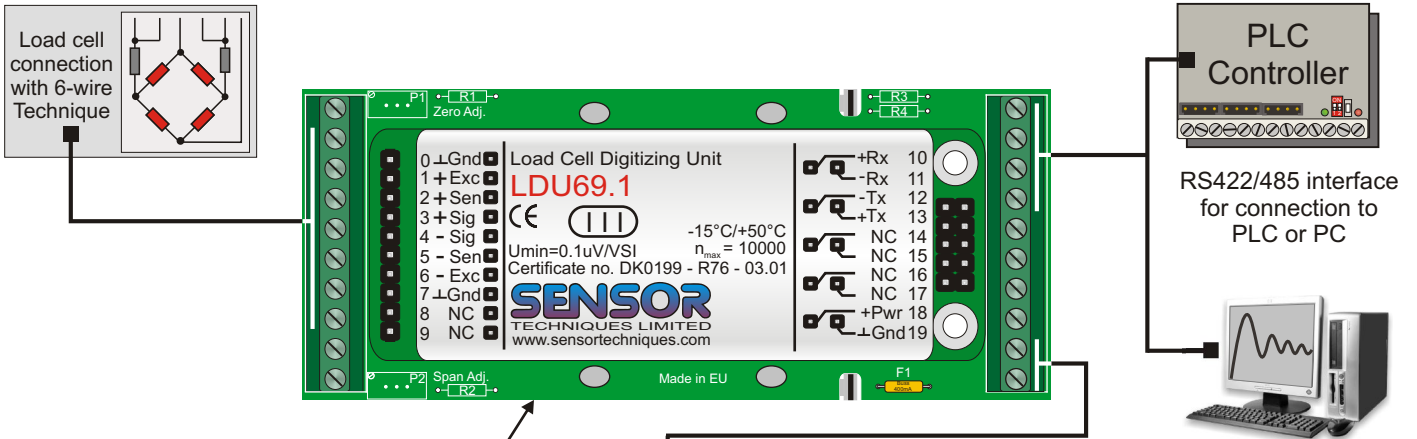




High Precision Load Cell Amplifier Model LDU 69.1

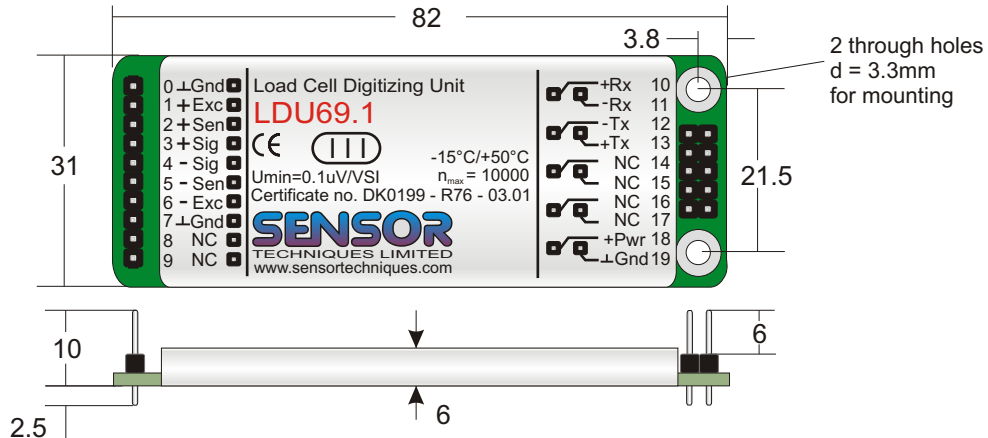
- Approved to OIML R76 10,000d, $0.1\mu\text{V} = 1\text{d}$
- Linearity better than 0.002 %, signal resolution $\sim 20\text{ nV}$
- Extremely low temperature drift typically $1\text{ppm}/^\circ\text{C}$
- Designed to drive four $1\text{K}\Omega$ Load Cells $\pm 2.2\text{mV}/\text{V}$ max
- Bipolar input range for weight, force or torque applications
- Up to 172 readings per second transmitted
- Supply voltage 12-24 VDC $\pm 10/-15\%$
- RS-422 / RS-485 2 or 4 wire Computer Interface
- Baudrates selectable from 9600 Baud to 115K2 Baud
- Full computer control and set-up via the computer interface
- Full wrap around steel case for better EMC performance
- Simple pin connections or Optional Din Rail Adaptors



The LDU can be supplied with either the UA73.2 a simple Unit Adaptor or the UA77.1 which has a built-in RS422/RS232 converter allowing direct connection to a PC or PLC with an RS232 port. Both units have screw terminal connections and 2 clips to mount directly to TS35 profile Din Rail (standard Top Hat). Dimensions of LDU mounted on the UA73.2/UA77.1 Din Rail Adaptor 99 x 41 x 21mm Weight ~50g

Supply Voltage

12 - 24 VDC
max. 60mA



Specifications

All Dimensions in mm
Specifications are subject to change without prior notice

Linearity	: < 0.002 % of full scale
Load cell supply voltage	: 5 V AC, designed to drive four 1KOhm load cells (250 - 2000 Ohm)
Input signal range	: +/-2,2 mV/V or +/- 11mVdc, with 6-wire technique
Input polarity	: Bipolar, for weighing, force and torque measurement applications
ADC resolution	: 20-Bit ADC ±520,000 divisions, Maximum output reading +/- 99.999 D
ADC conversion speed	: Maximum 172 measurements/sec transmitted.
Digital filter	: From 0.2Hz to 3Hz in 6 steps (0.2, 0.5, 1, 1.5, 2, 3 Hz)
Calibration	: Via ASCII protocol software commands
Communication interface	: RS-485 or RS-422, full duplex, 9600....115200 Baud, up to 32 devices on one bus.
Temperature effect	: <2ppm/°C on Zero and <2ppm/°C on Span
Temperature range	: -10°C to +40°C (compensated); -20°C to +60°C (storage)
Construction	: PCB with wrap around steel shield case sealed to IP40. Connector pins supplied but not fitted. Optional simple Din Rail Adaptor (UA73.2) or with built-in RS422/RS232 converter (UA77.1) available at extra cost.
Dimensions	: 82 x 31 x 6 mm, Weight ~ 30 g; with Adaptor 99 x 41 x 12 mm, ~50g
Power Supply	: 12...24 VDC +/-10 %, < 60mA, not galvanically isolated
Approval	