



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

IMPORTANT NOTE: ONLY CONNECT DEVICE TO USB 2.0 PORT

Sensor Solution Se	ource	
Load · Torque · Pressure	• Multi-Axis • Calibratio	$n \cdot \text{Instruments} \cdot \text{Software}$

CE

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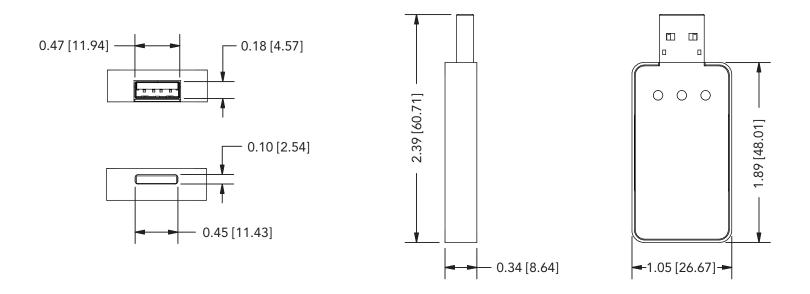
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SPECIFICATIONS	
GENERAL	
Item Number	FSH03927
Sampling Rate	Up to 4800 SPS
Bandwidth (Hz)	Sampling Rate (SPS) / 4
Internal Resolution	24 bits
Resolution (Noise Free)	See Chart
Non-Linearity (max)	± 0.005% of FSR
Output	Digital Packetized Data
Integrated 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]
Internal Shunt Resistance Value	60.4 kOhm
IP Rating	IP50
STRAIN GAUGE mV/V INPUT	
Bridge Excitation	4.6 VDC
Standard Input Range	± 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 ± 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 Criteria A Certification for Aerospace and Medical Grade Devices



Model USB220



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)	RESOLUTION (NOISE FREE BITS)	
5	17.8	
10	17.2	
100	16.4	
300	15.4	
1200	14.6	
2400	14	
4800	13.6	

Support Operating Systems: Windows XP and Vista; Windows 7, 8, 8.1, and 10; Linux; Mac OS X, Android¹

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

¹ 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-E

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