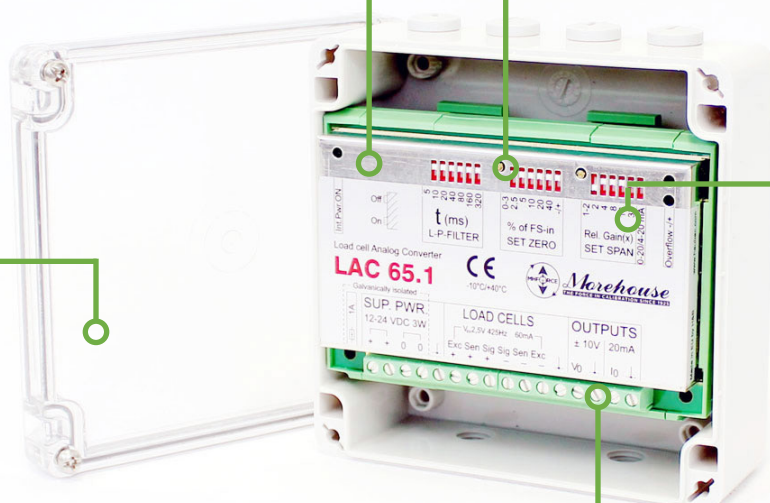




- ✓ Extreme Stability
- ✓ Wide Range of gain

- ✓ Wide range of filter to maximize stability

- ✓ Available with sealed mounting box



- ✓ Easy adjustment of span and offset

- ✓ Bipolar voltage output  $\pm 10$  V
- ✓ Current output 0-20 mA
- ✓ Current output 4-20 mA

## Standard Features

- » Offers extreme long-term stability and security in hostile, industrial environments
- » Both bipolar voltage output ( $\pm 10$  V) and current output (0-20 or 4-20 mA)
- » 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 thermoelectric forces from wire joints
- » Low 2.5 V excitation voltage effectively prevent load cell warm up errors
- » The adjustment of gain and zero virtually do not affect one another
- » Binary DIP-switches and quality 25-turn trim pots permit fine resolution of adjustments
- » A wide supply voltage range and the isolated power supply underline the electrically robustness
- » Can be clipped on to various DIN rails and offers robust screw terminals for all connections



## Technical Specifications

Specifications	Load Cell Amplifier for Controllers
	Model: LAC 65.1
<b>Input</b>	
Linearity	< 0.005 % FS
Load Cell Excitation	2.5 VAC 425 Hz
Load Cell Drive Capability	RLC 40-2000 ohm
Load Cell Wiring System	6 wire inclusive sense
Load Cell Input Range for Full Output	$\pm 0.17$ mV/V to $\pm 3.3$ mV/V
Load Cell Input Resolution	< 100 nV (> 50000 increments at 2 mV/V input)
<b>Zero / Gain</b>	
Zero Coarse (Binary Increment)	$\pm 2.4$ mV/V as 32 incr. of each 0.075 mV/V input
Zero Fine Trim (20 Turn Potentiometer)	0.1 mV/V, trim resolution < 0.5 $\mu$ V/V
Gain Coarse (Binary Increment)	1-32 relative as 32 incr. of each 1
Gain Fine Trim (20 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	0-20 mA or 4-20 mA (reversed current protected)
Second Filter: Adjustable First Order	0 $\pm$ 10 VDC
<b>General</b>	
Offset Deviation Between VOUT and IOU	< 2 %
Gain Deviation Between VOUT and IOU	< 2 %
Power Supply	12-24 VDC < 15 % ripple; < 3 Watt isolated
Isolation of the Power Source	> 10 M $\Omega$ ; < 1 nF; > 0.5 kV
<b>Influences</b>	
Temperature Effect on Zero	Typical 10 ppm/ $^{\circ}$ K; Max 25 ppm/ $^{\circ}$ K
Temperature Effect on Span	Typical 15 ppm/ $^{\circ}$ K; Max 30 ppm/ $^{\circ}$ K
Temperature Range	Operating: -20 $^{\circ}$ C to +50 $^{\circ}$ C; Storage -30 $^{\circ}$ C to +60 $^{\circ}$ C
Relative Humidity	0-95 % non-condensing
EMI	10 V/m (1-1000 MHz) IEC801-1 level 2
Burst (Transient)	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



## Technical Specifications

Specifications	Load Cell Amplifier for Controllers
	Model: LAC 65.1
<b>Dimensions</b>	
Height x Length x Width	L 114 mm; W 77 mm; H 35 mm incl. DIN rail clip
Weight	4.6 oz (130 g) net; Packed 6.0 oz
I/O Pins	6 screw terminals; 3.81 mm pitch
<b>Mounting</b>	
Universal DIN – Rail Clips is Provided	15 to 35 mm C or Hat profile
<b>Standards</b>	
Conform to Council Directive	CE in accordance with 93/98/EEC; 89/336/EEC
Certification Accuracy	Class III: 10000e ; 1 $\mu$ V/VSI