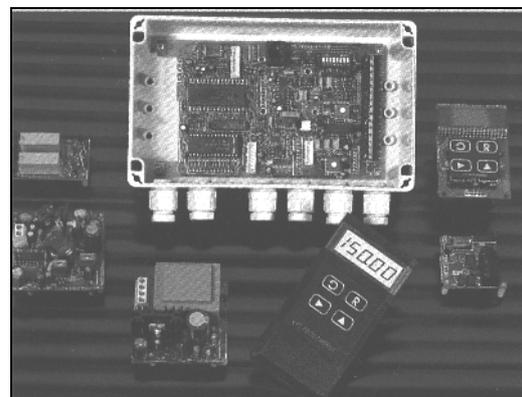


# LCA15

## Intelligent Loadcell Amplifier

- ◆ **Auto calibration**
- ◆ **Remote tare, printer and reset inputs**
- ◆ **4 to 20mA and 0 to 10V output as standard**
- ◆ **ABS case sealed to IP65**
- ◆ **Password protection of calibration**



This intelligent self-contained loadcell amplifier is designed for use with strain gauge loadcells.

It provides industry standard current, voltage or serial data signals for accurate interfacing of loadcells with control and monitoring systems.

All set up functions are via the programming module using a simple menu system. The module can be mounted on the amplifier board or supplied as a separate hand held unit for use with more than one amplifier. All parameters are set digitally for accuracy, including the analogue output.

The 4 to 20mA and 0 to 10V outputs can both be used at the same time but only one can be accurately calibrated. See the LCA15 specification for more information. The normal set-up is to calibrate the 4 to 20mA output accurately unless special instructions are given with an order. The analogue output is uni-polar so if a bi-directional loadcell is used the only way to scale the amplifier is to set the mid-point of the analogue output equal to zero load. This will be 12mA or 5V.

This amplifier is used throughout the process industry providing a local transmitter for process vessels and within the engineering industry for single or multiple loadcell applications. An option is available for RS232/RS485 serial communication single links or multi-drop applications of up to 25 weigh stations.

If the LCA15 is supplied with a loadcell it will normally be calibrated to read the loadcell output in the same engineering units as the loadcell calibration. A traceable system certificate will be supplied for the amplifier and loadcell combination.

This amplifier can be used with any of our loadcells. Details of our loadcell families can be found in the Product List and the Loadcell Specifier Guide. If you require copies please contact our sales department or look on our web site at [www.novatechloadcells.co.uk](http://www.novatechloadcells.co.uk).

## LCA15 Specification

Sensitivity	0.5 to 200mV/V
Conversion rate	10 readings per second
Accuracy	90 days $\pm 0.08\%$ of reading $\pm 0.05\%$ of FSD typical
Drift	0.002% full range / °C typical at 2.5mV/V
Analogue output	4 to 20mA, loop resistance $< 1k\Omega$ - typical accuracy $\pm 0.15\%$ of range 0 to 10V, load resistance $> 5k\Omega$ - accurate to within $\pm 2\%$ of 4 to 20mA
Settling time	0.25 second to 1% of step change
Loadcell supply	9.6Vdc at 150mA (4 x 350 $\Omega$ loadcells), with remote sensing
Operating temperature	-10 to +50°C
Storage temperature	-20 to +70°C
Case sealing	IP65
Supply requirements	115/230Vac (LS1) or 9-32Vdc (LS3), power 10 Watts

## Order codes

LCA15-LS1 Basic amplifier in an ABS IP65 case - 200 x 120 x 75mm.  
For 9-32Vdc powered versions change LS1 to LS3.

**Note: The basic amplifier does not include a programmer module - see below.**

Other options - add the code to the basic ordering code.

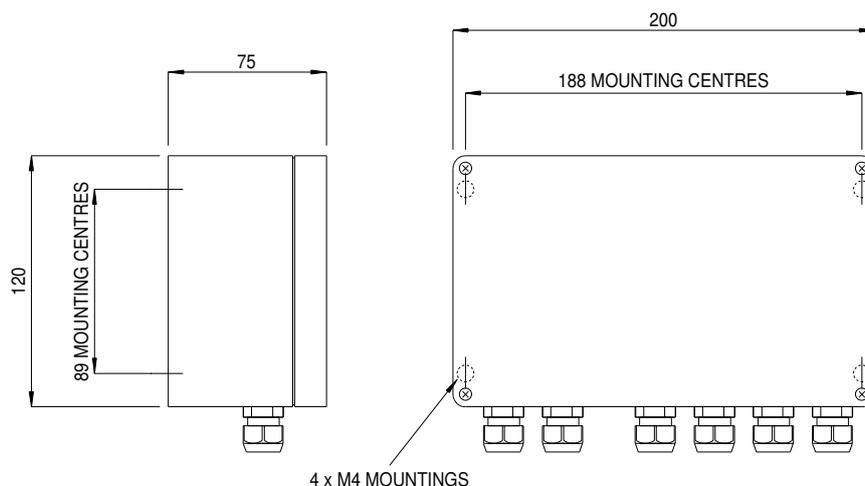
-LC3	RS232/RS485 serial communications. This can be configured for use with a printer or a computer.
-LR1	2 set points. Each set point has a SPCO relay contact rated at 5A 240Vac, resistive load.
-LTL	ABS case with a transparent lid
-LSS	Stainless steel case - 220 x 160 x 85mm

Supplied with an operators manual giving full details of the programmable parameters. The parameters are stored in non-volatile memory. When the LCA15 is purchased with a loadcell the amplifier will be calibrated with appropriate scaling for use with the loadcell.

## Programmers

LP1	Board mounted programmer	4½ digit display
LP2	Hand held programmer	4½ digit display

 This product complies with the requirements of the European EMC directive.



Novatech reserves the right to vary the foregoing details without prior notice

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