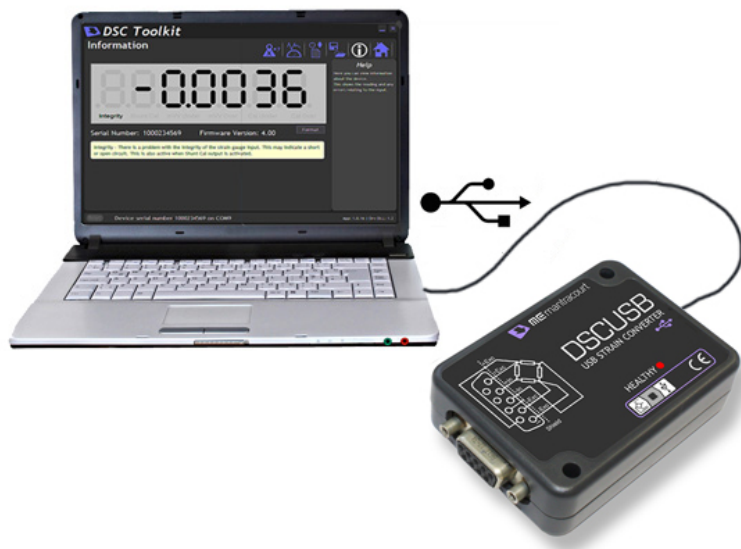


## USB Strain Gauge or Load Cell Digitiser Module



*Easy sensing with the DSCUSB portable USB digitiser 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

The DSCUSB is a compact, high performance strain gauge 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 gauge 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. Available in ASCII protocol, offering higher resolution and lower temperature drift.

### Specification 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 & trough recording
- IP50 rated enclosure dimensions 71 x 51 x 20 mm

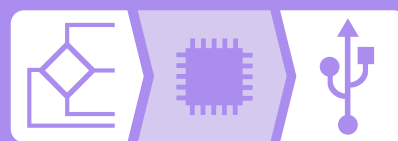


### User Benefits

- High stability providing superior performance
- USB interface - device appears as a virtual com port
- Simple & easy to connect to your strain gauge 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



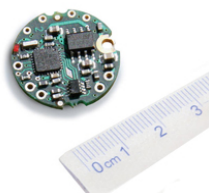
## Related Product



**DSCUSBOEM**  
New PCB version of DSCUSB  
available with added mounting holes



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



**DCell**  
Embedded digital load cell  
converter, RS485, Modbus, CAN



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

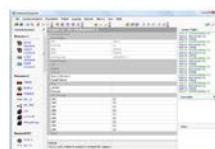
## Related Software



**DSC USB Toolkit**  
Calibrate and configure your DSCUSB



**24 Channel Logging**  
View and log up to 24 channels



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



**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 gauge was measured over the duration of a test movement. This was to be achieved as simply as possible in an office/lab environment.

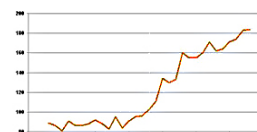
### The Solution:

The company needed to generate a report from the test and laptop was already available. As the measurement was from a strain gauge, the best solution was to use one of Mantracourt'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 were 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 analysed and graphed to create reports for their own 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 gauge to perform the test.



## CE & Environmental

Storage temperature	- 40 to +85°C
Operating temperature	- 40 to +85°C
Relative humidity	95% maximum non condensing
IP Rating	IP50

### CE Environmental Approvals

European EMC Directive	2004/108/EC
Low Voltage Directive	2006/95/EC

### Manufacturing factory:

Mantracourt Electronics Ltd The Drive, Farringdon,  
Exeter, Devon, EX5 2JB, UK

### Distributor:

UTILCELL s.r.o., nám. V. Mrštíka 40, 664 81  
Ostrovačice (Czech Republic)  
Tel: +420 546 427 053, Fax: +420 546 427 212,  
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