

## GSV-4USB SubD37 GSV-4USB SubD37



### Highlights

- 4 channels
- Supply via USB port
- Inputs for DMS / 0 - 5 V / PT1000
- Measuring ranges 2 mV / V / 10 mV / V
- DMS quarter- / half-, full bridges
- 8 digital inputs / outputs
- Data rate 0 Hz - 500 Hz

## Description

The measuring amplifier GSV 4USB is a compact 4 channel measurement amplifier.

The amplifier GSV 4USB SubD37 has 1 pcs SubD-37 connector for the sensor connection.

The GSV-4USB is configurable for measurements with strain gauges and other sensors, such as displacement sensors, temperature sensors and sensors with voltage output suitable.

Sampling frequencies from 0Hz to 500Hz are configurable.

No external power supply is needed due to power supply via USB port.

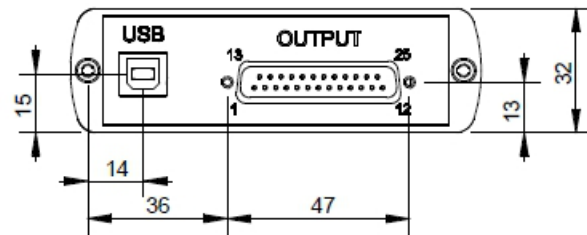
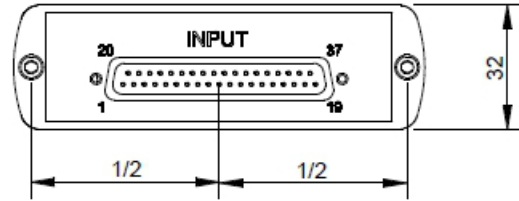
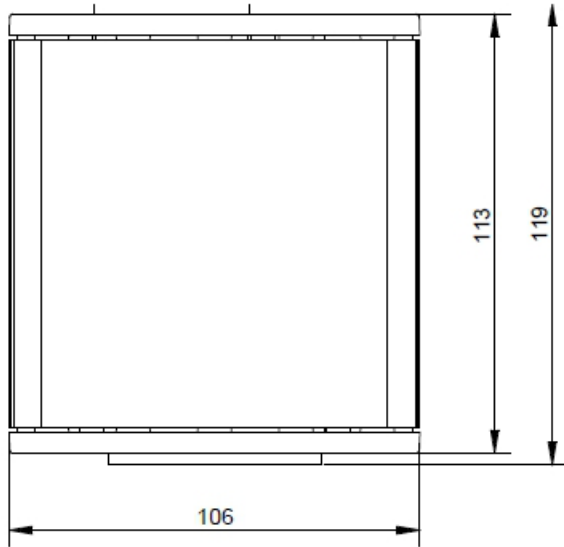
The analog inputs of the measuring amplifier GSV-4USB can be individually configured for strain gage full bridges, half bridges and quarter bridges 120 ohms, 350 ohms and 1k. Other inputs are 0 ... 5V and 0 ... 10V and PT1000.

In the variant with a SUB-D37 connector all input variants are accessible via SUBD37 Connector.

In the version with 4 pieces M12 connectors the device must be configured by solder bridges for the desired input type. PIN5 of M12 plug serves for all input variants different from strain gage full- or halfbridge.

An RS232 interface is optionally available on the 25-pin SubD socket. In this case the USB port serves as power supply. The configuration is done at the factory as an order option.

## Dimensions



## Technical Data

### Input analog

|   |                  |      |
|---|------------------|------|
| Input sensitivity-steps                             | 2.0   10         | mV/V |
| Input resistance strain-gauge-full-bridge           | 89 ... 5000      | Ohm  |
| Input resistance strain-gauge-half- /quarter-bridge | 120   350   1000 | Ohm  |
| Input voltage f                                     | 0 ... 5          | V    |

### Measuring frequency

|                          |           |     |
|--------------------------|-----------|-----|
| Data frequency f         | 0 ... 500 | Hz  |
| Sampling frequency       | 1.92      | MHz |
| Limit frequency (analog) | 450       | Hz  |

### Supply

|                            |             |    |
|----------------------------|-------------|----|
| Supply voltage f           | 4.5 ... 5.5 | V  |
| Current consumption to     | 200         | mA |
| Strain gauge bridge supply | 2.5         | V  |
| Isolation of the supply    | 1000        | V  |

### Interface

|                           |                             |
|---------------------------|-----------------------------|
| Type of the interface     | usb   rs232                 |
| Quantity of the interface | 1                           |
| Version of the interface  | USB 1.1, USB 2.0 kompatibel |

### Temperature

|                               |            |    |
|-------------------------------|------------|----|
| Rated temperature range f     | -10 ... 65 | °C |
| Operating temperature range f | -40 ... 85 | °C |
| Environmental protection      | IP40       |    |



### Basis Data

|                    |           |
|--------------------|-----------|
| Housing            | Aluminium |
| Connection         | Connector |
| Number of channels | 4-Kanal   |

### Precision

|   |               |
|---|---------------|
| Accuracy class                                  | 0,05%         |
| Temperature effect on the zero point            | 0.05 %FS/10°C |
| Temperature effect on the measuring sensitivity | 0.01 %FS/10°C |
| Resolution                                      | 16 Bit        |

## accessories

| Description   | Description  |
|---|--|
|  | Assembling the connector to sensor cable;<br>Connector Type SubD, 37 pin, male (male), with hood |
|  | Mounting plates for GSV-3USB / GSV-3USBx2 / GSV-1A4 / GSV-4USB                                   |