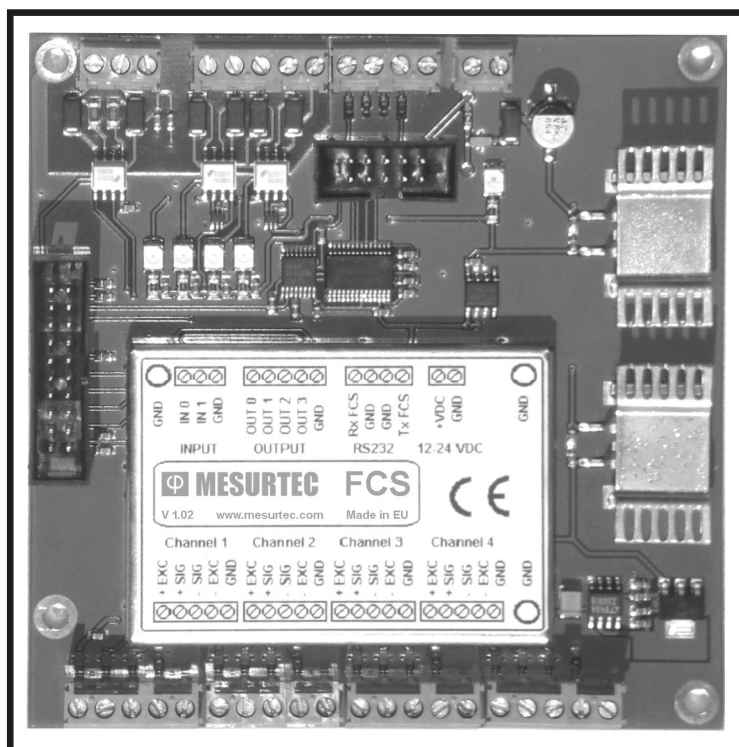


Four Channel System Type FCS



The Load Cell Digitizing Unit FCS is a Four Channel System for AD-conversion especially designed for weighing applications with the center of gravity, digital corner adjustment and badging. For badging control LEDs will monitor the achieved level.

It is as well a low budget solution for the connection of 2-4 different scales.

The FCS is accurate and suited for both static and dynamic applications. The major feature is the parallel processing of 2 to 4 AD converters.

The intuitive interface makes it easy to adapt it to all kind of applications and the 4 outputs can be used individually as well as the 2 inputs...

The parallel processing makes it particularly suited for parallel time critical weighing applications.

The common serial output reduces costs and simplifies wiring.

Important Features

- Real parallel processing on 4 channels
- Channels can be used separately or together
- Calculates center of gravity
- Badging software
- μ -controller with 32 bit
- 4 outputs with control LED and 2 inputs
- Max 130 Hz conversion speed
- Internal resolution of ± 80.000 counts for 2 mV/V load cell
- Double precision mode at 17 SPS
- Electronic calibration without weights
- Working temperature from -40°C - $+60^{\circ}\text{C}$.
- High sensibility $0.1 \mu\text{V/d}$
- Special amplification for FLINTEC PB(W) cells
- Up to 3,2 mV/V load cell input
- Min. overall impedance 80 Ohms
- Configurable FIR and IIR filters types
- Linearity typically 0.0004 %.
- 4-6 wire load cell connection.
- Serial output RS232
- DIN rail mounting or in housing
- Power supply 12...24 V DC.
- For internal use
- Different OEM options available

FCS Specifications

Accuracy Class	GP, for internal use
Linearity	< 0,0004 % F.S.
Excitation	5 V DC, load cells 80-2000 Ohm, 4-6 wire technique
Analogue input range	± 3,2 mV / V bipolar
Minimum input per vs1	0.1 µV per interval non approved
Resolution	Internal ±130.000 counts (±17-Bits), external max. ±99.999 counts
Analogue Input Filtering	5 Hz
Conversion rate	external up to 4 * 130 measurements per second
Digital filter	FIR and IIR Bessel filters configurable in 14 steps and 10 orders for IIR
Calibration	software calibration and set up
Interfaces	RS 232
Weighing functions	Center of gravity, badging, basic weighing functions
Inputs	2 opto-isolated inputs, 10...30 V DC max. 3 mA
Outputs	4 opto-isolated OC outputs with control LED, < 30 V DC, 10 mA
Temperature effects	on zero 30 ppm/°K typ.; max. <15 ppm/°K on span 15 ppm/°K typ.; max. < 10 ppm/°K
Temperature range	-40 °C to +60 °C working temperature or -40 °C to +85 °C storage temperature
Enclosure	Partial tinned steel enclosure, special housing with junction box on request
Dimensions	100 x100, approx. 95 g
Power supply	12...24 V DC ±10 %, < 70 mA (110 mA at 80 Ohm), not galvanically isolated, inversed polarity protection
Options	Contact us
EMC / Approvals	2004/108 EC (electromagnetic), 93/68/EC (marking), EN 6100-3-2, EN 61000-6-2, EN

All dimensions in mm. Dimensions and specifications are subject to change without notice.

System Configuration and dimensions

