

## Miniature Amplifier Type 2818



Type 2818



Type 2818H

### Specification

Power Supply Voltage	9-15 VDC
Power Supply Current	< 50 mA + Strain Gauge Current @ 6V Excitation
Input Range	+/- 0.5 – 1.5 mV/V
Output	0-5V WRT PSU –ve connection (2.5V centre)
Offset Trim Range	+/-0.3mV/V
Temperature Range	0-70 deg C
Accuracy	< 1% FSD
Linearity	<1% FSD
Gain range	200-700 (set by surface mount resistors)

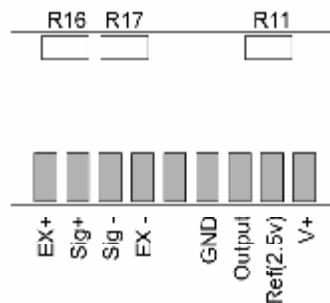
### Dimensions

Type 2818 - Board:- 28 x 18 x 7 mm

Type 2818H Housing:- 50 x 35 x 18 mm Cable length 1m

### Connections

All connections to board are via tinned solder terminals



## Order Information

**Type 2818 - XXX - XV - XM**

Type 2818 – gain – Zero point offset - Cable length, if required

**Type 2818H - XXX - XV - XM**

Type 2818 housed – gain – Zero point offset - Cable length (1M standard)

Leave gain and zero as X(XX) if customer setting up gain and zero offset.

## Set-up & Calibration Instructions

Connect Strain Gauge

Connect Power Supply & output monitoring equipment

Apply Zero Strain

Power Up

Note offset Polarity

If offset +ve connect Resistance decade box to R17 Terminals (remove power during connection)

If offset -ve connect Resistance decade box to R16 Terminals (remove power during connection)

Adjust resistance to remove offset (output =2.50V), remove decade box & fit 0805 SMT resistor of correct value to R16 or R17 as determined

Connect Resistance decade box to R11 Terminals (remove power during connection)

Apply full scale strain (positive direction)

Adjust resistance to give output of 5.00 V

Check output = 0V with full scale strain (-ve direction)

Remove decade box & fit 0805 SMT resistor of correct value to R11

## Resistor Value Guide

The following lists the offset & gain ranges expected from the resistor values shown

R11 (K)	Input for FSD mV/V	R16 or R17 (K)	Input Offset mV/V
1000	0.52	1000	0.002
470	0.54	470	0.004
220	0.58	220	0.009
100	0.66	100	0.019
47	0.79	47	0.038
22	0.98	22	0.074
10	1.18	10	0.132
4.7	1.34	4.7	0.205
2.2	1.44	2.2	0.276
1	1.50	1	0.331

If desired offset cannot be achieved with a single available resistor value, it is possible to over compensate with the nearest (lower) value & then re-trim the opposing resistor with a higher value.

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