

Strain Gauge or Load Cell Digitiser Module



Slimline digital strain cards designed for use with strain gauge sensors such as pressure transducers, load cells and torque sensors, with option of two enclosures

Introduction

The digital load cell or strain gauge digitiser cards (DSC) have high speed, high precision strain gauge signal conversion capabilities with linearisation and temperature compensation of the sensor.

Try our ready to go Evaluation Kit which includes one free DSC.

Two IP65 / NEMA 4 rated enclosures are available for multiple or single DSCs.

Specification at a Glance

- Available formats include RS232, RS485, ASCII, Modbus, CAN and MantraCAN (J1939). Ultra high performance, resolution of 1 part in 400,000 (18bit)
- High speed, up to 500 updates per second (streaming)
- Auto calibration or direct entry of mV/V with linearisation
- Programmable dynamic filter
- Temperature compensation
- Peak and trough (valley) recording
- Remote shunt calibration by software command or digital input
- Card dimensions 20 x 87.4 x 12 mm

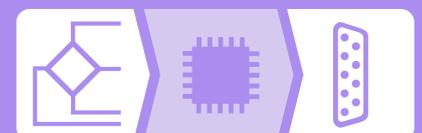


User Benefits

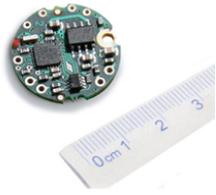
- Compact OEM PCB format for easy fitting to products
- Option of IP65 / NEMA 4 case for 1 or 4 digitiser modules
- Error reporting including strain gauge fault conditions
- Free software enabling 24 DSCs to be viewed and logged simultaneously

Ideal Applications

- Civil Engineering
- Agriculture
- Marine
- Industrial Processing
- Silo & Weighing industry



Related Product



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



EVAL KIT
Evaluations kits for DCell and DSC are available for stress free set up. Strain gauge data converter to RS232. Modbus, CAN, RS485



DSJ1
Mount band for single DSC



DSJ4
Mount band for 4xDSC

Related Software



DS485DIS
RS485 data display for DSC and DCell



DSCUSB
USB load cell interface for load cell / strain gauge



DSC 24 Channel Logging
View and log up to 24 channels



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

Case Study

The Application:

A company was looking for a cost effective way of monitoring individual silos with a simple display without the need for permanent connection to a dedicated PC or complicated PC software.

The Solution:

The solution was achieved by installing four load cells wired to digital strain cards (DSCs) fitted to a multi channel (DSJ4) which allowed the load cells and DSC's to be easily connected via RS485 to the LED display.

By mounting the LED display (DS485DIS) to the wall of the silo, users were able to quickly view changes within the silo. Users

viewed the summated value of the display as standard but could view the individual values of each of the four load cells if required.



An error message alerted users to any issues with any of the individual load cells.

CE & Environmental

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

CE Environmental Approvals

European EMC Directive 2004/108/EC

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