

## Measuring amplifier GSV-4USB M12

Item number: 3809



### Highlights

- 4-channels
- supply via USB Port
- inputs for strain gauge / 0 – 5 V / 0 - 10 V / PT1000
- measuring ranges 2 mV/V / 10 mV/V
- strain gauge quarter / half and full bridges
- 8 digital in- and outputs
- Data rate 0 Hz – 500 Hz

The measuring amplifier GSV 4USB is a compact 4 channel measurement amplifier. The amplifier GSV 4USB M12 has 4 pcs M12 round connectors 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.

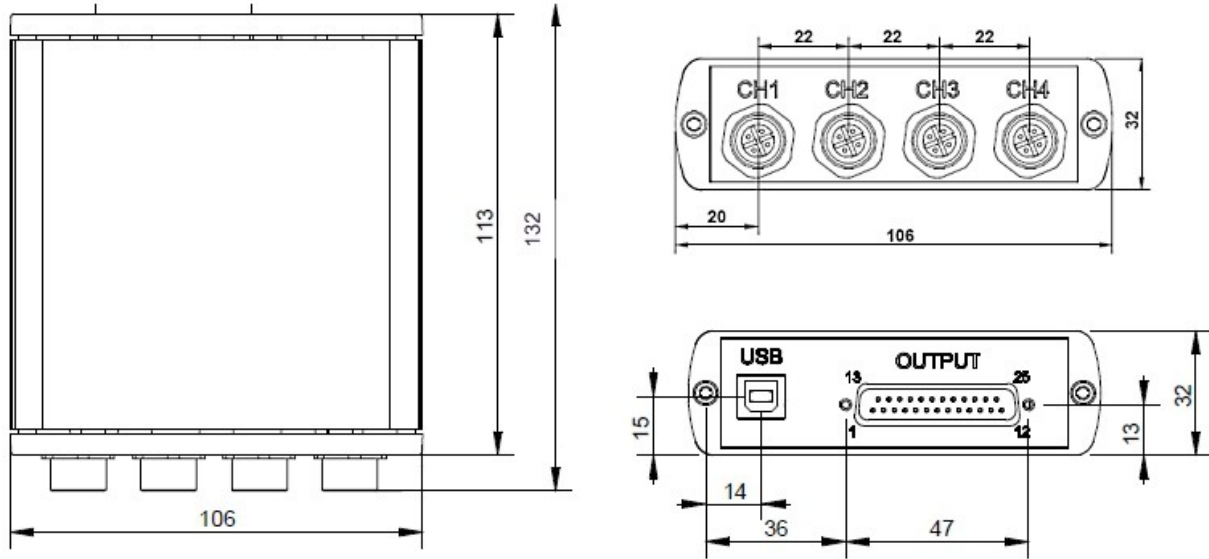
The analog inputs of the measuring amplifier GSV-4USB can be individually configured for strain gage full bridges, half bridges and quarter bridges 120 ohms, 350 ohms and 1k. Other inputs are 0 ... 5V and 0 ... 10V and PT1000.

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.

### Technical Drawing



## Technical Data

Basic Data		Unit
Dimensions	120 mm x 109 mm x 35 mm	
Housing	Aluminium	
Connection	Plug connector	
Number of channels	4-channel	

Input analog		Unit
Input sensitivity-steps	2.0   10	mV/V
Input resistance strain-gauge-half- /quarter-bridge	120   350   1000	Ohm
Input voltage from	0	V
Input voltage to	10	V

Output analog		Unit
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Accuracy data		Unit
Accuracy class	0,05%	
Temperature effect on the zero point	0.05	%FS/10°C
Temperature effect on the measuring sensitivity	0.01	%RD/10°C
Resolution	16	Bit

Measuring frequency		Unit
Data frequency from	0	Hz
Data frequency to	500	Hz
Sampling frequency	1.92	MHz
Limit frequency (analog)	450	Hz

Supply		Unit
Supply voltage from	4.5	V
Supply voltage to	5.5	V
Current consumption to	200	mA
Strain gauge bridge supply	2.5	V
Isolation of the supply	1000	V

Interface		Unit
Type of the interface	USB   RS232	
Quantity of the interface	1	
Version of the interface	USB 1.1, USB 2.0 kompatibel	

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	IP40	