



Strainstall

THE WORLD of **load measurement and stress analysis**

Product Type 2130 Calibration Unit



The 2130 Calibration Unit employs a number of precision resistors inter-connected in a specially designed mesh network, simulating the input and output characteristics of a bridge circuit without introducing the drift problems of the latter.

- **Rapid and accurate calibration of strain gauge readout systems and recorders**
- **Switch selection of five commonly used strain gauge resistance values from 120 to 1000 Ω**
- **Switch selection of equivalent mechanical strain in ten increments**
- **No drift, either short or long term**
- **High Accuracy and light weight**

These units may be used to calibrate readout systems including galvanometric recorders directly in microstrain, eliminating completely any possible error due to tolerances, ambiguity, miscalculation, etc., which can arise with spot calibrations furnished by the otherwise employed method of shunting one bridge arm with a high value resistor.

Whereas the scales on the instruments are marked for single-active strain output, the equivalent signals from bridges of other configurations are simply obtained by dividing the set value by the number of active arms in the operational bridge.

Typical Specification

Equivalent Bridge Resistance:	Switch selection of 120, 240, 350, 700 or 1000 Ω .															
Tolerance:	$\pm 5\%$															
Output Range:	Switch selection of eleven positions: 2130A – mV/V version – 9, 0.2, 0.4, 0.6, 0.8, 1.0, 1.2, 1.6, 2.0, 2.5, 3.0 2130B – microstrain single active version – 0, 400, 800, 1200, 1600, 2000, 2400, 3200, 4000, 5000, 6000 ALL SETTINGS ARE DUAL POLARITY, SELECTED BY A \pm SWITCH.															
Gauge Factor:	Standard units are adjusted to a gauge factor of 2.00.															
Output Accuracy:	Approximately $\pm 0.5\%$ of setting or ± 5 microstrain, whichever is the greater.															
Connection:	Terminals are clearly marked and colour coded according to the widely adopted code of American origin. The terminals for wire ends, also accepting standard 4mm plugs, are coded as follows: <table style="margin-left: auto; margin-right: auto;"> <tr> <td>P1</td> <td>Red</td> <td>Input</td> </tr> <tr> <td>P2</td> <td>Blue</td> <td>Input</td> </tr> <tr> <td>S1</td> <td>Yellow</td> <td>Output</td> </tr> <tr> <td>S2</td> <td>Green</td> <td>Output</td> </tr> <tr> <td></td> <td>Black</td> <td>Case</td> </tr> </table>	P1	Red	Input	P2	Blue	Input	S1	Yellow	Output	S2	Green	Output		Black	Case
P1	Red	Input														
P2	Blue	Input														
S1	Yellow	Output														
S2	Green	Output														
	Black	Case														
Enclosure:	Robust die-cast aluminium box.															
Dimensions:	Casing Size: 92 x 118 x 58mm approximately Overall Size: 120 x 118 x 80mm approximately															
Finish:	Blue stove enamel with chrome handle.															



STRAININSTALL's team of experienced engineers operates from offices in Cowes, Bath and Aberdeen (UK) and Tønsberg (Norway). For further information, please contact:

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Due to continuous development, Straininstall UK reserve the right to change specification without notice.

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