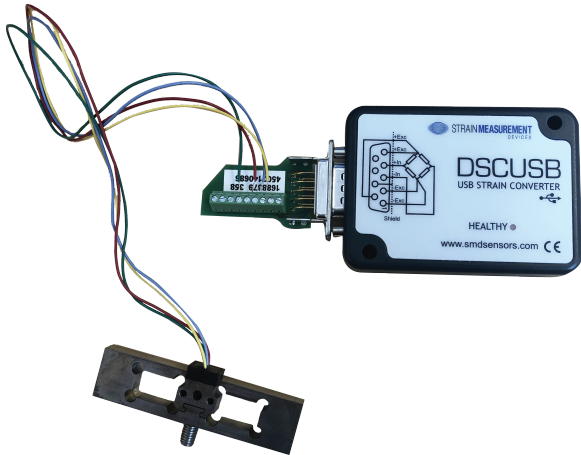


E370 DSC-USB Strain Module



The E370 **DSCUSB** is a compact, high performance strain gauge digital signal conditioner with USB connectivity aimed at applications which require high-accuracy measurement and repeatability.

A rugged and compact ABS IP50 enclosure makes this device suitable for all environments. By simply plugging the device into a PC, data can be extracted from most strain gauge bridge input sensors and acquired by software which allows data manipulation, removing the need for amplifiers, filters, and multi meters. No additional power supply is required.

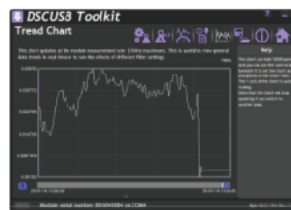
The Toolkit is designed for connection to a single DSCUSB, however with the use of a suitable USB hub, multiple channel software options allow for connection to multiple DSCUSB modules. Available in ASCII protocol, offering higher resolution and lower temperature drift.

By simply plugging the device into a PC, data can be extracted from a sensor to the DSCUSB for a wide range of systems. This is achieved by using the Toolkit software, that provides configuration, calibration, data review, and recording.

This free-standing module is fitted with a 9-way 'D' type socket for connection to the strain bridge or load cell while a micro USB socket allows connection to a PC and does not require external power.

Features:

- **Quick Set Up:** Simple USB 'Plug and Measure' device connects to a PC directly.
- **High Stability & Superior Performance:** 200 samples per second at 18 bits noise free resolution providing accurate measurement. Ideal for Test and Measurement, RD and laboratory environments.
- **Connect to Multiple Devices:** Ability to communicate to multiple sensors.
- **Free Toolkit Software:** Easy connection to toolkit software for simple configuration
- **Multipoint Linearisation:** Allows correction for non-linear sensors



Free DSCUSB ToolKit Software
Calibrate and configures the DSCUSB

USA
Strain Measurement Devices
55 Barnes Park North, Wallingford, CT 06492
sales@smdsensors.com | (203) 294-5800

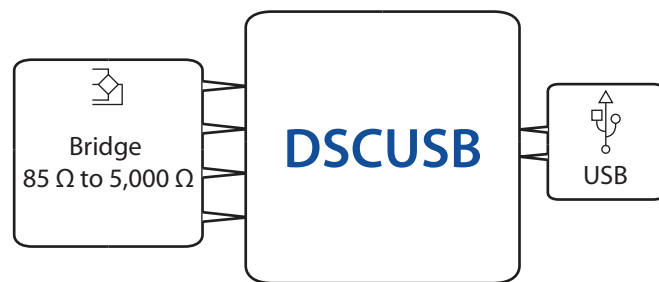
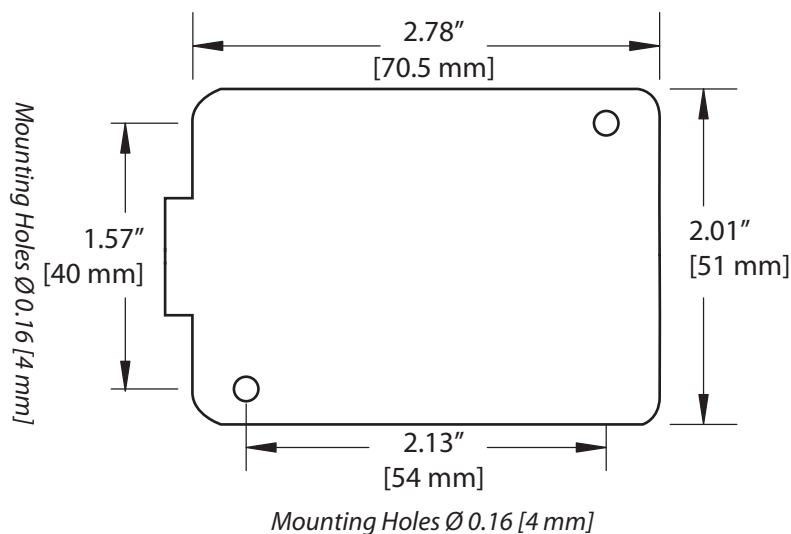
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STRAIN MEASUREMENT DEVICES

Specifications:	Parameter
Strain Gauge Measurement:	4 Wire
Strain Gauge Excitation Voltage:	5 V dc
Strain Gauge Drive Capability:	85 to 5,000 Ω
Strain Gauge Sensitivity:	-3 to 3 mV/V
Offset Temperature Stability:	4 ppm / $^{\circ}\text{C}$
Gain Temperature Stability:	5 ppm / $^{\circ}\text{C}$
Non-Linearity before Linearization:	25 ppm of FR MAX
Internal Resolution:	16 Million Counts/divs
Resolution @ 1 Hz Readings (Noise stable) over 100s:	200,000 Counts//divs
Resolution @ 10 Hz Readings (Noise stable) over 100s:	120,000 Counts/divs
Resolution @ 100 Hz Readings (Noise stable) over 100s:	50,000 Counts/divs
Electrical	
Power Supply Voltage (USB):	4.35 to 5.5 V dc
Power Supply Current (350 Ω Bridge):	68 mA typical, 75 mA MAX
Data Transmission	
Maximum Output Cable Length:	5 m
Data Transmission Rate:	115.200 kbps
Environmental	
Operating Temperature Range:	-40 to 85 $^{\circ}\text{C}$
Storage Temperature Range:	-40 to 85 $^{\circ}\text{C}$
Maximum Humidity:	95% RH
Protection:	IP50



Part Number	Description
E370	DSCUSB
E370 - DB9	Flying Lead to DB9 Adapter

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Identifying Strain Gauge Connections

9 Way D Connector Pin-outs

