

### Features

- Very stable bridge excitation
- User selectable analogue outputs
- IP65 ABS field case with cable glands
- Excitation: regulated 7.5V DC

# SGALC Analogue Strain Gauge Load Cell Amplifier

### Description

The SGALC strain gauge signal conditioning module is a cost effective signal conditioner for load cells that offers a wide input signal range.

With an input sensitivity range of 1.5 to 2.1 mV/V, any sensor in this input range can be amplified to give 0-5V, 0-10V or 4-20mA outputs.

The SGALC is an ideal product for many OEM customers, as its flexibility means that it can be configured to suit most applications.

The SGALC can be supplied calibrated with any of LCM Systems sensor range or could be integrated within a larger instrumentation system.

#### **Specification**

| Input signal             | Full bridge strain gauge/load cell  |  |  |  |  |
|--------------------------|-------------------------------------|--|--|--|--|
| Bridge resistance        | 350Ω or 1000Ω                       |  |  |  |  |
| Sensitivity              | 1.5 - 2.1mV/V                       |  |  |  |  |
| Excitation voltage       | 7.5V DC                             |  |  |  |  |
| Power supply             | 12-26V DC for 0-5V output           |  |  |  |  |
|                          | 18-26V DC for 0-10V & 4-20mA output |  |  |  |  |
| Linearity                | 0.3%                                |  |  |  |  |
| Temperature co-efficient | 100ppm full work temperature range  |  |  |  |  |
| Operating temperature    | 0-50°C                              |  |  |  |  |
| Environmental sealing    | IP65                                |  |  |  |  |
| Case material            | ABS plastic                         |  |  |  |  |
| Weight                   | 90g                                 |  |  |  |  |

#### Wiring

| Terminal No. | 1         | 2    | 3    | 4    | 5                     | 6            | 7     | 8     | 9      | 10     |
|--------------|-----------|------|------|------|-----------------------|--------------|-------|-------|--------|--------|
|              | To sensor |      |      |      | Power supply & output |              |       |       |        |        |
| Define       | EXC+      | SIG+ | SIG- | EXC- | Shield                | 12-26V<br>DC | l out | V out | Common | Shield |



- Force measurement systems
- Hoist & winch load control
- Simple weighing systems
- Conversion of load cell signals for long cable run applications

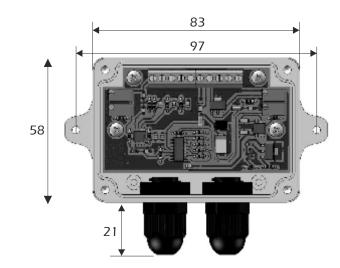
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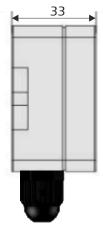


## **TYPE: SGALC**

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#### **Dimensions**





All dimensions are in mm

Due to continual product development, LCM Systems Ltd reserves the right to alter product specifications without prior notice.

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