

The **SGA** series signal conditioners are ideal for cyclic and high speed testing where no display is needed. Available in single and dual channel versions, they provide the signal conditioning electronics needed for a strain gage based extensometer.



Model SGA channel signal conditioner

The SGA has adjustable excitation voltage and a high accuracy amplifier to provide a high level DC voltage output. An offset adjustment potentiometer is easily accessible on the front panel.

The output is ideal for direct connection to data acquisition boards or test controllers which require high level voltage or current inputs.

All models are supplied with a universal power supply and adapters for your country: specify regional adapters when ordering. A 2.5 mm (8 ft) output cable is included to connect to external systems. Calibration with an extensometer (for each channel) is included.

**SPECIFICATIONS**

- Zero Adjustment Knob(s): On front panel. Fine ( $\pm 5\%$  FS) and coarse. ( $\pm 80\%$  FS) adjustment ranges
- Selectable Output Ranges:  $\pm 5V$ ,  $\pm 10V^*$ , 0-10V, 0-20 mA, etc.
- Bridge Excitation: 5V or 10V\* DC
- Bridge Sensitivity Range: 0.06 to 30.0 mV/V
- Linearity: 0.03% FS typical
- Filtering: 8 settings, 1-5000 Hz, plus secondary 800 Hz filter. 1 kHz\* default
- Operating Temperature Range: -10 to +50 °C
- Zero Temperature Coefficient: 0.009%/C (90 ppm/°C)
- 90 Day Output Stability: ~330 ppm
- Output Noise: 10-100  $\mu V$  (1-100 ppm), depending on filter, DAQ, and gain. 50  $\mu V$  typ.
- Input Power: 100-240 VAC, 50-60Hz. Specify regional power plug type required. Includes: power supply, connection for extensometer(s), output cable(s) and calibration with extensometer

\* Default settings

**Model SGA Available Versions:**  
 Model SGA-1 Single channel signal conditioner  
 Model SGA-2 Dual channel signal conditioner



Designed as an inexpensive solution for static mechanical testing where no digital display is required.



Model DSC signal conditioner

The DSC is a digital signal conditioner with analog output. All calibration is handled by software via an RS232 connection. The sampling rate is well suited for typical tensile tests. They provide all the signal conditioning electronics needed for a strain gage based extensometer. The DSC has an excitation voltage of 5 VDC and a high accuracy amplifier to provide high level DC voltage output. The unit includes a tare button to zero output at the start of every test and a shunt button for periodic verification of the output.

The output is well suited for direct connection to data acquisition boards which require a high level DC input voltage. It will also connect directly to chart recorders or test controllers. For computer based controls, it allows the extensometer data to be acquired by the data acquisition software.

All models include a power cord for your country. An 8 ft (2.5m) output cable is included to connect to external systems. Calibration with an extensometer is included in the pricing.

**SPECIFICATIONS**

- Automatic recognition of up to 3 extensometers after initial set-up
- Multiple extensometers may be calibrated with one DSC
- Accuracy: 0.01% of full scale  $\pm 1$  digital count
- Analog output with capability of 0 to  $\pm 10$  VDC output
- Operating temperature range: 0 to 50 °C
- Front panel tare button to zero output at the start of every test
- 60 readings per second update rate
- Includes power cord, connector for extensometer(s), output cable and calibration with extensometer
- Input power: 110 VAC, 60 Hz, Optional 240 VAC, 50 Hz



Model DSC signal conditioner

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