

GSV-8AS GSV-8AS PI-3



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 nV / V
- Protection IP67;

Description

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.

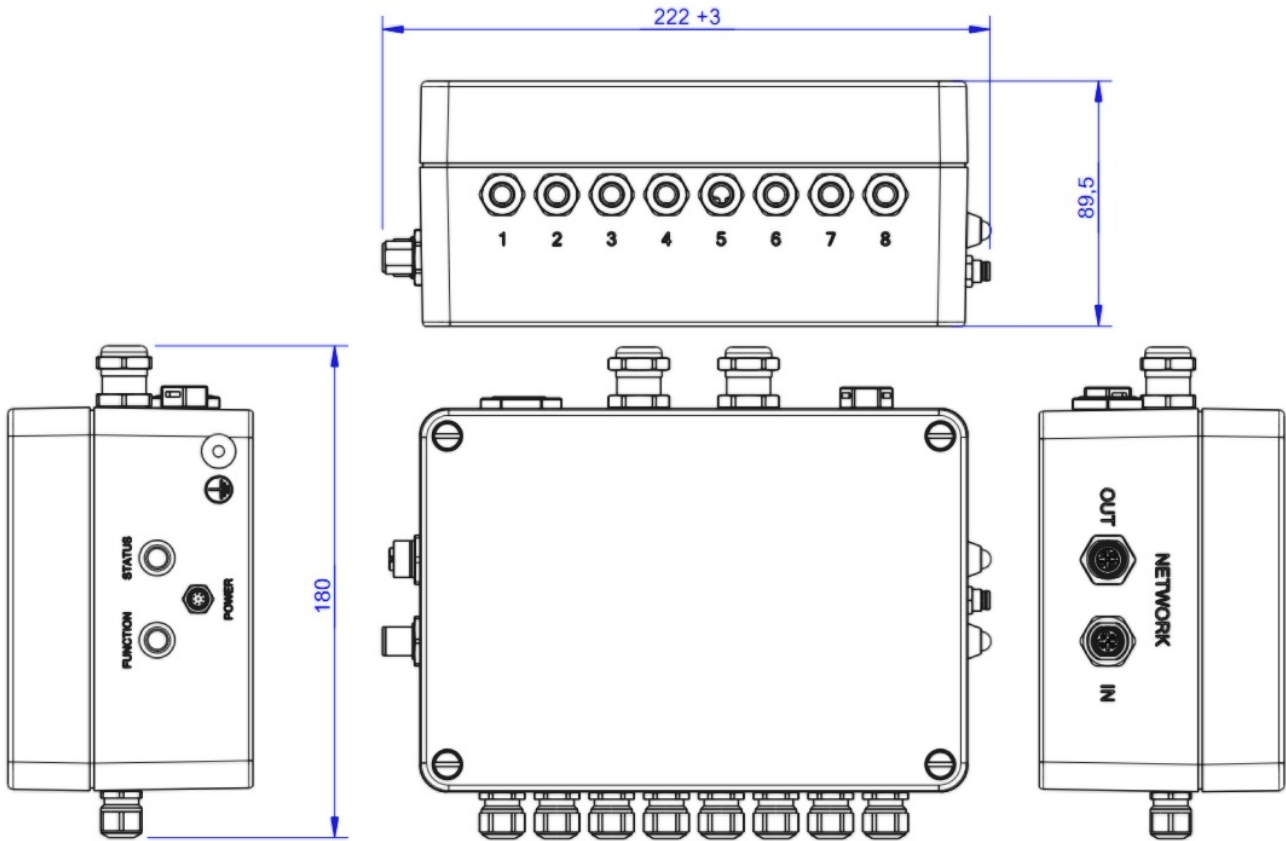
The device has 8 configurable analog outputs ($\pm 10V$ et al and 4 ... 20mA).
An UART interface is used to control the measuring amplifier via a Raspberry PI.

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.

Dimensions



Technical Data

Input analog

Number of analog inputs	8
Input sensitivity-steps	2.0 3.5 7 mV/V
Input resistance strain-gauge-full-bridge	60 ... 5 Ohm
Input voltage f	-10 ... 10 V
Input resistance-voltage	10 MOhm
Temperature input-type	PT1000
Temperature-measuring range from	-230 °C

Output analog

Number of analog outputs	8
Voltage output f	-10 ... 10 V
Output resistance - voltage	50 Ohm
Current output f	4 ... 20 mA
Output resistance - current	350 Ohm
Isolation of the analog output	2 kV

Measuring frequency

Data frequency f	0 ... 48000 Hz
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Supply

Supply voltage f	12 ... 28 V
Strain gauge bridge supply	2.5 5 8.75 V

Interface

Type of the interface	usb ethercat Analog can rs232 uart teds rs422
Quantity of the interface	2
Version of the interface	USB 2.0 Fullspeed

Temperature

Rated temperature range f	0 ... 50 °C
Operating temperature range f	-20 ... 70 °C
Environmental protection	IP66/IP67

Basis Data

Dimensions	180 x 222 x 90 mm
Housing	Aluminium
Connection	screw terminal
Number of channels	8-Kanal





Precision

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

accessories

Description	Description
 PI-3 8AS	Raspberry PI-3 in the housing cover as an optional accessory for GSV-8AS;
 Mounting-FEET-300	Mounting plates for GSV-4GPRS and GSV-4GPRSx2, GSV-8AS, also KL4 and GSV-15KL4;
 WLAN-Interface	WLAN interface for GSV-8DS and GSV-8AS
 GSM-Interface	GSM interface for GSV-8DS and GSV-8AS



Order options

Type	Description
GSV-8AS	
GSV-8AS CAN	1x CANbus/CANopen interface
GSV-8AS EC	EtherCat interface