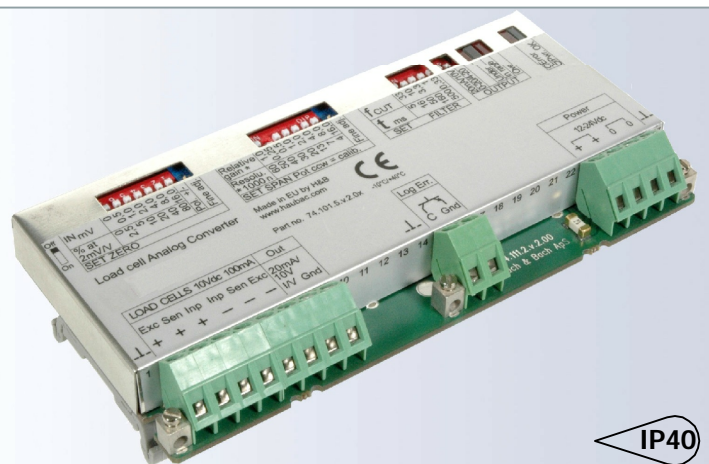


LAC74.1 is a Universal amplifier for static/semi-dynamic weighing applications in industrial environments providing both current and voltage output at high precision. Zero, span and filter settings are performed via firm DIP-switches in binary organized steps and fine trimmed by 20 turn pots to achieve a very high resolution. The LAC 74.1 can be clipped on to a DIN rail TS35 and offers robust screw terminals for all connections.



FEATURES

- Offers good stability and security in hostile, industrial environments.
- Both voltage output 10V and current output 0-20 or 4-20mA.
- Can drive up to 4 Pc 350 ohm load cells or 12 Pc 1000 ohm load cells.
- Wide range of gain and minimum zero drift enables a live range down to a few percent of the load cell's rating.
- Wide range of the low pass input filter from 33 to 0.33Hz to meet any requirement.
- Load cell wiring defects and power error are signaled for safety. (E.g. for TÜV approved applications).
- The lay out of the front and the LED indicators ease the set-up and calibration.

APPLICATIONS

- Static/semi-dynamic weighing applications in industrial environments.

OUTLINE DIMENSIONS

Height /length/width	L 135 mm; W 66 mm; H 18 mm excl. DIN rail clips.
Weight	130g (4.6oz) Net. (Packed 170g)
I/O pins	8+2+4 screw terminals, 5 mm pitch; 3 gnd. terminals
Mounting	Dual TS35 -clips is provided, Permit standard 35mm DIN-rail mounting

analogue amplifier

LAC74.1



SPECIFICATIONS

Input	Linearity	<0,01 % of full scale.
	Load cell excitation voltage	10 Vdc
	Load cell drive capability	R _{LC} 80-2000 ohm
	Load cell wiring system	6 wires inclusive sense
	Load cell input range	±3.2 mV/V equivalent to ±32 mVdc.
	Load cell input resolution	<200 nV/incr. (>100 000 counts at 2 mV/V input)
Zero/Gain	Zero coarse, binary increments	±31.5mV as 64 incr. of each 0.5mV
	Zero fine trim, 20 turn potentiometer	0.6mV, trim resolution <0.5uV
	Gain coarse, binary increments	1*-32* as 128 incr. of each 0.25*
	Gain fine trim, 20 turn potentiometer	0.3* trim resolution <0.003*
	Zero/Gain change influence on zero	0,045%FS/1*gain change
Input filters	First filter: Fixed 2nd order:	33Hz cut off frequency (5ms)
	Second filter: Adjustable 1st order	33-10-3,3-1,0-0,33Hz cut off frequency (5ms-500ms)
Analog output	Current output range	0-20mA or 4-20mA (reversed current protected)
	Voltage output range	0-10Vdc (as internal 500Ω shunt resistor)

General	One open collector	Normally closed OC, opens in case of error
	Rating of the logic output	I ≤ 300mA; V ≤ 30Vdc
	Fault/error messages occur if	- Load cell input- or sense wires is out of range - The current or voltage output is out of range - Power fail
	Power supply	12-24Vdc ≤15% ripple; ≤2,4 Watt Isolated

Influences	Temperature effect on Zero	Typical 10 ppm/°K, Max 25ppm/°K
	Temperature effect on Span	Typical 20 ppm/°K, Max 50ppm/°K
	Temperature range	Operating: -25°C/+55°C; Storage -35°C/+65°C
	Relative humidity	0-95 % non condensing
	EMI	10 V/m (1-2000 MHz)
	General I/O protection, all pins	Reversed polarity, excess voltage and surge
	Vibration	2.5 G operational; 5 G non-operational
Protection, environment	IP40	

Dimensions and specifications subject to change without notice



Pioneering Measured Solutions

Group Four Transducers
22 Deer Park Drive,
E. Longmeadow, MA 01028
www.groupfourtransducers.com

Phone : (800) 419 1444
Fax : (413) 525 -6182
sales@group-4.com