

## SG-IP-2G-2P

Single Channel Strain Gauge Amplifier with 2 Adjustable Set-Points for Parallel Operating of 2 Transducers

- Supply voltage 22 ... 26 VDC
- Test signal 5 ... 10 V, 2 adjustable threshold value set-points and switching contacts (max. 30 VDC / 0.5 A)
- EMC aluminium die-cast enclosure (IP65)
- Dimensions (W x H x D) 175 x 80 x 57 mm



The single-channel strain gauge measuring amplifier SG-IP-2G-2P allows supply and signal evaluation of two parallel connected strain gauge transducers with standardized sensitivity. The connection is done in 4-wire technology. For further evaluation standard analogue outputs are available. A test signal and 2 threshold value set-points as well as potential-free switching contacts (max. 30 VDC/0.5 A) for limit value monitoring are available for further evaluation.

The measuring amplifier is built-in into a robust EMC die-cast aluminium enclosure (IP65) which is suited for applications in rough and industrial environments.

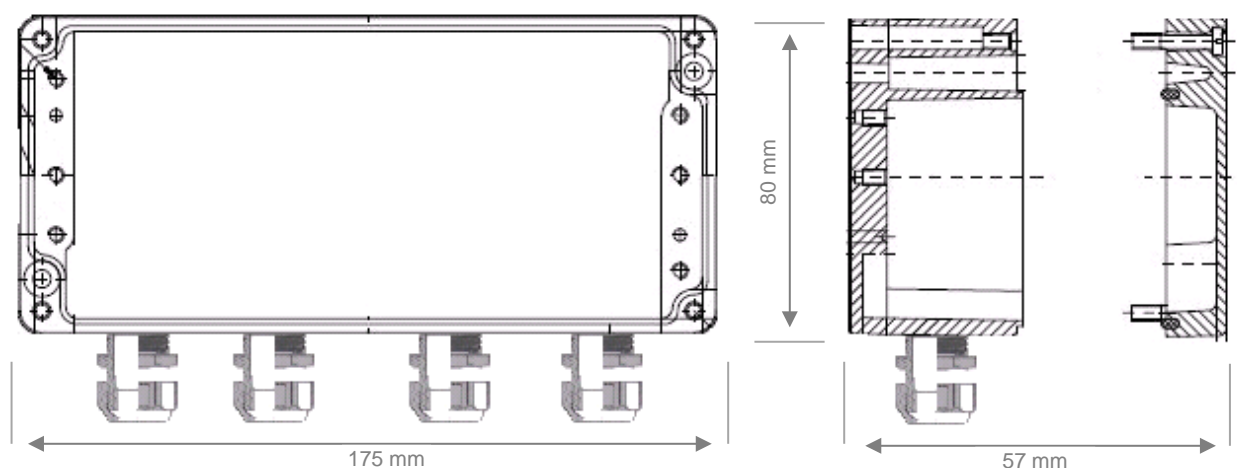
The amplification/channel of the amplifier can be adapted by an internal precision resistance.

The potentiometers Z (Zero) and G (Gain), which are accessible after removing the enclosure cover, allow a calibration correction.

### Technical Data

Number of measuring channels:	1 (full bridge resistance >300 Ω)
Supply voltage:	22 ... 26 VDC
Power consumption:	4 W max.
Strain gauge excitation supply:	+5 VDC, +10 VDC
Test signal:	5 ...10 V
Number of relay switching contacts:	2 (max. 30 VDC / 0.5 A)
Input resistance:	>3 MΩ
Max. input sensitivity:	100 mV/V at 10 VDC excitation supply
Non-linearity:	±0.05 % FSO
Electrical connection:	EMC cable gland on internal terminal block
Enclosure:	EMC aluminium die-cast enclosure (IP65)
Dimension (W x H x D):	175 x 80 x 57 mm
Weight:	750 g
Temperature, storage:	-20 ... +60 °C
Temperature, operating:	-20 ... +50 °C

## Enclosure Dimensions



## Terminal Wiring

Electrical connections are made via cable glands on a terminal block located inside of the enclosure. The terminal numbering is stated on the board. The maximum cable cross section amounts 2.5 mm<sup>2</sup>.

**Note:** The amplifier has to be operated with closed cover only.

Terminal	Description	Terminal	Description
1	Supply Voltage	9	+ SG Excitation Transducer
2	Supply Ground	10	- SG Excitation Transducer
3	Set point SP1 N/O (max. 30 VDC / 0.5 A)	11	- SG Signal Transducer
4	Set point SP1 COM	12	+ SG Signal Transducer
5	Set point SP1 N/C (max. 30 VDC / 0.5 A)	13	Screen / Enclosure
6	Set point SP2 N/O (max. 30 VDC / 0.5 A)	14	Test Signal
7	Set point SP2 COM	15	Test Signal Ground
8	Set point SP2 N/C (max. 30 VDC / 0.5 A)		

The EMC installation information must be followed. The terminals 2 and 15 are not galvanically isolated.

## Ordering Description

**SG-IP-24-2G-2P** Single channel strain gauge amplifier in a EMC aluminium die-cast enclosure (IP65) for limit value monitoring

## Alignment / Calibration

On request, a pre-setting of the measuring system or a factory calibration certificate with traceable references can be carried out for an extra charge.

## Customized Requirements

Technical modifications according to customized requirements are available on request. Moreover, we deliver customized special solutions for a lot of measuring tasks in the section pressure, force, position and tilt measuring using our measuring transducers. Do not hesitate to contact us.

Due to continuous product development, ALTHEN and partners reserve the right to vary the foregoing details without prior notice.

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*The information provided herein is to the best of our knowledge true and accurate, it is provided for guidance only. All specifications are subject to change without prior notification.*

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