Novatech
Loadcell Design & Manufacture

SY011 Loadcell Amplifier

- Small size
- 4 to 20mA, Â±5V or Â±10V output
- 5 or 10Vdc stabilised loadcell supply
- Low zero drift
- 1kHz bandwidth (-3dB)

Specification

Parameter	Value	Unit
Output	Current version: 4 to 20mA, loop resistance 10kÎ©	
Sensitivity	Factory set between 0.5 and 100mV/V	
Non-linearity - typical	±0.05% of full range	
Drift - typical	Zero: 0.5µV/°C at the input. Span: 80ppm/°C	
Supply requirements	Nominal 24Vdc (17 to 30Vdc)	
Maximum supply current	120mA	
Loadcell supply	5Vdc (15mA) or 10Vdc (30mA) (factory set)	
Operating Temperature	0 to +50°C	
Case material	ABS	
Case dimensions	100 x 49 x 20 mm (including terminals)	

This loadcell amplifier is designed for use with strain gauge loadcells.

It provides industry standard current or voltage outputs for accurate interfacing of loadcells with control and monitoring systems. This amplifier is ideally suited to engineering applications. Its small size makes it easy to mount inside existing equipment. The voltage output version of the amplifier has a bi-polar output for use

with bi-directional loadcells even though it is powered from a uni-polar supply. The amplifier is easily calibrated using non-interactive zero and span trimmers. When it is purchased with a loadcell it will be calibrated for use with the loadcell. If the SY011 is supplied with a loadcell it will normally be calibrated to read the loadcell output in the same force units as the loadcell calibration. A traceable system certificate will be supplied for the amplifier and loadcell combination. CE - This instrumentation product complies with the requirements of the European EMC directive.

Order Codes

Code	Description
SY011ABCD - Replace A, B, C and D with the required codes from the list below.	
A (Basic type)	V for voltage output, I for current output.
B (Amplifier output)	005 for Â±5, 010 for Â±10V, 420 for 4 to 20mA.
C (Loadcell excitation voltage)	05 for 5V, 10 for 10V.
D (Loadcell output in mV/V)	Usually 1.0 or 2.0, other values are possible.
	Example: SY011I-420-10-2.0 This has a 4 to 20mA current output, 10V loadcell excitation and an input sensitivity of 2.0mV/V for full range.

Notes

If the SY011 does not have all the functions you require the SGA or LCA20 Loadcell Amplifiers may be more suitable. An LCA20 data-sheet and an SGA data-sheet are available.

Files

Type	Title	Download
PDF Instructions	Printable user instructions for the current output	Download
PDF Instructions	Printable user instructions for the voltage output	Download

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