

## BX8-AS 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
- $\pm 5V$ ,  $\pm 10V$ , 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,  $\pm 10VDC$ , and PT 1000 temperature inputs
- Excitation sense
- Full,  $\frac{1}{2}$  and  $\frac{1}{4}$  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

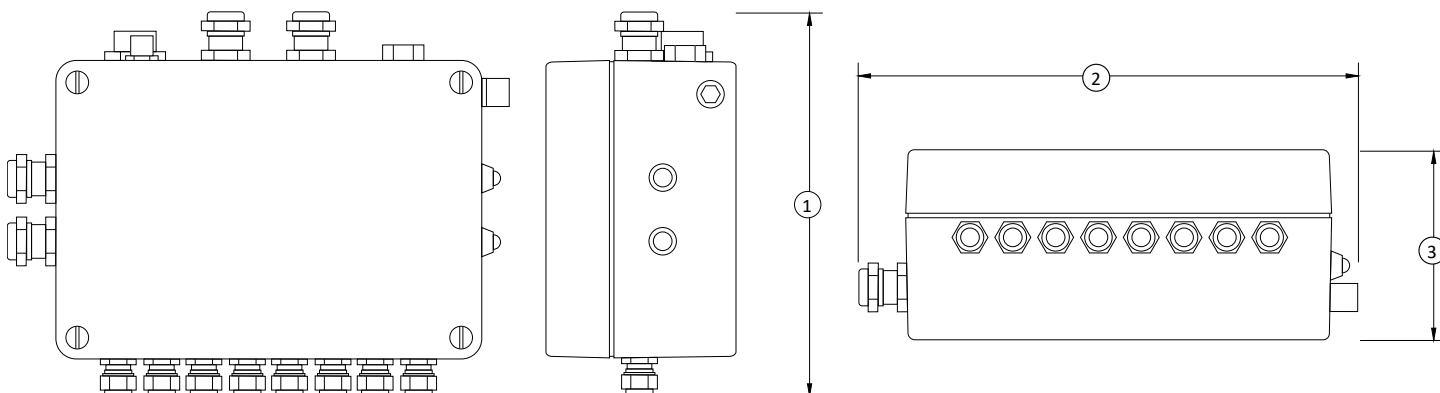
### STANDARD CONFIGURATION



MODEL BX8-AS (Shown)

### OPTIONS

- EtherCat
- CANbus/CANopen



### DIMENSIONS

| 1   |     | 2   |      | 3    |     |
|-----|-----|-----|------|------|-----|
| mm  | in  | mm  | in   | mm   | in  |
| 180 | 7.1 | 225 | 8.87 | 89.5 | 3.5 |

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### SPECIFICATIONS

| PERFORMANCE                                                                            |                                                                                                             |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Accuracy Class – %                                                                     | 0.05                                                                                                        |
| Nonlinearity – % range                                                                 | +/- 0.02                                                                                                    |
| Sample Rate - per channel – samples/sec                                                | 48,000S 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<br>> 20,000 parts @ 2000/s data rate<br>> 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<br><i>Individually configurable for each channel</i> | 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<br><i>Individually configurable for each channel</i> | ±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<br>24 integer, 24K, raw data<br>32 floating point, 9.6K, scaled data<br>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 222 x 180 x 89.5                                                                                                                                |
|                                                                             | in 8.7 x 7.1 x 3.52                                                                                                                                |
| Weight                                                                      | kg 2.4                                                                                                                                             |
|                                                                             | lbs 5.29                                                                                                                                           |
| Protection Level                                                            | IP67                                                                                                                                               |
| Connection Type                                                             | 24-pin M16 or screw terminals                                                                                                                      |

### BLUEDAQ SOFTWARE

