
EtherCat
CANbus/CANopen

The BX8 is the newest addition to Interface's family of measurement systems. Easy enough for the inexperienced user but powerful enough for the sophisticated test engineer, anyone can be up and measuring in minutes. Designed specifically for use with mV/V output sensors such as Force, Torque and Pressure along with PT1000 thermocouples and +/-10V output sensors, the BX8 puts Graphing, Logging and Display capabilities at your fingertips. The BX8 also includes ¼ and ½ bridge completion for seamless integration of strain gage measurements. Eight independent, user configurable, 16-bit scalable analog outputs can be connected to external devices.

The BX8 is ideally suited for use with 6-axis sensors requiring axis load calculations. The sensor coefficient matrix can be loaded internally into the BX8 via software interface and the outputs are actively scaled according to the calculations. All channels are sampled simultaneously and fully synchronized. When purchased with a 6-axis sensor, the system will arrive pre-configured and ready to use.

Dimensions

Model BX8-HD15



interface
ADVANCED FORCE MEASUREMENT
7401 East Butherus Drive
Scottsdale, Arizona 85260 USA
Phone: 480.948.5555
Toll-Free: 800.947.5598
contact@interfaceforce.com

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Specifications

Model	BX8
PERFORMANCE	
Accuracy Class - %	0.05
Nonlinearity - % range	+/- 0.02
Sample Rate - per channel - samples/second	48,000 Synchronous
Digital Output Data Rate - values/second	0.75 to 48,000
Resolution - bit	24
Resolution – noise limited	>100,000 parts @ 10/s data rate >20,000 parts @ 2000/s data rate >9,400 parts @ 12,000/s data rate
Signal Input Filter (-3dB)	28 Hz, 850 Hz, 11,4 kHz 1st order, switchable
Digital Output Filters (-3dB) Individually configurable for each channel	0.18 Hz to 15 kHz Includes High pass, Low pass, Band pass and Band stop.
SENSOR INPUTS	
Input Channels	8
Bridge Input Range - mV/V	2.0, 3.5, or 7.0
Bridge Input Impedance - MΩ	> 20 (300 pF)
Bridge Excitation Voltage - VDC	8.75, 5, or 2.5
Bridge Excitation Current - mA	135
Bridge Input Type	4 or 6-wire
Bridge Completion	¼ and ½ 120, 350, or 1000 Ω
CMMR - dB - DC - 100 Hz	>120 >100
Analog Input Range - VDC	+/-10V
Analog Input resistance - MΩ	10
PT1000 thermocouple - Ω	1000
ANALOG OUTPUTS	
Output types - individually selectable per channel	±10V, ±5V, 0-10V, 0-5V, 4-20mA, 0-20mA
Analog Output Scaling	Via software, Active scaling capability
Analog Output Resolution	16-bit over scaled range
Analog Output Update Rate – Hz	Up to 48K
DIGITAL INPUTS/OUTPUTS	
DIOs	16 Configurable
USB - 8 channel packets	16-bit integer, 48K/sec, raw data 24-bit integer, 24K/sec, raw data 32-bit floating point, 9.6K/sec, scaled data 6-axis sensor: 32-bit floating point, 6K/sec, scaled data
ENVIRONMENTAL	
Operating Temperature Range - °C	0 to +50
Storage Temperature Range - °C	-20 to +70
POWER	
Supply - VDC	12-28
Supply - Watt	< 12
MECHANICAL	
Dimensions - L x W x H - mm	172 x 171 x 55
Weight - kg	1.3
Protection Level	IP 64
Connection Type	15-Pin High Density D-Sub Connectors

