

Load cell Amplifier Unit, **LAU 63.1C** (Bipolar voltage output) **enhanced noise performance.**

FINAL DATA, 1st issue.

Property	Specification	Access by	Notes
Load cell Excitation voltage	10 VDC		Short-circuit protected
Load cell Excitation system	4 wire, pins for sense wires available		Balanced or unbalanced
Load cell Drive capability	Load cell impedance: 200 $\Omega$ - 2000 $\Omega$		Ohm bridge impedance.
Input range capability and resolution	$\pm 32$ mV input; resolution $\approx 50$ nV.		0- $\pm$ Max Load cell output.
Zero Offset, fixed binary steps	$\pm 7$ mV by 1mV increments	+/- and three DIP-switches	Input at 0 V output.
Option: Zero Offset, fine trim	$\pm 1,5$ mV or 0,07mV/360 $^\circ$ turn	20 turn 3/8' pot.	Only if UA73.3 board apply
Relative gain factor, fixed binary steps	Range 1-8*; by 1* increments. (i.e. min. $\pm 4$ mV <sub>inp</sub> at $\pm 10$ V <sub>out</sub> )	Three DIP-switches	1*: $\pm 32$ mV <sub>inp</sub> at $\pm 10$ V <sub>out</sub> 8*: $\pm 4$ mV <sub>inp</sub> at $\pm 10$ V <sub>out</sub>
Option: Relative gain factor, fine trim	1,2* (non-linear)	20 turn 3/8' pot.	Only if UA73.3 board apply
Signal filter, active, low pass	3300; 330; 33 or 3.3Hz	Three DIP-switches	
Voltage Output	$\pm 10$ Vdc; 20mA (i.e. permit 500 $\Omega$ load)		Short-circuit protected
Linearity	<0.010 (one part in 10 000)		% of Full Scale
Temperature Effect on Zero	Zero<50ppm/ $^\circ$ C		Given no optional trim pots
Temperature Effect on Gain	Gain<50ppm/ $^\circ$ C		Given no optional trim pots
Temperature Range	Compensated -10 $^\circ$ C/+40 $^\circ$ C; Operating -20 $^\circ$ C/+50 $^\circ$ C		
Power Supply	12-16VDC 70mA Regulated supply,	Not isolated	Excess voltage, reversed polarity and ESD protected.
External connections	Load cell: Single row, 10 pos. Power supply and output: Dual row, 10 positions. All 2.54mm pitch.		
Dimensions, weight and mounting	L81.3 * W30.5 * H6,1mm; Weighing 26 gram ; Bolt mounting 2* $\varnothing$ 3,2mm holes in one end.		
Environmental protection	IP40 – enclosure of tinned steel, attached to the PCB.		
Conform to Council Directives	CE in accordance with 73/23/EEC; 93/98/EEC and 89/336/EEC		