

GSV-8DS SubD44HD



Highlights

- 8-channel amplifier
- 8x input configurable
- Full, half, quarter bridge, 120- 350- 1000 ohm, PT1000, $\pm 10V$
- Outputs 1x USB port, 8x analog output $\pm 10V$, 4 ... 20mA configurable, 1x UART
- 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

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:

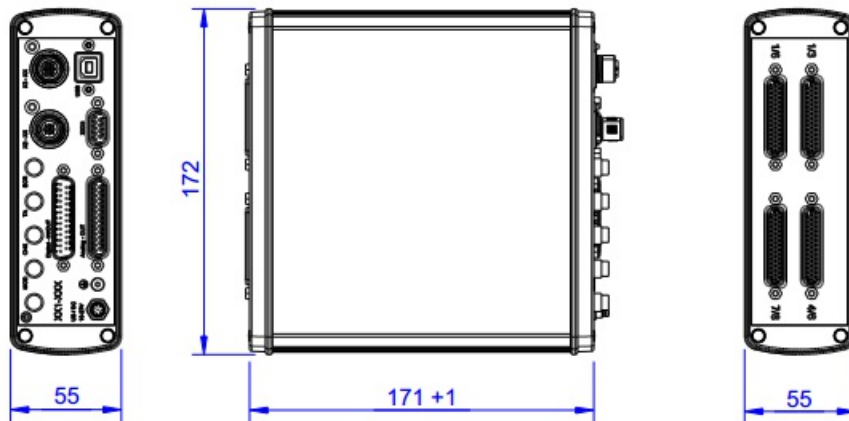
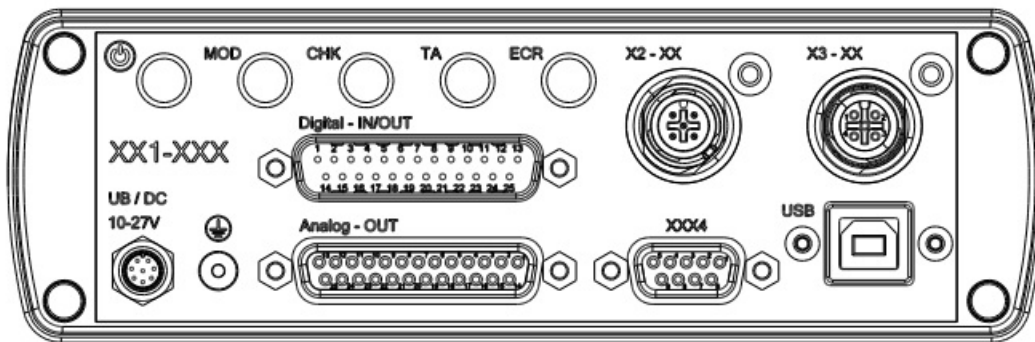
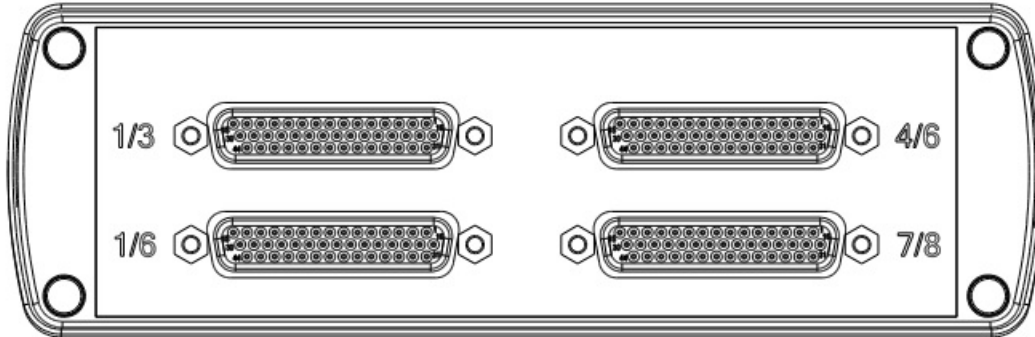
- DMS input for full bridges in 4- and 6-wire technology
- DMS input for half-bridges
- DMS input for quarter-bridge 120 ohms, 350 ohms, 1kOhm
- Single-ended input $\pm 10V$
- Input for PT1000 temperature sensor.

The measuring amplifier GSV-8DS SubD44 is equipped with industrial connectors SubD44HD. This connector is suitable for connection of

- 1x 6-axis sensor K6D or alternatively with
- 2x for DMS 0-45-90 rosettes or 2x 3-axis sensors;
- 1x for 2 DMS T rosette or 1x 2-axis sensors;

The inputs 1 to 6 are connected in parallel on the connectors 1/6 to the inputs on the connectors 1/3 and 4/6.

Dimensions



Technical Data

Basis Data

Dimensions	172 x 172 x 55 mm
Housing	Aluminium
Connection	Connector
Connection type	Sub-D15HD
Number of channels	8-Kanal

Input analog

Input sensitivity-steps	2.0 3.5 7 mV/V
Input resistance strain-gauge-full-/half-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

Precision

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

Supply

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

Interface

Type of the interface	usb uart teds
Quantity of the interface	2
Version of the interface	USB 2.0 Fullspeed






Temperature

Rated temperature range to	50 °C
Operating temperature range f	-20 ... 70 °C
Environmental protection	IP64

Measuring frequency

Data frequency to	48000 Hz
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accessories

	Description	Description
	Mounting-FEET-200	Mounting plates for GSV-1A8 / GSV-1A8USB / GSV-8DS
	Adapter Sub-D 25	Adapter Sub-D 25-pin to 27-pin terminal block for connection to the measuring amplifier GSV-8DS
	TCP-IP-Interface	TCP / IP interface for GSV-8
	WLAN-Interface	WLAN interface for GSV-8DS and GSV-8AS
	GSM-Interface	GSM interface for GSV-8DS and GSV-8AS

Orderoptions

Type	Description
GSV-8DS SubD15HD	8 SUB-D15 HD inputs for sensor
GSV-8DS CAN/SubD15HD	8 SUB-D15 HD inputs for sensor, variant with CANbus / CANopen
GSV-8DS EC/SubD15HD	8 SUB-D15 HD inputs for sensor, variant with EtherCat Fieldbus
GSV-8DS SubD44HD	4 pieces Sub-D44HD
GSV-8DS CAN/SubD44HD	4 pieces Sub-D44HD, variant with CANbus / CANopen
GSV-8DS	4 pieces Sub-D44HD, variant with EtherCat Fieldbus