

Measuring amplifier GSV-2AS -5+5/250/2

Item number: 122



Highlights

- Tare function via control cable
- RS232, RS422 or CAN/CANOpen
- analogue output ± 5 V
- optionally 4...20 mA output signal
- 24 Bit, to 200.000 Digits display resolution
- extensive software support
- two threshold generator
- trigger input

The GSV-2 is regarded as the "classic" among the industrial measurement amplifiers for sensors with strain gauges. Maximum EMC protection according to degree of sharpness 4 (EN61000-4-2, 61000-4-4, EN50082-2) and beyond. IP66 housing and compactness are appreciated worldwide.

Optionally, the GSV is equipped with a display, plug-in connectors or a zero-setting switch and amplifying switching over relay contacts.

The measuring amplifier GSV-2 is used in process monitoring and weighing technology. Up to 2000 measured values per second can be transmitted via the RS232 serial interface. It has excellent digital filters. No filtering or averaging of the transferred measured values is necessary.

An analog output (0 ... 10 V, or ± 5 V or 4 ... 20 mA) is also available.

The analog output can be set to 0 via a digital control input. The adjustment range is 200% of the measuring range.

The measurement rate and the outstanding software support are particularly noteworthy for a low-cost 24-bit measuring amplifier.

The comprehensive software package ME GSV Control is included in the scope of supply.

The setting of the measuring amplifier or the measuring rate, switching thresholds or display is made either via control signals or via the software ME GSV Control.

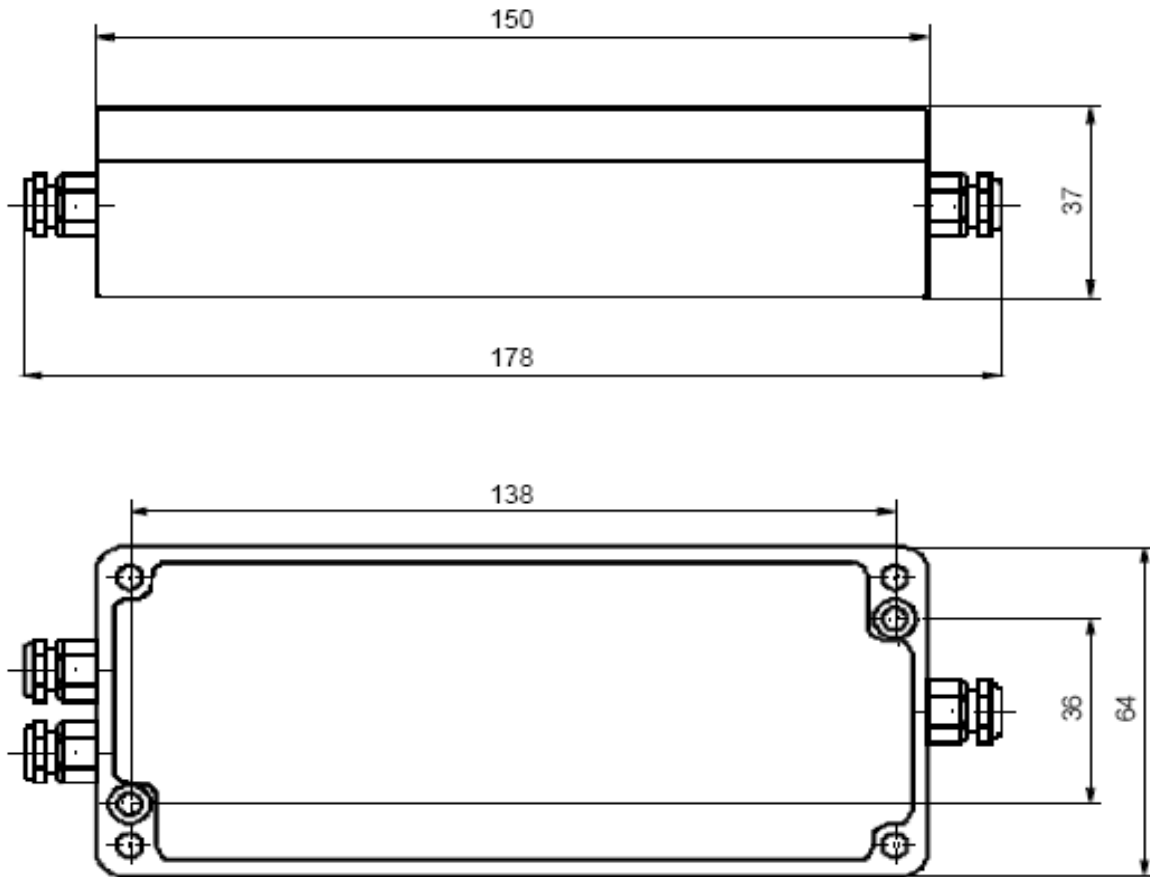
For software developers Windows DLL is available for the integration of the functions.

There are various functions available, like automatic zero-point correction and noise suppression.

The GSV-2 also has an analogue output. This analog output is characterized by fully analog signal processing. Therefore, the output signal is not scalable depending on the sensor signal. A zero setting function for the analog output is available. Only two variant can be set: 2mV/V at the input corresponds to 5V at the analog output, or 3.5 mV/V at the input corresponds to 5V at the analog output. Alternatively, devices with 10V analog output are

also available (order option). The low-pass filter of the analog output adapts in 3 steps depending on the set data frequency: 2.5Hz, or 260Hz, or 1.7 kHz.

Technical Drawing



Technical Data

Basic Data		Unit
Dimensions	178 x 64 x 37	mm
Housing	Aluminium	
Connection	Screw terminal	
Number of channels	1-channel	

Input analog		Unit
Number of analog inputs	1	
Input sensitivity-steps	2.0 3.5	mV7V
Input voltage from	0	V
Input voltage to	10	V
Input resistance-voltage	56	kOhm

Output analog		Unit
Number of analog outputs	1	
Voltage output from	-5	V
Voltage output to	5	V
Output resistance - voltage output	47	Ohm

Accuracy data		Unit
Accuracy class	0,05%	
Relative linearity error	0.02	%FS
Temperature effect on the zero point	0.2	%FS/10°C
Temperature effect on the measuring sensitivity	0.1	%RD/10°C
Resolution	24	Bit

Measuring frequency		Unit
Data frequency from	0	Hz
Data frequency to	1000	Hz
Limit frequency (analog)	1700	Hz

Supply		Unit
Supply voltage from	10	V
Supply voltage to	29	V
Current consumption from	100	mA
Current consumption to	120	mA
Strain gauge bridge supply	5 2.5	V

Interface		Unit
Type of the interface	RS232 RS422	
Quantity of the interface	2	

Zero Adjustment		Unit
Type	Software Regelung Digital	
Tolerance	0.01	%
Time period	1	ms
Debouncing time	4	ms
Trigger level from	3.4	V
Trigger level to	29	V
Trigger edge	Pegel	

Filter		Unit
Order	2	
Algorithm	Bessel	

Environmental Data	Unit
Rated temperature range from	-10 °C
Rated temperature range to	65 °C
Operating temperature range from	-40 °C
Operating temperature range to	85 °C
Environmental protection	IP66