Measuring amplifier GSV-8DS CAN/SubD15HD

Item number: 8144

Highlights

- 8-channel amplifier
- 8x input configurable
- Full, half, quarter bridge, 120- 350- 1000 ohm, PT1000, ± 10V, Thermocouple Type K,
- optionally IEPE Sensors with Adapter IEPE-BNC
- Outputs 1x USB port, 8x analog output ± 10V, 4 ... 20mA configurable, 1x UART/RS422
- optional EtherCat, CANbus / CANopen
- optional external extensions Ethernet, Wi-Fi, LTE
- 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

The 8-channel measuring amplifier GSV-8 is characterized by particularly high resolution at data rates from 1 Hz to 48000 Hz.
The channels are recorded simultaneously, without multiplexing.

An USB port is present for communication and configuration and optionally, EtherCAT or CANbus are available.

The device has 8 analog outputs that are individually configurable (like ± 10V or 4 ... 20mA, among others).

USB, analog output and fieldbus can be used simultaneously.

The GSVmulti software for configuration, live viewing and recording of measurement data is free of charge.

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

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

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Stand: 30.06.2026

- 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 ± 10V
- Input for PT1000 temperature sensor,
- Input for thermocouple type K (7x Typ-K, 1x Reference measuring point cold junction compensation PT1000 on channel 8)
- optional IEPE with Adapter Accessory.

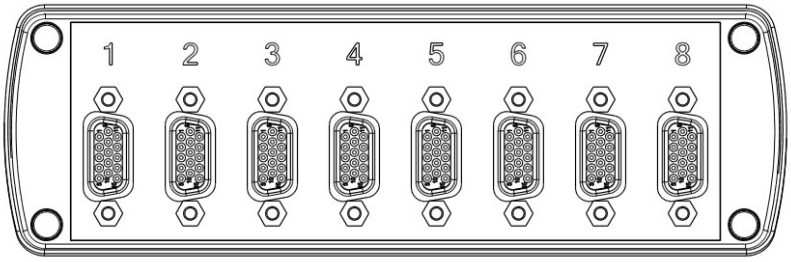
Sensors with IEPE (ICP) interface can be connected via an adapter plug with BNC socket, e.g. IEPE acceleration sensors, IEPE force sensors, etc.

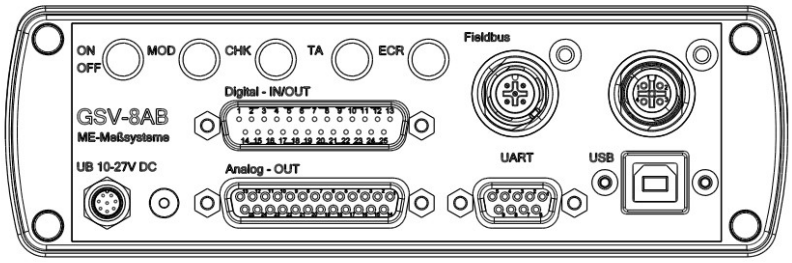
The measuring amplifier GSV-8DS SubD44 is equipped with industrial connectors SubD44HD. This connector is suitable for connection of

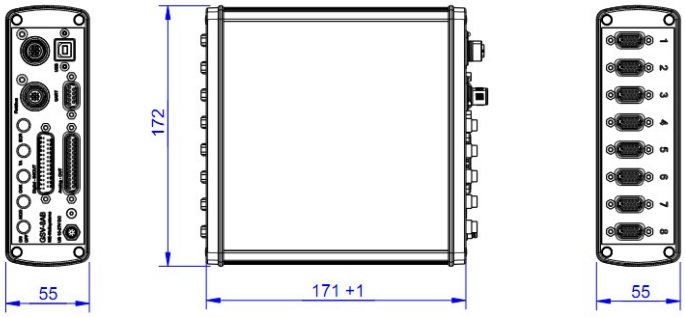
- 1x 6-axis sensor K6D or alternatively with
- 2x for strain geuge 0-45-90 rosettes or 2x 3-axis sensors
- 1x for 2 strain gauge T rosette or 1x 2-axis sensors

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.

Technical Drawing







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Technical Data

Basic Data		Unit
Dimensions	172 x 172 x 55	mm³
Housing	Aluminium	
Connection	Plug connector	
Connection type	Sub-D15HD	
Number of channels	8-channel	
Interface	USB, UART 3.3V, Analog, Dig. IO, EC, CAN, LAN	
Functions	Tara, Gain, Threshold, DIO	

Input analog		Unit
Input sensitivity-steps	2.0 | 3.5 | 7	mV/V
Strain-gauge-full-bridge resistance from	88	Ohm
Strain-gauge-full-bridge resistance to	5000	Ohm
Input voltage from	-10	V
Input voltage to	10	V
Input resistance-voltage	10	MOhm
Temperature measuring range PT1000	-230...1500	°C
Temperature measuring range Type K	-260...445	°C

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	500	Ohm
Isolation of the analog output	2	kV

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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	5 | 2.5 | 8.75	V

Interface		Unit
Type of the interface	USB | CAN | CANOPEN | UART | TEDS	
Quantity of the interface	3	
Version of the interface	USB 2.0 Fullspeed, CANbus / CANopen	

Zero Adjustment		Unit

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	IP64	

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