

# Supply Isolation Amplifier

AD-STV 22 GVB

## Description

The supply isolation amplifier AD-STV 22 GVB serves the galvanic isolation and amplification of current signals in the range 0/4...20 mA. The transmitter is supplied by an isolated and limited supply voltage. Input, output and power supply are galvanically isolated. The electronic wide range power supply avoids an excessive heating. In combination with the small shape, high packing densities can be achieved.

## Application

Supply of 2-wire transmitters like pressure or temperature transmitters and galvanic signal isolation.



## Specific characteristics

- 3-way isolation of input, output and supply
- Current transfer ratio 1:1, input = output
- Integrated current-limited power supply

## Business data

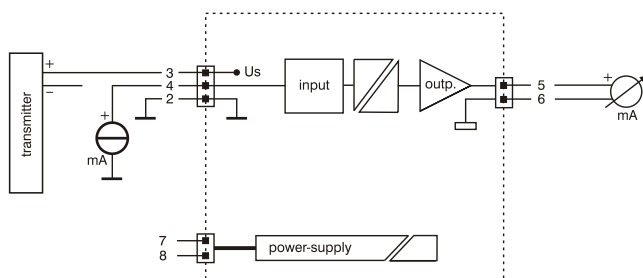
**Order number**  
AD-STV 22 GVB

## Information

### Downloads

- Tender text [stv22gyb.zip](#)  
Safety instructions [ad-safety-instructions.pdf](#)

## Block and wiring diagram



## Technical specifications

### Input current

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

### Transmitter supply

Open-circuit voltage < 23 V  
At 20 mA > 17 V  
Current limit < 30 mA

### Output current

Output range 0 ... 20 mA; 4 ... 20 mA  
Max. burden < 400 Ohm

### Transmission behaviour

Basic accuracy < 0,2 %  
Linearity error < 0,2 %  
Temperature influence < +/-100 ppm/K  
Response time < 1 ms

### Supply

Voltage range 20 ... 253 V DC; 50 ... 253 V AC  
Power consumption 1,5 W, 3 VA

### Housing

Dimensions (WxHxD) 13x110x134 mm  
Type of protection IP 20  
Connection method detachable terminal clamp (2,5 mm<sup>2</sup> flex wire / 4 mm<sup>2</sup> one wire)  
Bolting torque terminals 0,5 Nm  
Manner of fastening DIN rail 35mm (EN 50022)  
Weight ca. 100 g

### Environmental conditions

Ambient temperature -10 ... 70 °C  
Storage and transport -20 ... 70 °C (no condensation)

### EMC

Product family standard EN 61326-1  
Emitted interference EN 55011, CISPR11 Cl. B, Gr. 1  
During electromagnetic disturbance minor changes in output signal are possible.

### Electrical safety requirements

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

### Galvanic isolation, test voltages

Input/output 3,75 kV, 1 min  
Signal/auxiliary voltage 3 kV, 1 min

## Dimensions

