

## Measuring amplifier GSV-8AS

Item number: 7162



### Highlights

- 8-channel amplifier
- 8x input configurable
- Full, half, quarter bridge, 120- 350- 1000 ohm, PT1000,  $\pm 10V$ , Thermocouple Type K, IEPE Sensors
- Outputs 1x USB port, 8x analog output  $\pm 10V$ , 4 ... 20mA configurable, 1x UART/RS232/RS422
- optional EtherCat, CANbus / CANopen
- 16x Digital Input / Output
- 5x galvanic isolation: analog input, analog output, digital IO, UART, USB
- 8x 48kS / s simultaneous sampling
- 6-wire technology, bridge supply 2.5V, 5.0V, 8.75V configurable
- Digital filters IIR and FIR configurable
- Resolution  $< 20 \text{ nV} / V$
- Protection IP67;

The 8-channel measuring amplifier GSV-8 is characterized by particularly high resolution at data rates from 1 Hz to 48000 Hz.

The 8 channels are recorded simultaneously, without multiplexing.

As communication interfaces USB port, optional EtherCAT or CANbus are available.

The device has 8 configurable analog outputs ( $\pm 10V$  et al and 4 ... 20mA).

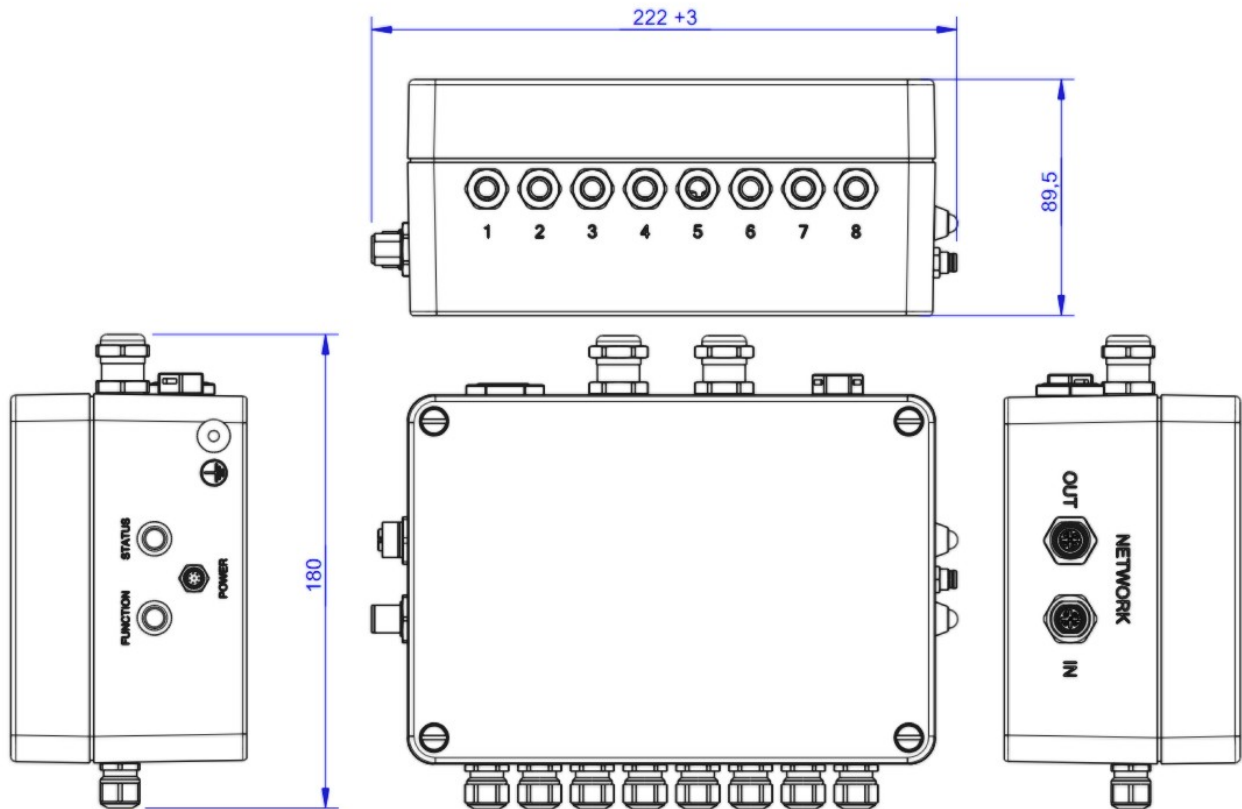
An UART interface is used to control the measuring amplifier via a Raspberry PI.

There are 8 analog inputs. They are individually configurable as:

- DMS input for full bridges in 4- and 6-wire technology
- DMS input for half-bridges
- DMS input for quarter-bridge 120 ohms, 350 ohms, 1kOhm
- Single-ended input  $\pm 10V$
- Input for PT1000 temperature sensor,
- Input for thermocouple type K.

Sensors with IEPE (ICP) interface can be connected via an adapter plug with BNC socket, e.g. IEPE acceleration sensors, IEPE force sensors, etc.

## Technical Drawing



## Technical Data

Basic Data		Unit
Dimensions	180 x 222 x 90	mm <sup>3</sup>
Housing	Aluminium	
Connection	Screw terminal	
Number of channels	8-channel	
Schnittstelle	USB, UART 3.3V	

Input analog		Unit
Number of analog inputs	8	
Input sensitivity-steps	2.0   3.5   7	mV/V
Input voltage from	-10	V
Input voltage to	10	V
Input resistance-voltage	10	MOhm
Temperature input-type	PT1000	
Temperature-measuring range from	-230	°C
Temperature-measuring range to	1500	

Output analog		Unit
Number of analog outputs	8	
Voltage output from	-10	V
Voltage output to	10	V
Output resistance - voltage output	50	Ohm
Current output from	4	mA
Current output to	20	mA
Maximum load resistance - current output	350	Ohm
Isolation of the analog output	2	kV

Accuracy data		Unit
Accuracy class	0,05%	
Relative linearity error	0.02	%FS
Resolution	24	Bit

Measuring frequency		Unit
Data frequency from	0	Hz
Data frequency to	48000	Hz

Supply		Unit
Supply voltage from	9	V
Supply voltage to	28	V
Strain gauge bridge supply	2.5   5   8.75	V

Interface		Unit
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Zero Adjustment		Unit
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Environmental Data		Unit
Rated temperature range from	0	°C
Rated temperature range to	50	°C
Operating temperature range from	-20	°C
Operating temperature range to	70	°C
Environmental protection	IP66/IP67	