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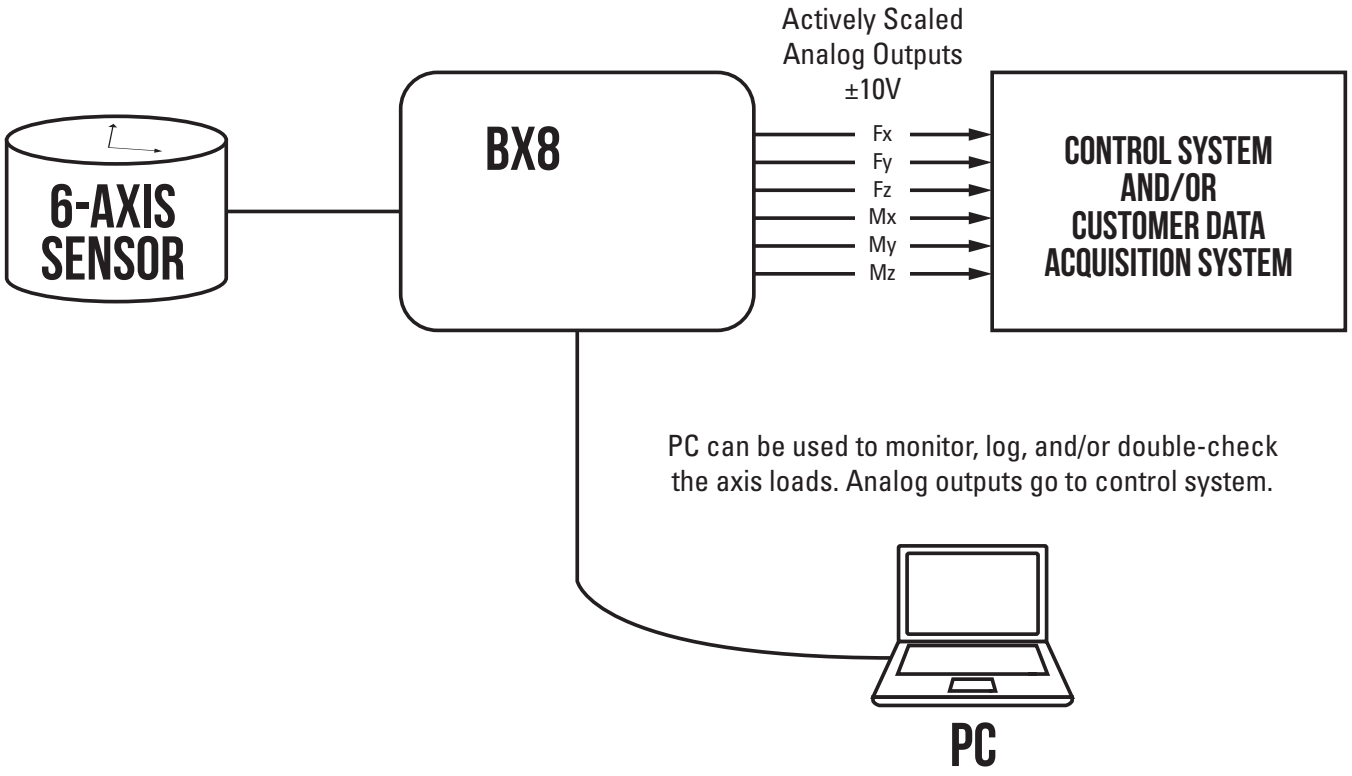
