



## FEATURES

- USB 2.0 Communication Link
- USB Bus-Powered
- Integrated Shunt Call
- Input/Output Short Circuit Protection
- Streaming ASCII Output
- CE Criteria A Certification for Aerospace and Medical Grade Devices
- Supports mV/V type sensors

## SPECIFICATIONS

### GENERAL

|                           |                                |
|---------------------------|--------------------------------|
| Item Number               | FSH03927                       |
| Sampling Rate             | Up to 4800 SPS                 |
| Bandwidth (Hz)            | Sampling Rate (SPS) / 4        |
| Internal Resolution       | 24 bits                        |
| Resolution (Noise Free)   | See Chart                      |
| Non-Linearity (max)       | $\pm 0.005\%$ of FSR           |
| Output                    | Digital Packetized Data        |
| Integrated Digital Filter | 50 Hz/60 Hz Rejection (100 dB) |
| On Chip Memory            | 1 Kilobyte                     |
| Stored Calibration        | Up to 16 Points                |
| Weight                    | 0.05 lb. [23 g]                |

### STRAIN GAUGE mV/V INPUT

|                        |                                  |
|------------------------|----------------------------------|
| Bridge Excitation      | 4.6 VDC                          |
| Standard Input Range   | $\pm 3.4$ mV/V (factory default) |
| Optional Input Range   | Up to $\pm 400$ mV/V             |
| Min. Bridge Resistance | 50 Ohm                           |
| Max. Bridge Resistance | 5000 Ohm                         |

### INPUT

|                    |                           |
|--------------------|---------------------------|
| Supply Voltage     | USB Bus (5V $\pm$ 5%)     |
| Current Input Rate | 90 mA with 350 ohm bridge |

### CONNECTORS

|                   |                 |
|-------------------|-----------------|
| Sensor Connector  | Hirose LX40-12P |
| Mating Connector  | Hirose LX60-12S |
| USB 2.0 Connector | Type A Plug     |

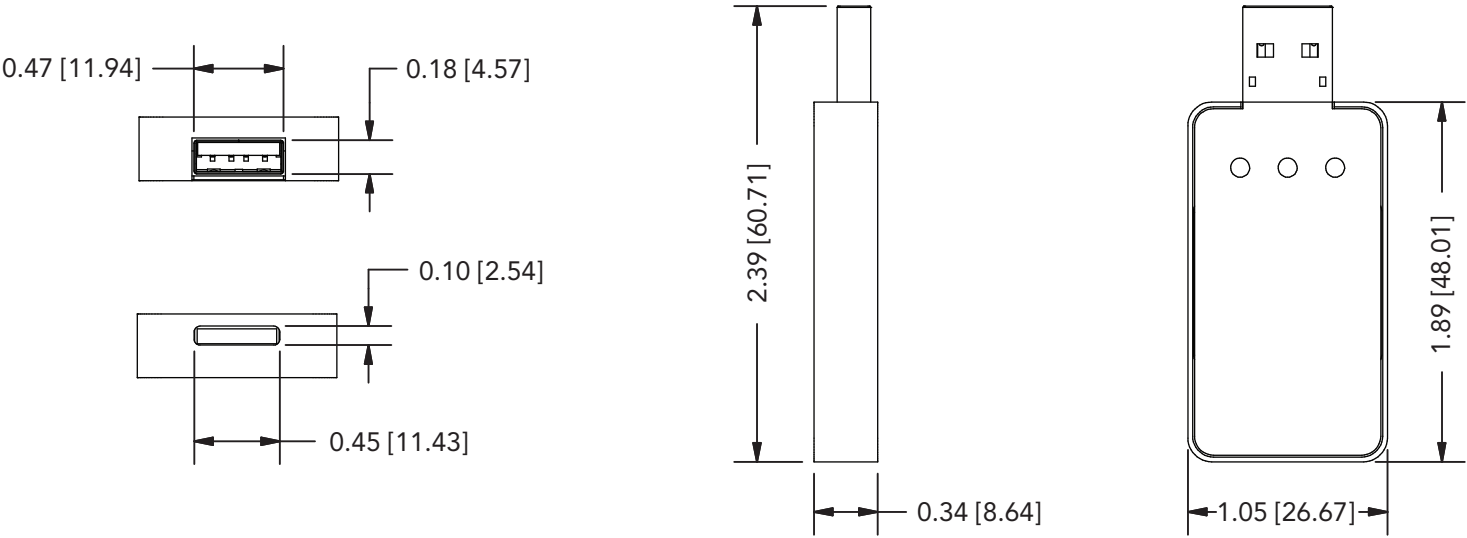
### ENVIRONMENT

|                                |                                 |
|--------------------------------|---------------------------------|
| Operating Temperature          | -13°F to 185°F [-25°C to 85°C]  |
| Storage Temperature            | -40°F to 257°F [-40°C to 125°C] |
| Temperature coefficient factor | 10 ppm                          |

### CONFORMITY

|      |                                                                                     |
|------|-------------------------------------------------------------------------------------|
| RoHS | 2011/65/EU                                                                          |
| CE   | EN 61326-1:2006<br>Criteria A Certification for Aerospace and Medical Grade Devices |

DIMENSIONS inches [mm]



LED INDICATORS

|                       |                         |
|-----------------------|-------------------------|
| Blinking blue (10 Hz) | Module Auto-Calibration |
| Blinking blue (1 Hz)  | Module Normal Operation |
| Green                 | USB Power               |
| Red                   | USB Data Link           |

SAMPLING RATE

| SAMPLES PER SECOND (SPS) | mV/V RESOLUTION |
|--------------------------|-----------------|
| 5                        | 18.1            |
| 50                       | 17.4            |
| 100                      | 16.6            |
| 300                      | 15.7            |
| 1200                     | 14.8            |
| 2400                     | 14.2            |
| 4800                     | 13.9            |

Support Operating Systems: Windows XP and Vista; Windows 7, 8, 8.1, and 10; Linux; Mac OS X, Android<sup>1</sup>

Programming Platforms: DLL file available for programing support, such as LabVIEW, Visual Studio, and Xcode

<sup>1</sup> USB Host Controller Needed

ACCESSORIES

- FUTEK's SENSIT™ Software (FSH03189)**  
14 Day Trial - Available to download on FUTEK website. A license is required, per seat, after 14 days to benefit the features such as data logging, graphing, etc. Trial version turns into basic read-out ONLY after 14 days and a product key is required to enable the features.

Drawing Number: FI1370-A

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