# Load Cell Central

DSCUSB

# USB Strain Gauge or Load Cell Digitizer Module



Easy sensing with the DSCUSB portable USB digitizer for weight, pressure, force & torque. High stability module has a D9 connector & female micro USB connector, supplied with a USB to micro USB cable

### Introduction

Load Cell Central's DSCUSB is a compact, high performance strain gage digital signal conditioner with USB connectivity aimed at applications which require high-accuracy measurement repeatability.

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

Although ideal for 1 to 1 interface, the device can connect with multiple sensors with the use of a suitable hub.

### Features at a Glance

- Ability to communicate with multiple sensors
- ASCII protocol
- Digital I/O
- High speed: To 500 readings/second
- Real mV/V calibration
- Peak & valley recording
- IP50 rated enclosure dimensions 71 x 51 x 20 mm

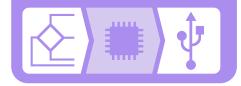


# **User Benefits**

- High stability providing superior performance
- USB interface device appears as a virtual com port
- Simple & easy to connect to your strain gage sensor
- Multiple devices can be used with one PC
- Free DSCUSB toolkit software
- Compatible with most load cells and sensors
- Non-expert maintenance
- Windows driver DLL's available

# **Ideal Applications**

- Laboratory Testing
- Educational Environments
- R&D
- Test & Measurement



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### **Related Product**



DSCUSBOEM New PCB version of DSCUSB available with added mounting holes

#### **Related Software**



DSC USB Toolkit Calibrate and configure your DSCUSB



DSCUSBOEM1 The new PCB version with connectors and a 9 way D type slot and micro USB

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24 Channel Logging

View and log up to 24 channels

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DCeII Embedded digital load cell converter, RS485, Modbus, CAN



Instrument Explorer Quick set up software event monitoring, data logging, calibration and configuration



DSC Strain gauge data converter to RS232. Modbus, CAN, RS885



OEM Functionality New OEM level functionality for the DSCUSB toolkit

### Case Study

#### The Application:

An engineering company needed to test a mechanical system where the force applied to a strain gage was measured over the duration of a test movement. This was to be achieved as simply as possible in an office/lab environment.

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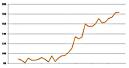
#### The Solution:

The company needed to generate a report from the test and laptop was already available. As the measurement was from a strain gage, the best solution was to use one of Load Cell Central's digital strain signal conditioners (DSC) but as only one channel was required, the USB version was ideal.

The data only needed to be recorded against time so no specialist or custom software was required other than the DSC Toolkit and MS Excel.

The DSC Toolkit showed the realtime weight of the load cell on screen, however the company was also able to choose a logging interval and log the values to a CSV file. Later these results could be loaded into MS Excel and the data analyzed and graphed to create reports for their customers.

The DSCUSB offered the resolution required and was easy to connect to the company's laptop. This also gave the advantage of no power supply wires trailing to the



measurement device as the DSCUSB is powered from the USB connection. This enabled the customer to carry the laptop to the test rig and simply connect to the strain gage to perform the test.

#### CE & Environmental

Storage temperature Operating temperature Relative humidity IP Rating - 40 to +85°C - 40 to +85°C 95% maximum non condensing IP50 CE Environmental Approvals European EMC Directive 24 Low Voltage Directive 24

2004/108/EC 2006/95/EC

DSCUSB Product Sheet

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