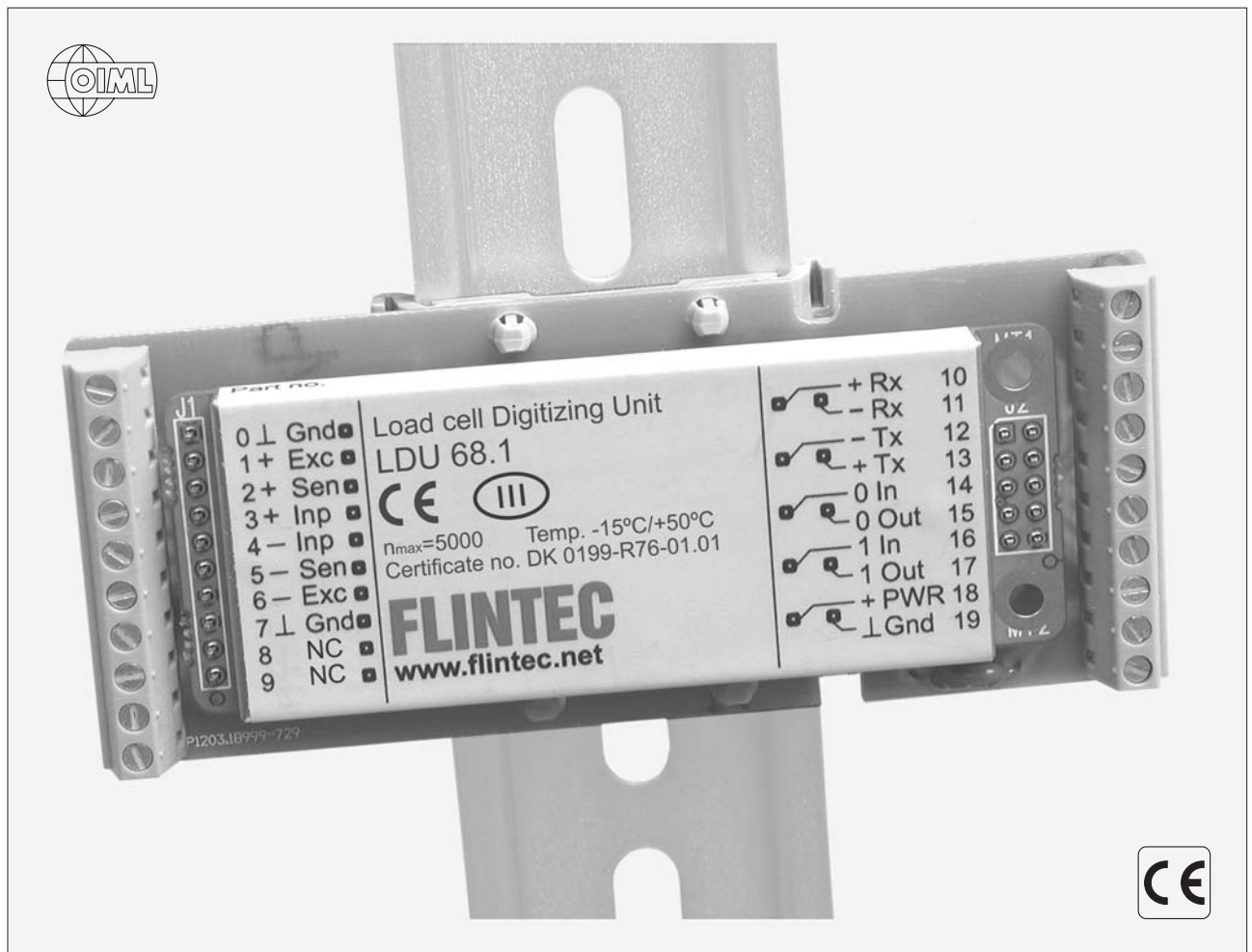


## Load Cell Digitizing Unit Type LDU 68.1



LDU 68.1 plugged on adaptor board UA 77.1 (optionally)

The Load Cell Digitizing Unit LDU 68.1 is an accurate, veritable, A/D convertor for static and quasi-static weighing applications.

The instrument is approved by Weights & Measures Authorities for use in Accuracy Class III applications with up to 5000 increments (e) according to OIML R 76.

Communication via serial interface RS422/485, making it easy to connect to PC, PLC and other devices.

Standard weighing functions are available.

Software calibration and set up.

### Important Features

- Easy converting analogue load cells to digital.
- Internal resolution  $\pm 130000$  counts.
- Max. conversion rate 90 per second.
- Digital filter, programmable.
- Linearity better than 0.002 %.
- 6 wire load cell connection.
- 2 inputs (opto-isolated).
- 2 outputs (OC).
- Network function by RS422/485.
- Power supply 12...24 V DC.

