INTERFACE
FORCE MEASUREMENT SOLUTIONS

BX8-HD15 INTERFACE BLUEDAQ SERIES DATA ACQUISITION SYSTEM (U.S. & METRIC)

FEATURES & BENEFITS

- 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, and 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 PT 1000 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

STANDARD CONFIGURATION

MODEL BX8-HD15 (Shown)
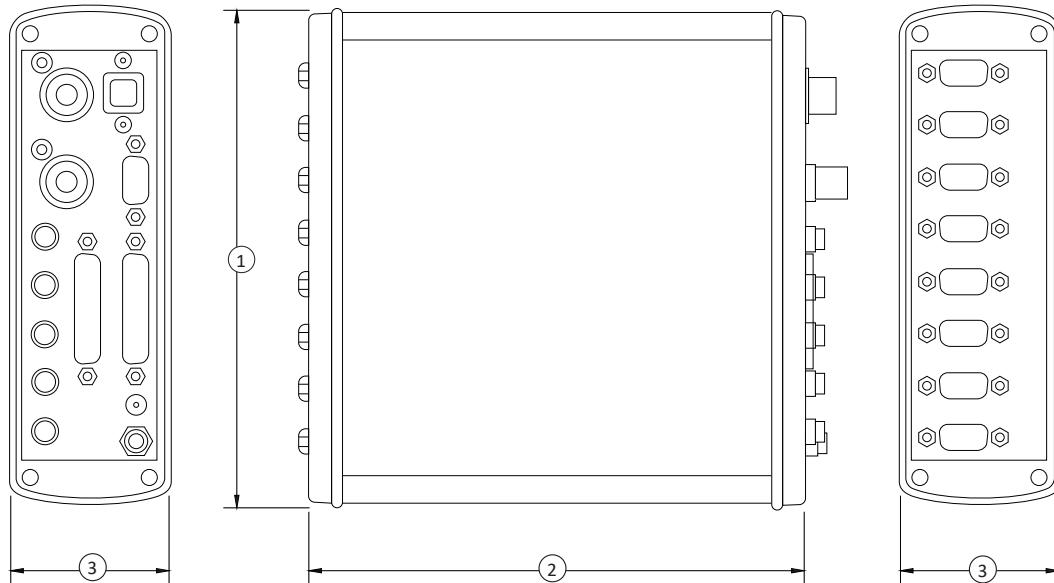
DIMENSIONS

1		2		3	
mm	in	mm	in	mm	in
172	6.8	172	6.8	55	2.2

Datasheet BX8-HD15 v2.502-04-2021

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SPECIFICATIONS

PERFORMANCE	
Accuracy Class – %	0.05
Nonlinearity – % range	±0.02
Sample Rate – per channel – samples/sec	48,000 synchronous
Digital Output Data Rate – values/sec	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) – Hz	28, 850, 11.4k 1st order, switchable
Digital Onput Filter – (3dB) – Hz Individually configurable for each channel	0.18 to 15K 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 – (pF)	> 20 (300)
Bridge Excitation Voltage – VDC	8.75, 5, or 2.5
Bridge Excitation Current – mA	135
Bridge Input Type – wire	4 or 6
Bridge Completion – Ω	¼ and ½, 120, 350 or 1000
CMMR – dB – DC – 100 Hz	>120, >100
Analog Input Range – VDC	±10
Analog Input Resistance – MΩ	10
PT1000 thermocouple – Ω	1000

ANALOG OUTPUTS	
Outputs types – V – mA Individually configurable for each channel	±10, ±5, 0-5, 0-10, 4-20, 0-20
Analog Output Scaling	Via software, active scaling capability
Analog Output Resolution – bit	16 over scaled range
Analog Output Update Rate – Hz	Up to 48K

DIGITAL INPUTS/OUTPUTS	
DIOs	16 configurable
USB – 8 channel packets – bit – /sec	16 integer, 48K, raw data 24 integer, 24K, raw data 32 floating point, 9.6K, scaled data 6-axis sensor: 32 floating point, 6K scaled data

ENVIRONMENTAL		
Operating Temperature Range	°C	0 to +50
	°F	+32 to +122
Storage Temperature Range	°C	-20 to +70
	°F	-4 to +158

POWER	
Supply – VDC	12-28
Supply – Watt	< 12

MECHANICAL		
Dimensions (L x W x H)	mm	172 x 171 x 55
	in	6.8 x 6.7 x 2.2
Weight	kg	1.3
	lbs	2.87
Protection Level		IP67
Connection Type		15-pin High Density D-Sub Connector

BLUEDAQ SOFTWARE
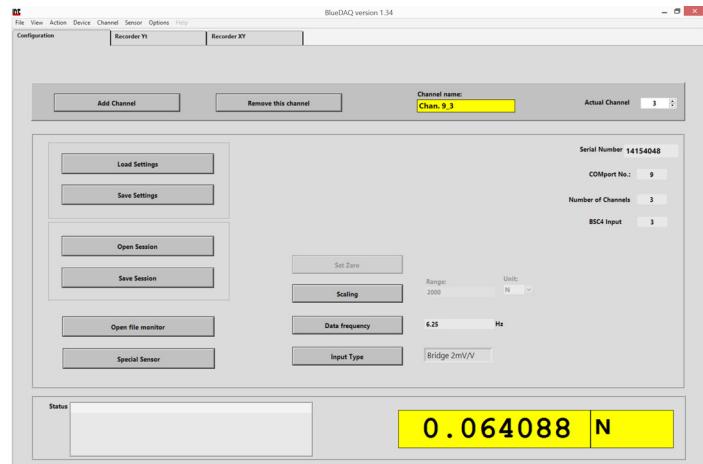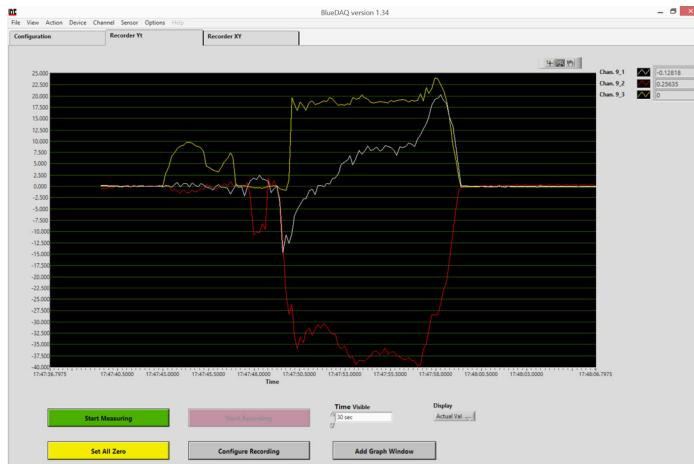
U.S. dimensions and capacities are provided for conversion only. Standard products have International System of Units (SI) capacities and dimensions.