

GSV-2LS -5+5/250/2/CANOpen



Highlights

- Tare function via control cable
- RS232, RS485 or CAN/CANOpen
- analog output $\pm 5V$
- optionally 4...20mA output signal
- 24 Bit, to 200.000 Digits display resolution
- extensive software support
- two threshold generators
- trigger input

Description

The GSV-2 is considered the "classic" among industrial amplifiers for sensors with strain gauges. Highest EMC protection according to severity level 4 (EN61000-4-2, 61000-4-4, EN50082-2) and other standards, IP66 housing and compactness are valued worldwide. Optionally, there is the GSV with display, connectors or zero reset button and gain switching via 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 serial interface RS232. He has excellent digital filters. Filtering or averaging of the transmitted measured values is not necessary. In addition, an analog output (0 ... 10V, or $\pm 5V$ or 4 ... 20mA) is available. The digital output signal and the analogue output can be set to 0 via a digital control input. The adjustment range is 200% of the measuring range.

The measuring amplifier GSV-2 shows its advantages especially in connection with RS232, or RS485 or CANbus (CANopen). The analogue output can not be adjusted unlike the digital output. $\pm 100\%$ of the measuring range are mapped to $\pm 5V$.

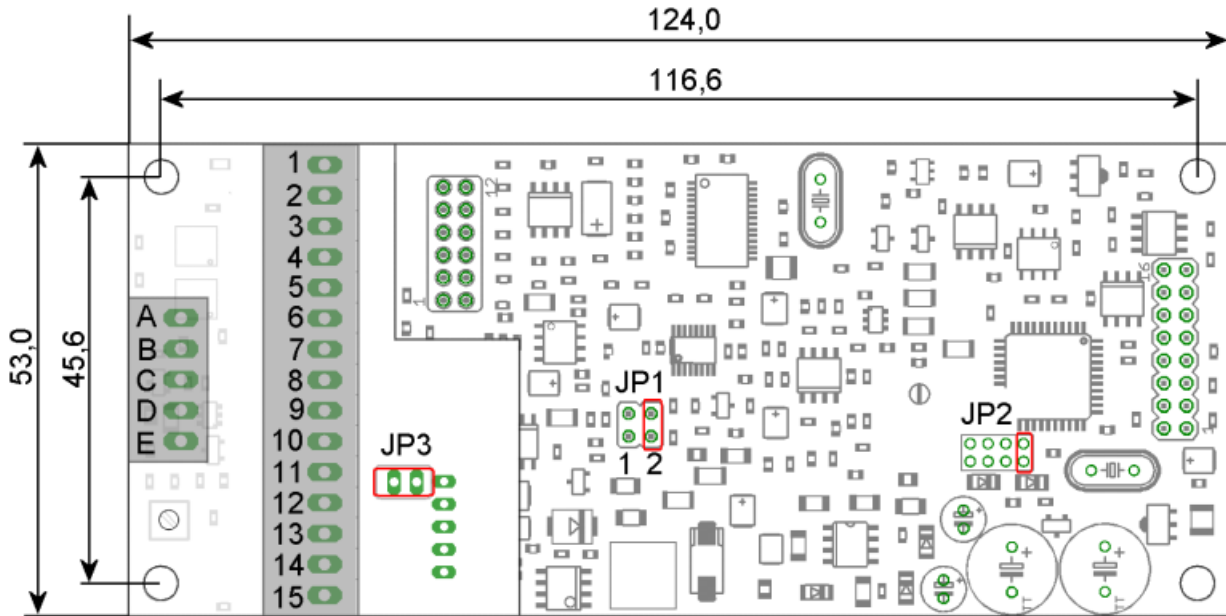
The measuring range can be set to 3.5 mV / V or 2 mV / V by software, or 1 mV / V by a jumper.

For a low-cost amplifier in 24-bit technology, especially the measuring rate and the excellent software support are remarkable. The comprehensive software package ME GSV Control is included in delivery. The setting of the measuring amplifier with regard to measuring rate, switching thresholds or display is done either via control characters or via the software GSVmulti. For software developers, a Windows DLL is available to integrate the functions.

Various functions, such as an automatic zero point adjustment and noise suppression are available.

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.

Dimensions



Technical Data

Input analog

Number of analog inputs	1
Input sensitivity-steps	2.0 3.5 mV/V
Input resistance strain-gauge-full-bridge	87 ... 5000 Ohm
Input voltage f	0 ... 10 V
Input resistance-voltage	56 kOhm

Output analog

Number of analog outputs	1
Voltage output f	-5 ... 5 V
Output resistance - voltage	47 Ohm

Measuring frequency

Data frequency f	0 ... 1000 Hz
Limit frequency (analog)	1700 Hz

Supply

Supply voltage f	10 ... 29 V
Current consumption f	100 ... 120 mA
Strain gauge bridge supply	2.5 5 V

Interface

Type of the interface	canopen rs232 can
Quantity of the interface	3

Zero adjustment

Type	digital
Tolerance	0.01 %
Debouncing time	4 ms
Trigger level f	3.4 ... 29 V
Trigger edge	Level

Temperature

Rated temperature range f	-10 ... 65 °C
Operating temperature range f	-40 ... 85 °C
Environmental protection	IP66

Basis Data

Housing	PCB
Connection	screw terminal
Number of channels	1-Kanal

Precision



Accuracy class	0,1%
Relative linearity error	0.2 %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