

## Strain Gauge/Load Cell Amplifier/Signal Conditioner

### Features

- Very Stable Bridge Excitation
- Selectable Sensitivity
- High Frequency Filtering
- User Selectable Analogue Outputs
- **High Specification:**
- IP65 ABS field case with cable glands
- Surface mount PCB
- Wide range filtering 1Hz to 5kHz
- Switch selectable offset  $\pm 70\%$  FS
- Excitation: regulated 10V@110mA
- 3 year manufacturer's warranty
- Full CE approval



### Introduction

#### Flexible Solution:

10v Excitation for up to 4 x 350R Strain Bridges  
 Adjustable transducer sensitivity 0.1 to 30 mV/V  
 User-selectable analogue output  $\pm 10V$ ,  $\pm 5V$ , 0-10V, 0-5V, 0-20mA, 4-20mA

Simultaneous voltage and current output  
 230/110VAC or 18-24Vdc power supply  
 Direct connection to a PLC, a display unit, industrial instrumentation, chart recorder, or a P (with A/D card)  
 An LVDT version of this unit is also available.

#### Simple to use

All parameters configurable by DIL switch  
 Clear and concise operating instructions supplied

An ideal product to stock

#### Cost Effective

Attractive discounts on quantity orders

Fast delivery times

### Specifications

#### Parameter

Parameter	Minimum	Typical	Maximum	Units
Power supply (SGA/A):- (110/230Vac) 50 - 60Hz	-	110/230	-	V AC
Power supply DC :-	18	-	24*	V DC
Power supply current DC :- (depends on loading)	50	90	200	mA
Bridge excitation 350R Strain Gauge	9.5	10	10.5	V
Bridge resistance	85	-	-	Ohms
Bridge sensitivity (Switchable)	0.06	-	29	mV/V
Gain adjustment (Pot - fine adj.)	0.06	-	1.0	mV/V
Offset adjustment (Pot - fine adj.)	-1.25	-	+1.25	%FR
Offset adjustment (Switchable - coarse adj)	$\pm 1.25$	-	$\pm 79$	%FR
Output load (Voltage output)	-	-	2	mA
Output load (Current output)	0	-	500	Ohms
Bandwidth (No filter and > 2mV/V) - 3d B point	DC	-	6	kHz
Filter cut-off (Switchable ranges) - 3 d B point	1	-	5000	Hz
Zero temperature coefficient (@2.5mV/V)	-	0.002	0.009	%/ °C @ 2.5mV/V FR
Span temperature coefficient	-	0.007	0.01	%/ °C
Linearity	-	0.03	-	%FR
Gain stability -1st 1000 Hours	-	0.2	-	%FR
Gain stability -2nd 1000 Hours	-	0.1	-	%FR
90 day Offset stability	-	3.3	-	uV
Output load stability gain (0 - 100%)	-	-	0.01	%FR
Output load stability offset (0 - 100%)	-	-	0.01	%FR
Power supply rejection gain (0 - 100%)	-	-	0.01	%FR
Power supply rejection offset (0 - 100%)	-	-	0.01	%FR
Operating temperature range	-10	-	50	°C
Storage temperature range	-20	-	70	°C
Humidity	-	-	95	%

\*N.B. 18V max at full load FR= Full Range

