



# SG0611

## High-Temperature Instrumentation Amplifier With Sensor Supply

### ◆ DESCRIPTION

The SG0611 is an instrumentation amplifier designed for sensors working at high temperature with the electronics close to the heat sources.

The gain is programmable in more than 40 steps without external components.

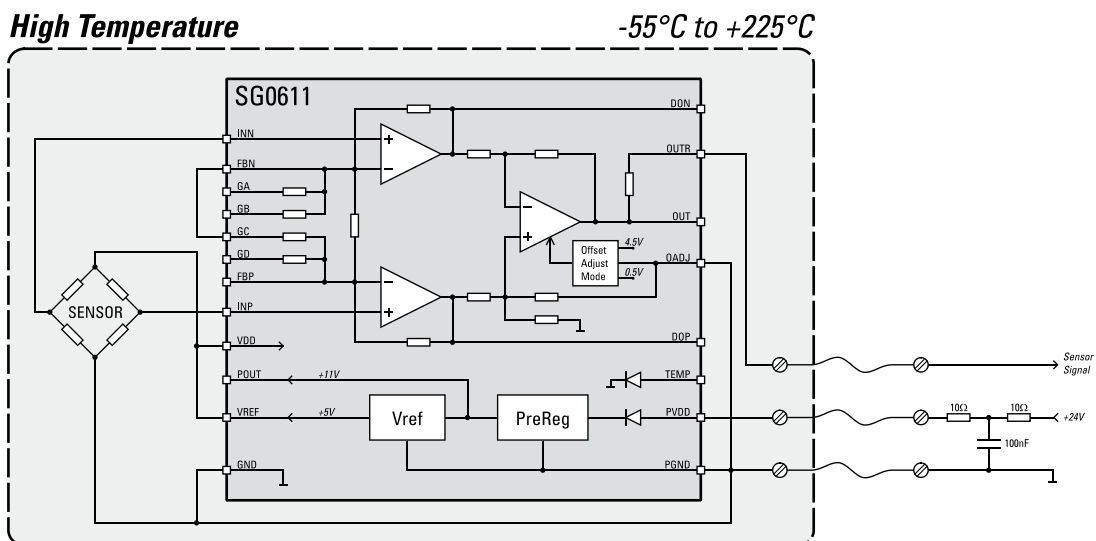
A 5V voltage reference supplies the circuit and the sensor bridge. A high voltage pre-regulator is also included to increase the supply range.

The device is manufactured in an SOI process with very low leakage currents and a high-temperature metal system to guarantee continuous operation at high temperature.

### ◆ KEY FEATURES

- High-temperature operation up to **+225°C**
- Selectable gain from 18x to 278x in more than 40 steps without external components
- Pre-regulator with supply up to 36V
- Internal 5V reference and sensor supply
- No external high-temperature components needed
- Available as die or packaged component
- Option to customise for your application
- Evaluation board available

### ◆ TYPICAL APPLICATION





◆ SALES CONTACT

***Please visit our website [www.sga.se](http://www.sga.se)  
for more information about our  
representatives and distributors,  
or contact SGA directly.***

***specific***   
***components***

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◆ ADDITIONAL INFORMATION

**Support**

If you need any technical advice or help in any way regarding this product, please send an E-mail to [support@sga.se](mailto:support@sga.se), or call SGA, +46 13 364660, and ask for support. We will always be pleased to discuss your requirements and how this product could be used in your application.

**Electrostatic discharge (ESD) precautions**

Electrostatic Discharge (ESD) can damage this integrated circuit. SGA recommends that all integrated circuits are handled with appropriate precautions. Failure to observe proper handling may cause performance degradation or complete failure.

**Data sheet identification**

**Advance Information**

The product is in a formative or design stage. The data sheet contains target specifications for product development. Engineering samples may or may not be available.

**Preliminary Specification**

The data sheet contains preliminary data. Additional data may be added later. Engineering samples are available. Production quantities may or may not be available.

**Product Specification**

The data sheet contains final product specifications. The product is in full production.

**Notice**

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