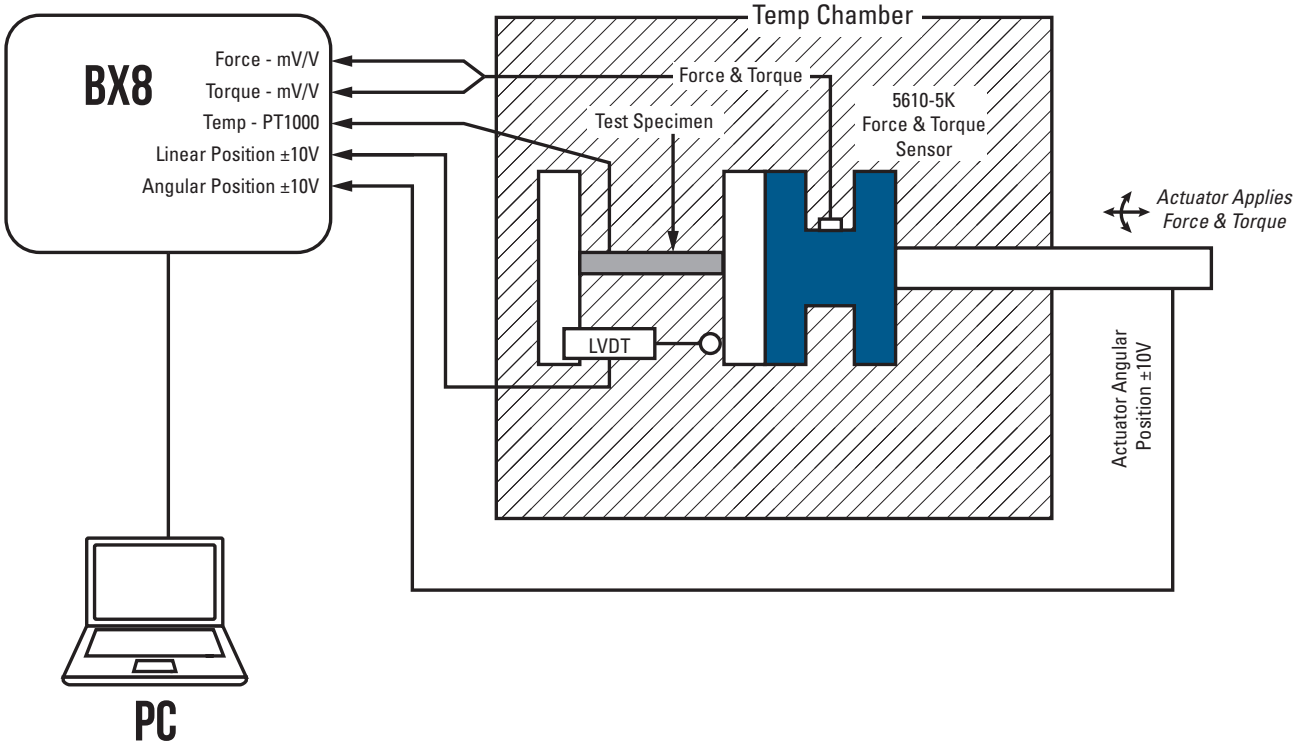
Sample Application



