



Strain Gauge board for Recorders

DAS1400 and 8440

The strain gauge board is fully compatible with SEFRAM 8440 and DAS 1400.

Capabilities

Channels	6 (fully isolated)
Measurements	Strain gauge, voltage, thermocouple and current with optional external shunt
Input	differential, fully isolated
Input impedance	2 MΩ for ranges < 1 Volt 1 MΩ for ranges >= 1 Volt
Maximum input voltage <small>(Between one input and ground, or between ground and mechanical chassis)</small>	200V DC
Input voltage	± 50V
Isolation <small>(between channels and mechanical chassis)</small>	>100 MΩ under 500V
Input connectors	Fast plug-in / plug-out, 6 contacts per channel
<i>All accuracies are given with 1Hz filter</i>	
Voltage measurement	
Maximum range	50 V
Lowest range	1 mV
Maximum offset	±50V limited at ± 5 ranges
Accuracy	± 0.1% of full scale ± 10µV ± 0.1% of offset
Resolution	16 bit
Offset drift	100ppm/°C ±1 µV/°C
Sampling rate	100kHz (or 10µs)
Noise	<30µV without filter
Strain Gauge measurements	
The unit is µSTR (micro strain) - 2000µSTR = 1 mV/V	
Bridge	Full bridge (4 and 6 wires), half bridge
Automatic balancing range	±25000 µSTR
Bridge supply voltages	2V and 5V (symetrical ±1V and ±2.5V)
Gauge rate	2 (ajustable between 1.8 and 2.2)
Maximum range	50 000 µSTR
Minimum range	1000 µSTR
Maximum offset	±50000µSTR
Accuracy	± 0.1% of full scale ± 5µSTR ± 0.1% of offset
Resolution	16 bit
Sampling rate	100kHz (or 10µs)
Offset drift	100ppm/°C ±1 µV/°C
Bandwidth	
3 dB bandwidth	>18 KHz
Analogue filter (low pass 60dB/decade)	1KHz, 100Hz, 10Hz
Low pass (digital)	1 Hz, 0.1 Hz, 0.01 Hz, 0.001 Hz

Temperature measurement

Cold junction compensation for J,K,T,S,N,E,W5 thermocouples : ± 1.25 °C

Sensor	Maximum possible range	Range
COUPLE J	-210°C to 1200 °C	20 °C to 2000 °C
COUPLE K	-250°C to 1370 °C	20 °C to 2000 °C
COUPLE T	-200°C to 400 °C	20 °C to 500 °C
COUPLE S	-50°C to 1760 °C	50 °C to 2000 °C
COUPLE B	200°C to 1820 °C	50 °C to 2000 °C
COUPLE E	-250°C to 1000 °C	20 °C to 1000 °C
COUPLE N	-250°C to 1300 °C	20 °C to 1000 °C
COUPLE W5	0°C to 2320 °C	50 °C to 2000 °C

To order
984402500

Supplied with : a set of 6 connectors, user and setup manual

Specifications subject to change without notice - FTDAS1400 A 01



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For assistance and ordering

