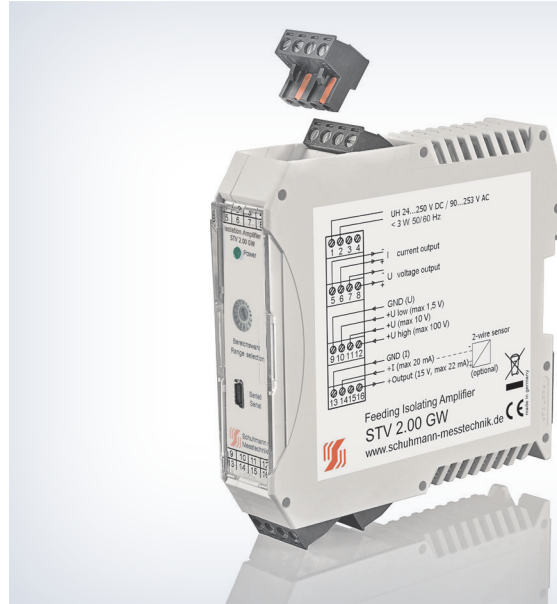


FEATURES

- **Input, switchable:**
Current ± 20 mA or
Voltage ± 10 V, 60 mV to 100 V
- **Output, simultaneous:**
Current ± 20 mA and
Voltage ± 10 V
- **Integrated transmitter feeding**
- **Linearity tolerance $< 0,1$ %**
frequency range 0...1 kHz
- **Parameterization via PC-interface**
- **Galvanic 3-way isolation**
of 4 kV



FUNCTION

Accurate calibration and high-precision potential isolation: the STV 2.00 GW is a universal Bipolar Feeding Isolating Amplifier with calibrated, switchable measuring ranges for the different analog measuring signals for conversion and galvanic isolation.

It has a bipolar input for current or voltage and one bipolar output which can do current and voltage simultaneously.

A LED on front side indicates if the input is within or outside the range.

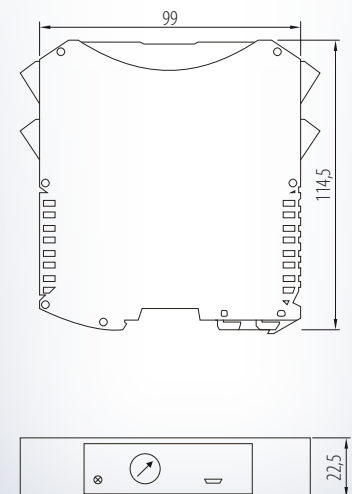
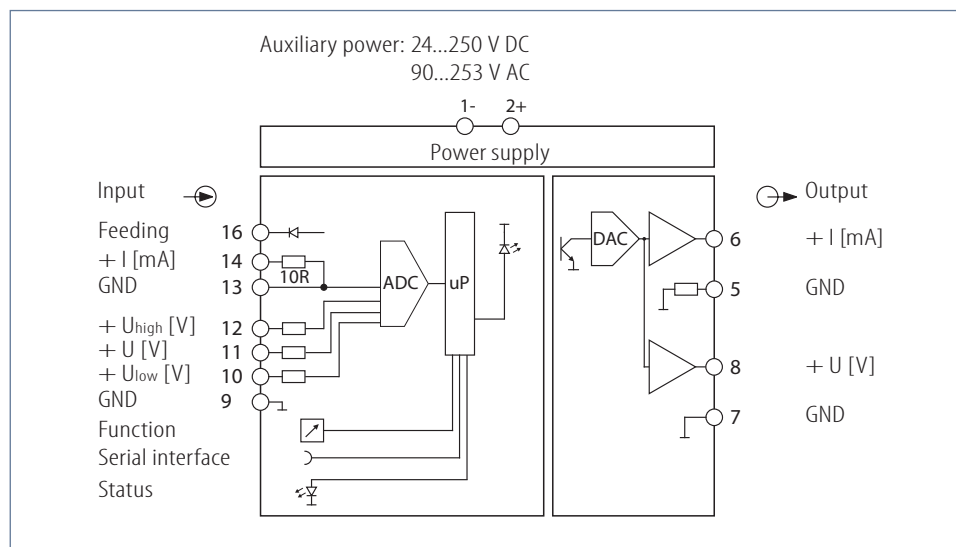
The different characteristics of transmission can be selected by turn-switch. Fixed calibrated measuring ranges for input and output are stored in **position 0...E**. See table on side.

At **position F** the transmission ranges can be individually defined with the USB2-Adapter in connection with KALIB-Software:

Input: absorbability 0,4 ms...50 sec., range, zero point, final value.