Note: Connection to PC NOT REQUIRED for axis calculations.

Sample Application



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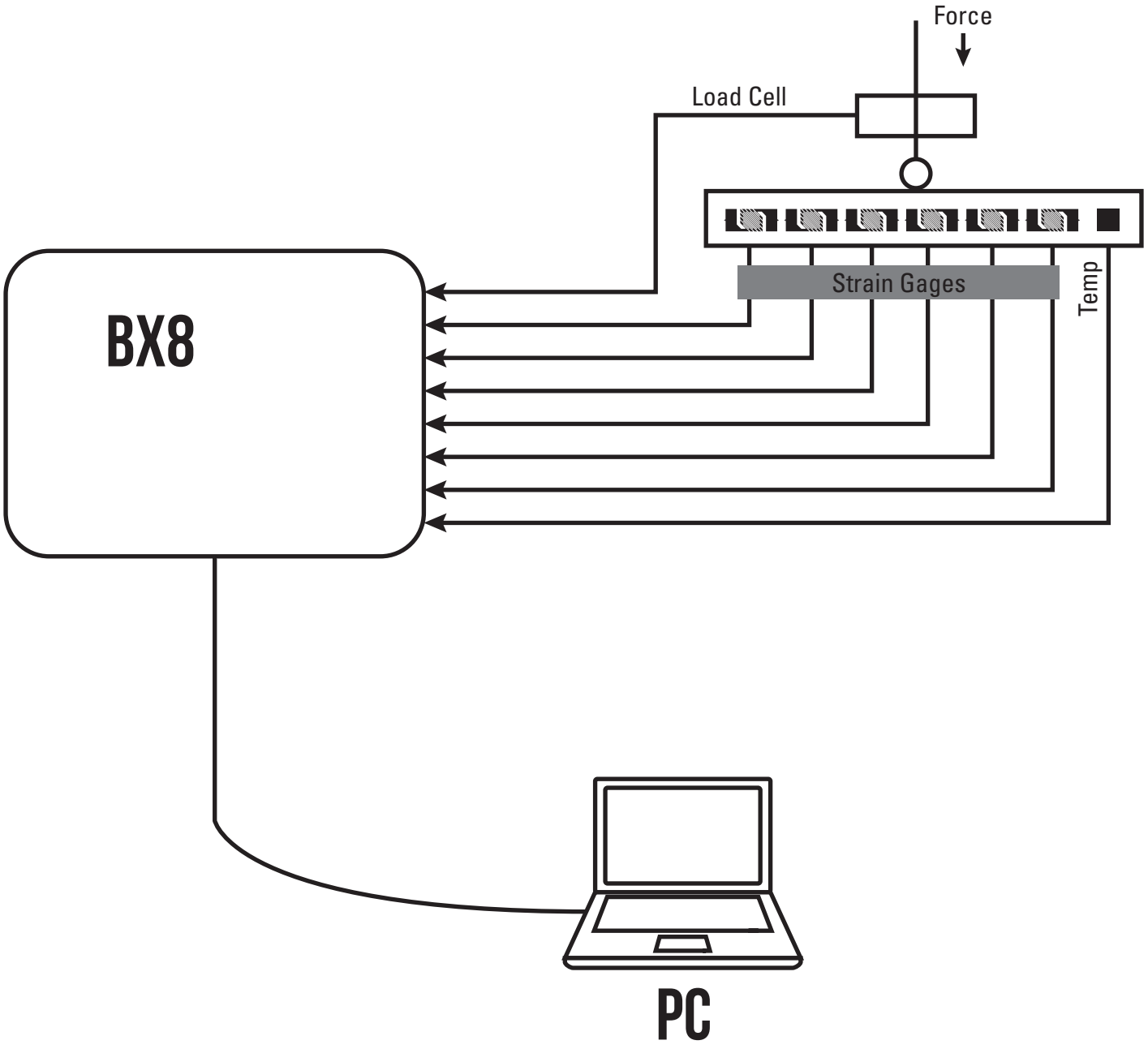

