

Description

The supply isolation amplifier AD-STV 2 GX with its width of only 6.2 mm is used for galvanic isolation and amplification of transmitter signals (4-20 mA). The 2- or 3-wire transmitter is supplied directly by a galvanically isolated supply voltage. The input signal can be selected via DIP switches. Manual readjustment is required when switching the measuring range, the start and end values can be set using trimmers. Input, output and the supply voltage are galvanically separated from each other. A high packing density is achieved thanks to the narrow design. In combination with DIN rail connectors, the wiring effort is reduced considerably.

Application

Supply and data acquisition of 2- or 3-wire transmitters such as pressure transmitters, temperature transmitters, etc. with simultaneous amplification and galvanic isolation. Can also be used as a pure burden amplifier.



Specific characteristics

- narrow 6.2mm construction
- Current and voltage input (switchable)
- easy configuration using DIP switches on the side of the device
- Supply via DIN rail connector

Business data

Order number

AD-STV 2 GX

Accessory

DIN-rail connector AD-GX Connector

Information

Downloads

Tender text [stv2gx.zip](#)
Safety instructions [ad-safety-instructions.pdf](#)

Technical specifications

Input voltage

Measuring range 0 ... 10 V
Input resistance 100 kOhm

Input current

Measuring range 0 ... 20 mA; 4 ... 20 mA
Input resistance 50 Ohm

Transmitter supply

Open-circuit voltage < 20 V
At 20 mA > 14 V
Current limit < 30 mA

Output current

Output range 0 ... 20 mA; 4 ... 20 mA
Max. burden 350 Ohm
Residual ripple < 0,1 % of full scale

Transmission behaviour

Response time < 50 ms (10-90 %)
Linearity error < 0,1 % of full scale
Temperature influence < 70 ppm/K of full scale
Adjust begin +/- 22%
Adjust end +/- 5%

Supply

Voltage range 18 ... 30 V DC
Nominal voltage 24 V DC
Power consumption < 1,3 W

Housing

Dimensions (WxHxD) 6,2 x 92 x 101 mm³
Manner of fastening DIN rail 35mm EN 50022
Type of protection IP 20
Connection method screw clamp (2,5 mm² flex wire / 4 mm² one wire)
Weight ~ 70 g
Bolting torque terminals 0,5 Nm

Environmental conditions

Ambient temperature -10 ... +50 °C
Storage and transport -10 ... +70 °C (no condensation)

EMC

Product family standard ¹⁾ EN 61326-1
Emission ²⁾ EN 55011, CISPR11 Cl. A, Gr. 1

¹⁾ During electromagnetic disturbance minor changes in output signal are possible.

²⁾ Warning:

This device is not intended to be used in residential areas and can not ensure adequate protection of radio reception in such environments.

Electrical safety requirements

Product family standard EN 61010-1
Overvoltage category II
Pollution degree 2

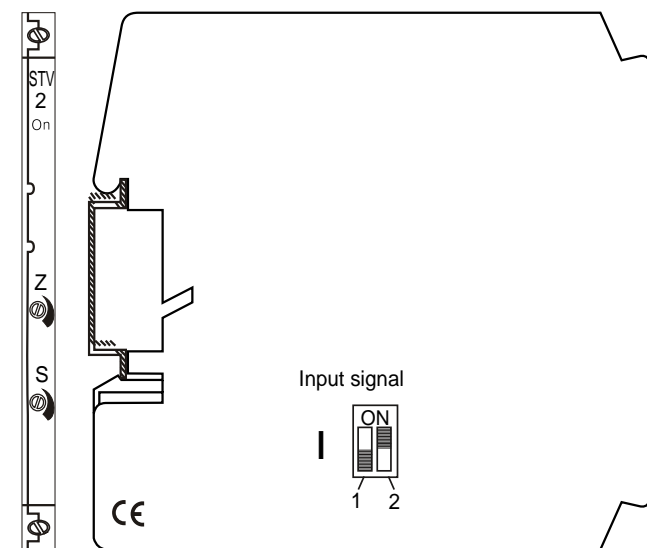
Galvanic isolation, test voltages

Input/output 1,5 kV, 1 min
Signal/auxiliary voltage 1,5 kV, 1 min

Supply Isolation Amplifier

AD-STV 2 GX

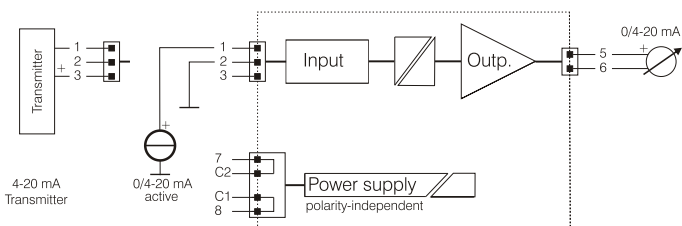
Display and operating elements



Front

Designation	Value	Meaning
On	LED green	Power supply
Z	+/- 22 %	Adjust begin value
S	+/- 5 %	Adjust end value
I1 / I2	OFF / OFF	Input: 0... 10 V
I1 / I2	OFF / ON	Input: 0... 20 mA

Block and wiring diagram



Dimensions

