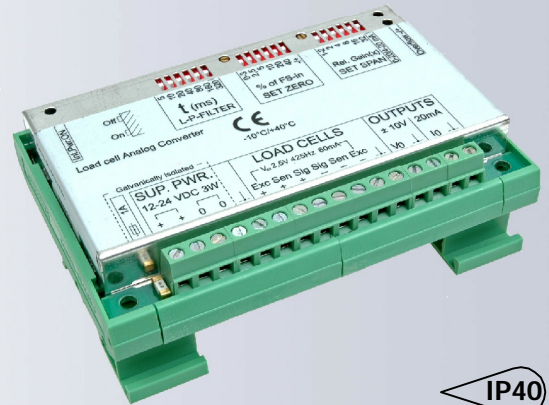


LAC 65.1 is a Universal analogue amplifier for static/ semi-dynamic weighing applications in hostile industrial environments providing both current and bipolar voltage output at a very high precision. Zero, span and filter settings are performed via firm DIP-switches in binary organized steps and fine trimmed by 20 turn pots to achieve a very high resolution. The LAC 65.1 can be clipped on to various DIN rails and offers robust screw terminals for all connections.



### FEATURES

- Offers extreme stability and security in hostile, industrial environments.
- Both Bipolar voltage output  $\pm 10V$  and current output 0-20 or 4-20mA.
- Can drive up to 8 Pc 350 ohm load cells or 24 Pc 1000 ohm load cells.
- Wide range of gain and virtually no 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.
- AC excitation voltage (425Hz) cancels influence from EMI and thermo electric forces from wire joints.
- Low 2.5V excitation voltage effectively prevent load cell warm up errors.
- The lay out of the front and the LED indicators ease the set-up and calibration.

### APPLICATIONS

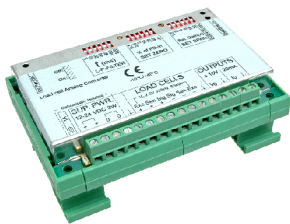
- Static/semi-dynamic weighing applications in hostile industrial environments.

### OUTLINE DIMENSIONS

Height /length/width	L 114 mm; W 77 mm; H 35 mm incl. DIN rail clips.
Weight	130g (4.6oz) Net. (Packed 170g)
I/O pins	6 screw terminals, 3,81 mm pitch;
Mounting	Universal DIN-rail clips is provided 15 to 35mm C or Hat profile

analogue amplifier

# LAC65.1



## SPECIFICATIONS

<b>Input</b>	Linearity	<0.005 % of full scale.
	Load cell excitation voltage	2.5 Vac 425Hz
	Load cell drive capability	R <sub>LC</sub> 40-2000 ohm
	Load cell wiring system	6 wires inclusive sense
	Load cell input range for full output	±0.17mV/V to ±3.3mV/V.
	Load cell input resolution	<100 nV (>50 000 increments at 2 mV/V input)
<b>Zero/Gain</b>	Zero coarse, binary increments	±2.4mV/V as 32 incr. of each 0.075mV/V input
	Zero fine trim, 25 turn potentiometer	0.1mV/v, trim resolution <0.5uV/V
	Gain coarse, binary increments	1*-32* relative as 32 incr. of each 1*
	Gain fine trim, 25 turn potentiometer	1-2* trim resolution <0.005*
	Optional gain set	10*-320*
	Zero/Gain change influence on zero	0.045%FS/1*gain change
<b>Input filters</b>	First filter: Fixed 2nd order:	32Hz cut off frequency (5ms)
	Second filter: Adjustable 1st order	32-0.25Hz cut off frequency (5ms-640ms)
<b>Analog output</b>	Current output range	0-20mA or 4-20mA (reversed current protected)
	Voltage output range	0-±10Vdc
<b>General</b>	Off-set deviation between V <sub>OUT</sub> and I <sub>OUT</sub>	< 2%
	Gain deviation between V <sub>OUT</sub> and I <sub>OUT</sub>	< 2%
	Power supply	12-24Vdc ≤15% ripple; ≤3 Watt Isolated
	Isolation of the Power source	>10 MΩ <1 nF >0.5kV
<b>Influences</b>	Temperature effect on Zero	Typical 10 ppm/°K, Max 25ppm/°K
	Temperature effect on Span	Typical 15 ppm/°K, Max 30ppm/°K
	Temperature range	Operating: -20 °C/+50 °C; Storage -30 °C/+60 °C
	Relative humidity	0-95 % non condensing
	EMI	10 V/m (1-1000 MHz) IEC801-1 level 2
	Burst (Transients)	IEC 801-4 (level 2)
	Electrostatic discharge to meet	IEC 801-2 (level 3)
	General I/O protection, all pins	Reversed polarity, excess voltage and surge
	Vibration	2.5 G operational; 5 G non-operational
	Protection, environment	IP40
<b>Dimensions</b>	Height /length/width	L 114 mm; W 77 mm; H 35 mm incl. DIN rail clips.
	Weight	130g (4.6oz) Net. (Packed 170g)
	I/O pins	6 screw terminals, 3.81 mm pitch;
<b>Mounting</b>	Universal DIN-rail clips is provided	15 to 35mm C or Hat profile
<b>Standards</b>	Conform to Council Directive	CE in accordance with 93/98/EEC; 89/336/EEC
	Certificate of approval	-
	Certification accuracy	Class III: 10000e; 1 μV/VSI

Dimensions and specifications subject to change without notice



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