### Options

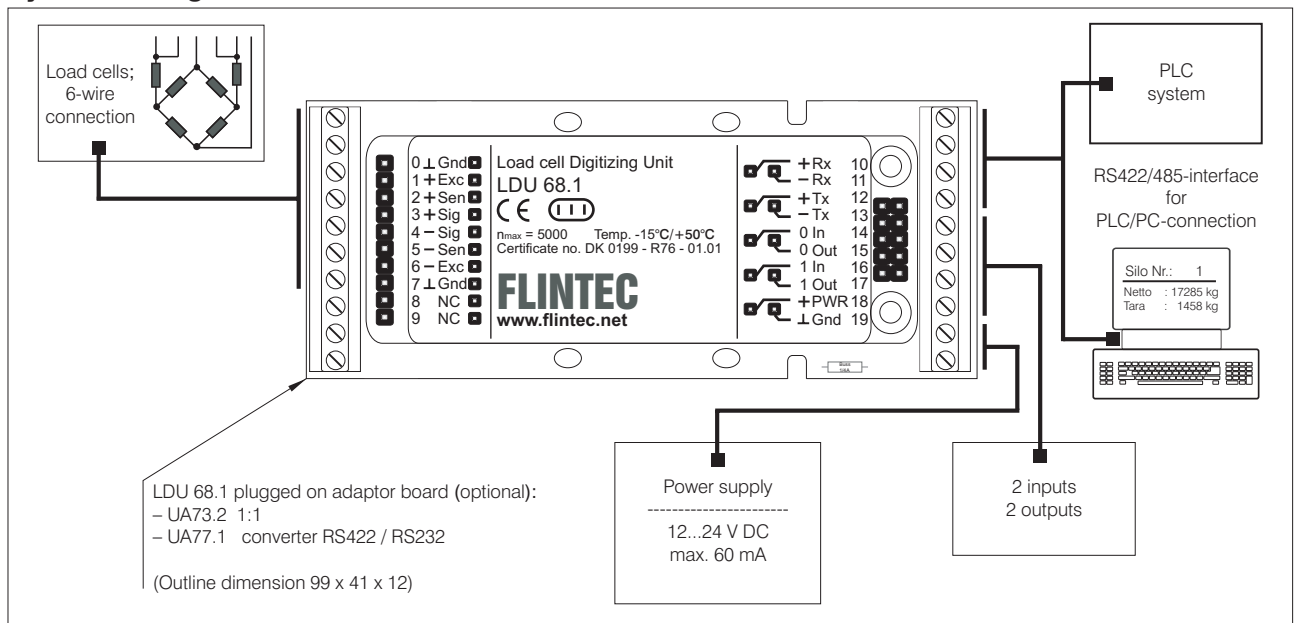
- Adaptor board(s) with screw terminals for mounting on rail.
- Profibus-Gateway.
- CAN-Bus-Gateway.
- Ethernet-Gateway.

## LDU 68.1 Specifications

Accuracy Class	III
EU Type approved	5000 increments according OIML R 76
Linearity	< 0,002 % F.S.
Excitation	5 V DC, load cells 250-2000 Ohm, 6 wire technique
Analogue input range	±2,2 mV/V (bipolar, for weighing applications and force measurements)
Minimum input per vs1	0.1 µV per interval non approved; 0.7 µV per interval legal for trade
Resolution	Internal ±130000 counts, ±17-Bit-A/D convertor; external max. ±99999 counts
Conversion rate	internal 90 measurements per second; external up to 90 measurements per second
Digital filter	0.02...5 Hz programmable in 8 steps / Bessel Characteristics
Calibration	software calibration and set up
Computer interface	RS485 or RS422, full duplex, 9600....115200 Baud; bus capability up to 32 devices (RS485)
Weighing functions	zero, gross, tare, net, filter etc.
Inputs	2 opto-isolated inputs, 10...30 V DC max. 3 mA
Outputs	2 OC outputs, < 30 V DC, 200 mA
Temperature effects	on zero 5 ppm/°K typ.; max. <10 ppm/°K on span 3 ppm/°K typ.; max. < 5 ppm/°K
Temperature range	-10 °C to +50 °C (compensated); -20 °C to +60 °C (storage)
Enclosure	tinned steel enclosure, protection IP 40, special housing IP 65 on request
Dimensions	82 x 31 x 6 mm, weight approx. 30 g; with adaptor board 99 x 41 x 12 mm, approx. 50 g
Power supply	12...24 V DC ±10 %, < 60 mA, not galvanically isolated
Options	adaptor board UA73.2 (passive) or UA77.1 (RS422 to RS232) or 3 Gateway versions
EMC / Approvals	CE 73/23/EEC; 93/98/EEC and 89/336/EEC / OIML R 76 for 5000 d

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

## System Configuration



## Dimensions

