



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 generator
- trigger input

Description

The GSV-2 is considered to be the "Classic" among the industrial amplifiers for sensors with strain gauges. Highest EMC protection according to severity level 4 (EN61000-4-2, 61000-4-4, EN50082-2) and beyond, IP66 enclosures and compactness are valued worldwide. The GSV is optionally available with display, plug connectors or zero-setting button and gain switching via relay contacts. The GSV-2 measuring amplifier 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. Filtering or averaging of the transmitted measured values is not necessary. Additionally an analog output (0...10V, or $\pm 5V$ or 4...20mA) is available.

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

For a low-cost measuring amplifier in 24-bit technology, the measuring rate and the excellent software support are particularly remarkable.

The comprehensive software package GSVmultichannel is included in the scope of delivery.

The setting of the measuring amplifier concerning The measuring rate, switching thresholds or display can either be displayed via control characters or via the GSVmulti software.

For software developers, a Windows DLL is available for integrating the functions. Various functions, e.g. automatic zero-point readjustment and noise suppression are available.

Technical Data

Input analog

| | |
|---|----------------------|
| Number of analog inputs | 1 |
| Input sensitivity-steps | 3.5 mV/V |
| Input resistance strain-gauge-full-bridge | 87 ... 5000 Ohm |
| Input resistance strain-gauge-half- /quarter-bridge | 120 350 1000 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 | 1 ... 1000 Hz |
| Limit frequency (analog) | 1700 Hz |

Supply

| | |
|----------------------------|-------------|
| Supply voltage f | 10 ... 29 V |
| Current consumption to | 180 mA |
| Strain gauge bridge supply | 2.5 5 V |

Interface

| | |
|-----------------------|---------------------|
| Type of the interface | rs232 rs422 usb |
|-----------------------|---------------------|

Zero adjustment

| | |
|-----------------|--------------|
| Tolerance | 0.01 % |
| Time period | 1 ms |
| Debouncing time | 4 ms |
| Trigger level f | 3.4 ... 29 V |
| Trigger edge | Level |

Temperature

| | |
|-------------------------------|---------------|
| Rated temperature range f | 0 ... 50 °C |
| Operating temperature range f | -20 ... 70 °C |
| Environmental protection | IP40 |

Basis Data

| | |
|--------------------|-----------|
| Housing | Desktop |
| Connection | Connector |
| Number of channels | 1-Kanal |

Precision



| | |
|---|--------------|
| 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 |

Order options

| Type | Description |
|-----------------------------------|---|
| GSV-2TSD-DI -5+5/250/3,5 | Output -5...5 V, 250 Hz, input ± 3.5 mV/V |
| GSV-2TSD-DI -5+5/250/3,5/CANOpen | Output -5...5 V, 250 Hz, input ± 3.5 mV/V, CANOpen |
| GSV-2TSD-DI -5+5/250/3,5/Ethernet | Output -5...5 V, 250 Hz, input ± 3.5 mV/V, Ethernet |