NORDIC TRANSDUCER

LAU63.1

Load cell to Analog High Speed Unit

Applications. Any automatic or manual weighing, or measuring device with common requirements to speed and precision. The LAU provides analog bi-polar voltage output from weighing/measuring operations based on a single strain gauge load cell. Zero set, gain set and filter set takes place as binary organized steps accessed direct at the unit.
The LAU63.1 provides an analog voltage output for an instrument or PLC etc. The voltage output ranges from –10 to +10Volt. Fine trimmed zero and span are options provided by an external adaptor.

The LAU is made for electrically hostile environments where reliability and simplicity of operation is of major importance.

Input compliance
- convert the output from a load cell over a wide range at high resolution and linearity. The full 10V load cell supply further add to this quality.

Easy configuring
- the binary organized range of both the zero band, the gain settings and the three LP filters comply with almost any demand.

Outstanding stability
- is achieved owing to the quality components and the binary set-up switches which avoid pots.

Pre-calibration
- owing to the binary switches coarse set-up (within 1/500) can be performed before installation or substitution.

Voltage output
- is bi-polar covering the range –10 to +10V is simple and easy to read. It provide point-to-point transfer and suit most hosting instruments.

Electrically robust
- shielding and T-filters at all pins provides EMC compliance and surge protection. The power input withstand excessive actions and offer a wide supply range.

Installation
- the LAU63.1 can be bolted on side of a load cell or in-designed a PCB etc.

Functionality options
The LAU63.1 is compatible with a Unit Adaptor for DIN rail mounting, providing a fuse and regular screw terminals. The UA73.203 is availab-le with an additional quality 20 turn Zero and Span pots for fine adjustments.

LAU63.1 shown mounted on UA73.203 DIN system

All types of NTT load cells can be connected to LAU63.1

Nordic Transducer Als Oddevej 85 Telephone: *+45 98 58 14 44* Email: *ntt@ntt.dk*
DK9560 Hadsund Denmark Telefax: *+45 9 85 818 66* Web: *www.ntt.dk*

NORDIC TRANSDUCER

LAU63.1

Load cell to Analog High Speed Unit

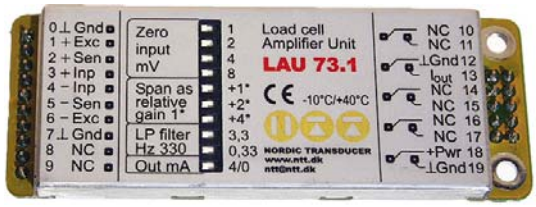
Specifications

Load cell input range:	-32 to +32mV input (i.e. +/-3,2mV/V). Pins for sense wires are available.
Load cell drive capability:	One load cell: >200 Ω <2000 Ω. Excitation voltage 10Vdc.
Zero set, fixed binary steps:	Range +/- 7mV as +/-6 increments of 1mV per incr. for 0 Volt output.
Zero set, fine trim option:	Range +/- 1,5mV (20 turn pot, i.e. 2µV per 6°revolution of the pot.). *Only if UA73.3 board is used !!*
Gain set, fixed binary steps:	Range 1* to 8* as 8 increments of 1* per incr. 1*: +/-32mV input for +/-10V output; 8*: +/-4mV input for +/-10V output;
Gain set, fine trim option:	Range +/-1,2* (25 turn pot). *Only if UA73.3 board is used !!*
Filter set, fixed steps:	3300; 330; 33 or 3,3 Hz low pass frequency. (Time constants 0,05-50ms)
Voltage output:	-10 to +10Volt <20mA (i.e. permit 500 ohm load).
Power supply:	12-16Vdc, Max ripple 1,2Vpp; Supply current 70mA. Non-isolated. Excess voltage and reversed polarity protected.
Linearity:	<0,01% deviation from a straight line between zero and max.
Resolution:	1/100000 i.e. input equivalent LF noise floor: <0,2µV.
Temperature effects:	Zero: <50 ppm/°C at 0 mV input; Span: <50 ppm/°C of Full Scale.
Temperature range:	Compensated: -10°C/+40°C; Storage: -20°C/+50°C.
Conform to Council Directive:	CE in accordance with 73/23/EEC; 93/98/EEC and 89/336/EEC
Basic unit size:	Single PCBoard: L81,3*W30,5*H6,1mm. full metal encapsulated IP40.
Wiring terminals:	10 pc single row and 10 pc. dual row 2,54 mm pitch lugs for standard pins.
Mounting, std.:	Two ø3,5mm holes at the power/output end i.e. to bolt the device onside a load cell.

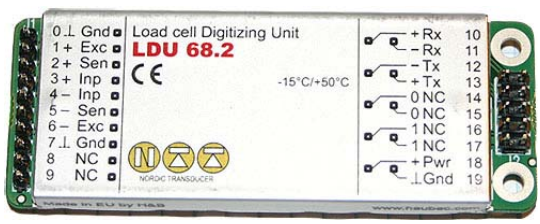
Accessories, optional

Enclosures:	A number of metal or plastic enclosures are available, all IP65 proof.
Extensions:	**UA73.203** provides 2*10 pos. screw terminals, a 0,5A fuse and dual DIN TS35 clips. And in addition the fine calibration facilities as noted in the above.

Other types:
LAU63.1C very low drift and low noise model
LAU73.1 0..10Volt or 4..20mA output
5 VDC supply can be made on UA73.203



Complete series of Digital types LDU's from very high speed to 1mill divisions,
also OIML R76 / R51 approved.
Please take a look at the LDU's



Nordic Transducer Als Oddevej 85 Telephone: *+45 98 58 14 44* Email: *ntt@ntt.dk*
DK9560 Hadsund Denmark Telefax: *+45 9 85 818 66* Web: *www.ntt.dk*