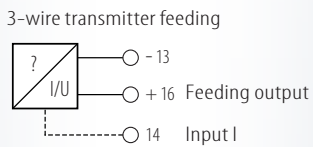
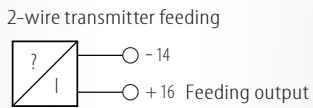
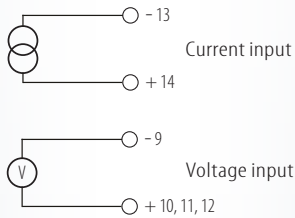
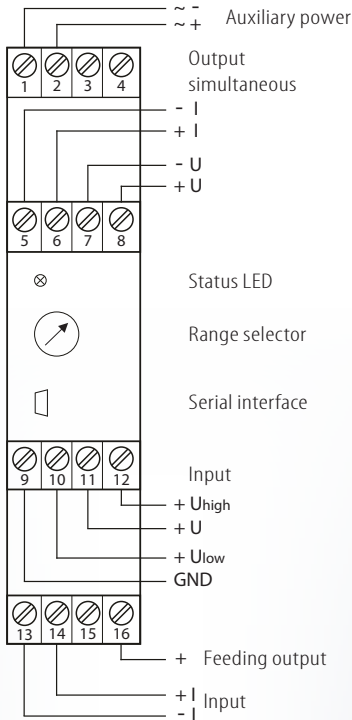
Output: range, zero point, final value, output minimum, output maximum.

With its frequency range of 0..1 kHz the STV 2.00 GW is ideal for very fast applications and can be used for e.g. measuring of water hardness, recording of rotation direction and speed, 2- and 3-wire transmitter feeding.



STV 2.00 GW

Connection diagram:



Input:

I: DC current:	-20...0...+20 mA	input resistance approx. 10 Ω
connection:	terminal 13 -, 14 +	
U: DC voltage:	-10...0...+10 V / 100 V	input resistance approx. 1 MΩ (at signals < 200 mV a screened line is recommended!)
connection U _{low} (max. 1 V):	terminal 9 -, 10 +	
connection U (max. 10 V):	terminal 9 -, 11 +	
connection U _{high} (max. 100 V):	terminal 9 -, 12 +	
transmitter feeding:	approx. 15 V at 20 mA, I _k =30...50 mA	

Output:

I: load-independent DC current:	-20...0...+20 mA	permissible load max. 500 Ω
connection:	terminal 5 -, 6 +	
U: load-independent DC voltage:	-10...0...+10 V	permissible load ≥ 5 kΩ
connection:	-12...0...+12 V	permissible load ≥ 6 kΩ
connection:	terminal 7 -, 8 +	

Adjustment:

Range selection by front side turn-switch:

Position	Input	Output	Position	Input	Output
0	4...20 mA	4...20 mA	8	20...0 mA	4...20 mA
0	0...20 mA	0...20 mA	9	0...10 V	0...20 mA
0	-20...0...+20 mA	-20...0...+20 mA	9	-10...0...+10 V	-20...0...+20 mA
1	4...20 mA	0...20 mA	A	0...10 V	4...20 mA
2	0...20 mA	4...20 mA	B	0...10 V	0...10 V
3	0...20 mA	0...10 V	B	2...10 V	2...10 V
3	-20...0...+20 mA	-10...0...+10 V	B	-10...0...+10 V	-10...0...+10 V
4	4...20 mA	0...10 V	C	0...60 mV	0...20 mA
5	20...4 mA	0...20 mA	C	-60...0...+60 mV	-20...0...+20 mA
6	20...4 mA	4...20 mA	D	0...60 mV	0...10 V
7	20...0 mA	0...20 mA	E	0...100 V	4...20 mA
F	user-defined adjustment (via KALIB-Software)				

You need a PC to adjust the measuring ranges and parameter for **position F** as well as KALIB-Software and USB2 interface adapter. **Input: absorbability, range, zero point, final value.**

Output: range, zero point, final value, output minimum, output maximum.

Display:

LED Status:	green, active	input signals are in standard range, device ready for use
	red, active	input out of predetermined limits

Environmental conditions:

Storage temperature:	-40...+70 °C
Operating temperature:	0...55 °C
Isolation voltage:	4 kV eff. 1 sec. input-output-auxiliary voltage

Auxiliary power:

Wide range:	24...250 V DC 90...253 V AC < 3 W
Infl. of auxiliary power:	< 0,1 %

Characteristics of transmission:

Transmission error:	
0 Hz at Outp. I	< 0,1 % of final value
at Outp. U	< 0,2 % of final value
1 kHz Sine	< 1 %
Resolution:	16 bit
Temperature error:	< 100 ppm/ K
Load influence I:	< 50 ppm of final value
Load influence U:	< 100 ppm at 1 kΩ load
Sampling rate:	approx. 12 kHz
Frequency:	≤ 1 kHz sine

Directive:

EMC Directive:	2014/30/EU*
Low Voltage Directive:	2014/35/EU
*minimum deviations possible during HF-radiation infl.	

Mounting details:

Housing for top hat rail	
Type of protection:	IP 40 housing IP 20 clamps
Rail-mounting fixed according to	EN 50022-35 x 6,2 mm
Width:	22,5 mm
Weight:	145 g
Material:	Polyamide PA
Flammability class:	V0 (UL94)
Approval:	CE
Connection:	pluggable screw clamps 0,2...2,5 mm ²

For safety reasons we recommend to mount the housing for top hat rail with a distance of approx. 5 mm to each other.

Please check switch position before initial operation!

Ordering information:

Type: STV 2.00 GW wide range
Accessories: USB2/ USB-Sim. with KALIB-Software

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