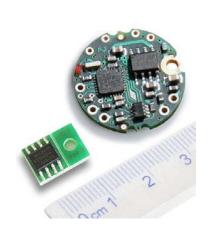




# Embedded Digital Load Cell Converter/Strain Gauge Digitiser Module



Miniature format designed specifically to be incorporated directly into strain gauge sensors such as load cells, pressure transducers and torque sensors

High speed and high precision digitizing capabilities, along with linearization and temperature compensation.

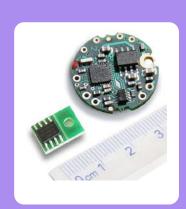
Ability to convert standard strain gauge load cells into digital load cells.

Available output formats include the RS485, ASCII, Modbus, CAN and MantraCAN (J1939). All are 4 wire bus and power formats offering connection of up to 32 sensors on just 4 wires.

Please Note: MantraCAN products will only work with Mantracourt software up to and including Windows Vista.

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

- ATEX component approval
- Remote shunt calibration
- Temperature compensation
- Peak and trough recording
- Long cable lengths up to 1000 m
- Programmable dynamic filter
- Option of miniature digital temperature sensor module for wiring to DCell temperature sensor pcb board (shown above)
- Low profile, small 20 mm diameter diameter for mounting inside sensor

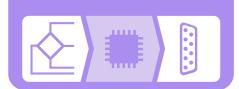


# User Benefits

- Low profile, small 20 mm diameter diameter for mounting inside sensor
- Option of an in-line stainless steel enclosure
- Free software enabling 24 logged simultaneously

# Ideal Applications

- Civil Engineering
- Marine
- Test & Measurement
- **Torque Measurement**



ME

#### Related Product



EVAL KIT
Evaluations kits for DCeII and DSC
are available for stress free set
up.Strain gauge data converter to
RS232. Modbus, CAN, RS885



ILE Stainless steel enclosure for DCeII data converters and ICA



DSC Card version available the strain gauge data converter to RS232. Modbus, CAN, RS885

# Related Software



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:

An Australian mango grower had to accurately weigh his produce. It they are not of a required minimum weight to be sold as fruit, they are under-sold for chutney.

The fruit's irregular shape make it difficult to weigh. As they moved along the conveyor for processing, their irregular shape caused them to bump and collide which the standard load cell picked up as 'noise', and made it impossible to accurately weigh the fruit

## The Solution:

What was put in place was incredibly simple but effective. After the inspection section of the conveyor, the mango's are placed in individual egg-cup like trays to keep them stable when moving on



to the weigh beam.

Now that the 'noise' is removed, the weighing system needs to be fast enough to respond.

Mantracourt's DCell load strain digitiser records 500 readings / Sec. This is fast enough to weigh the moving

fruit and thereby accurately measure the weight of each individual fruit. The system allows only truly underweight products to be rejected.

## 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

## For more information contact us today...

mantracourt.com technical@mantracourt.com Mantracourt Electronics Ltd The Drive, Farringdon, Exeter, Devon, EX5 2JB, UK tel: +44 (0) 1395 232020













ME

fax: +44 (0) 1395 233190
In the interests of continued product development, Mantracourt Electronics Limited reserves the right to alter product specifications without prior notice

DCell Product Sheet Issue 2.9 13-01-14 mantracourt.com sales@mantracourt.com tel +44 (0)1395 232020