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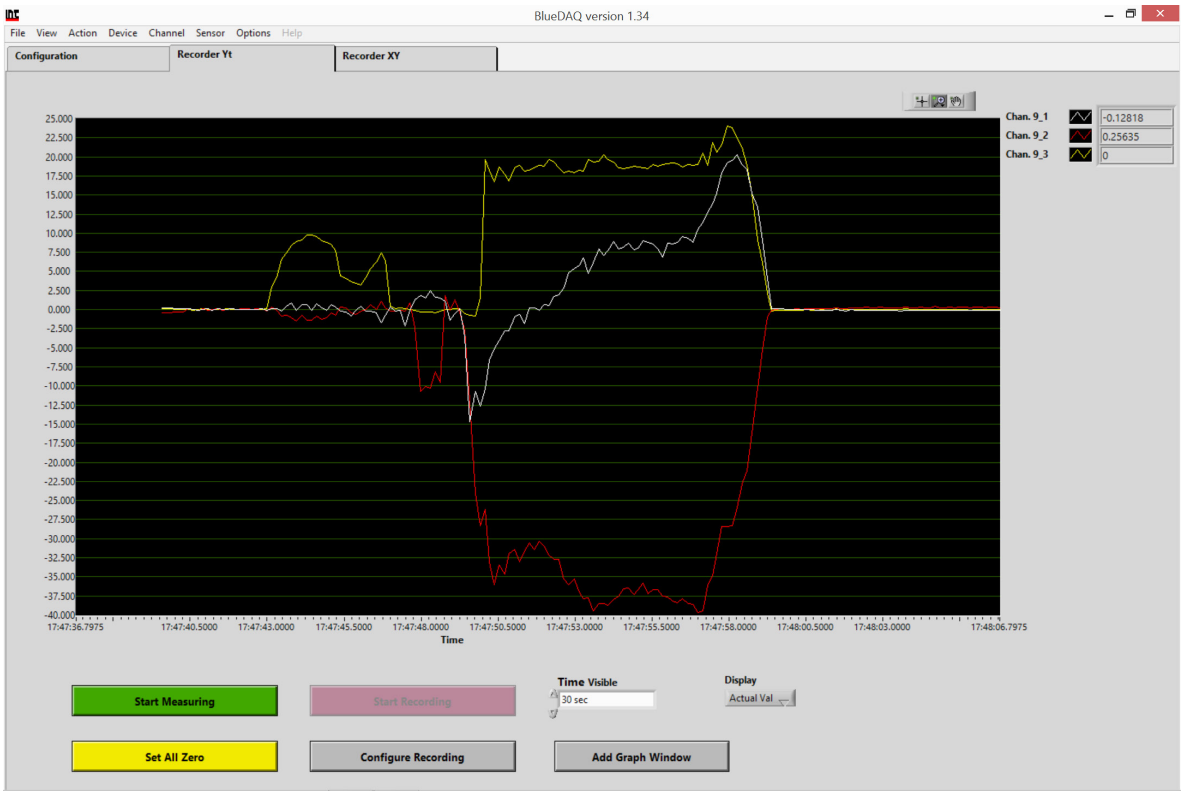
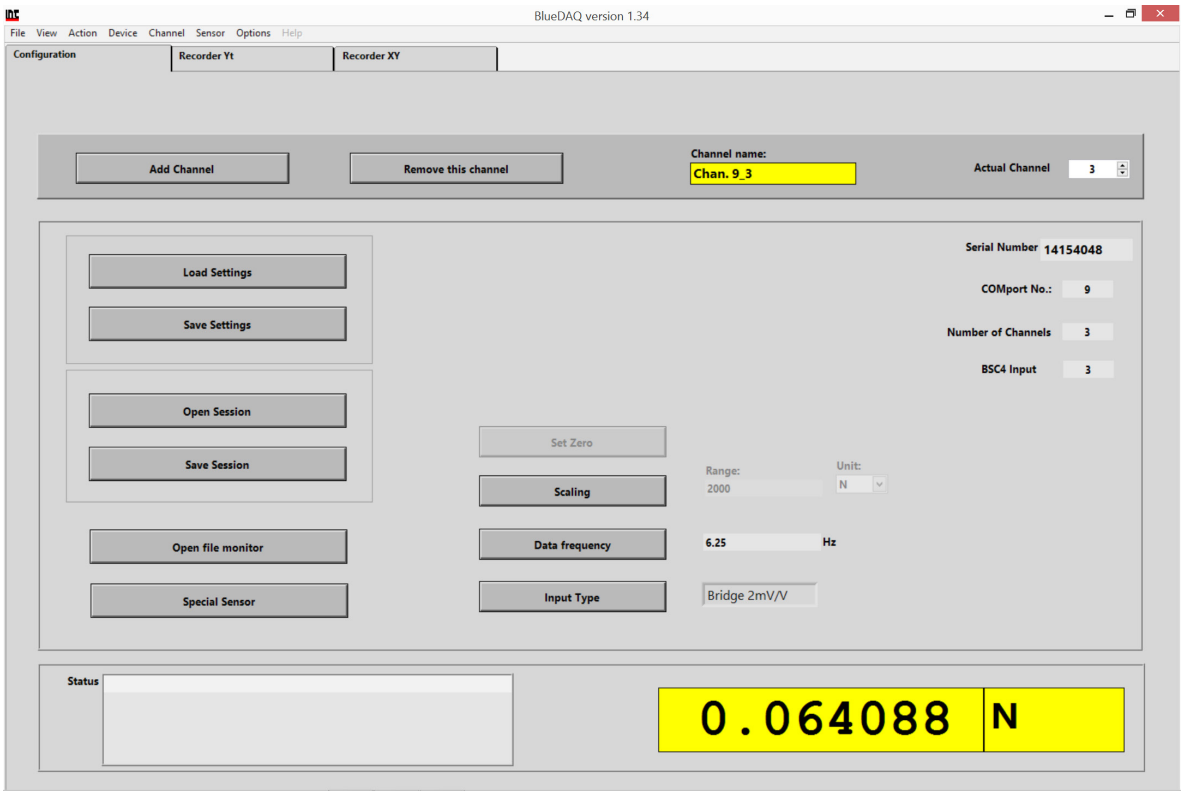
BlueDAQ Software





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