

# AED 9101A / AD101B

Digital transducer electronics



## Special features

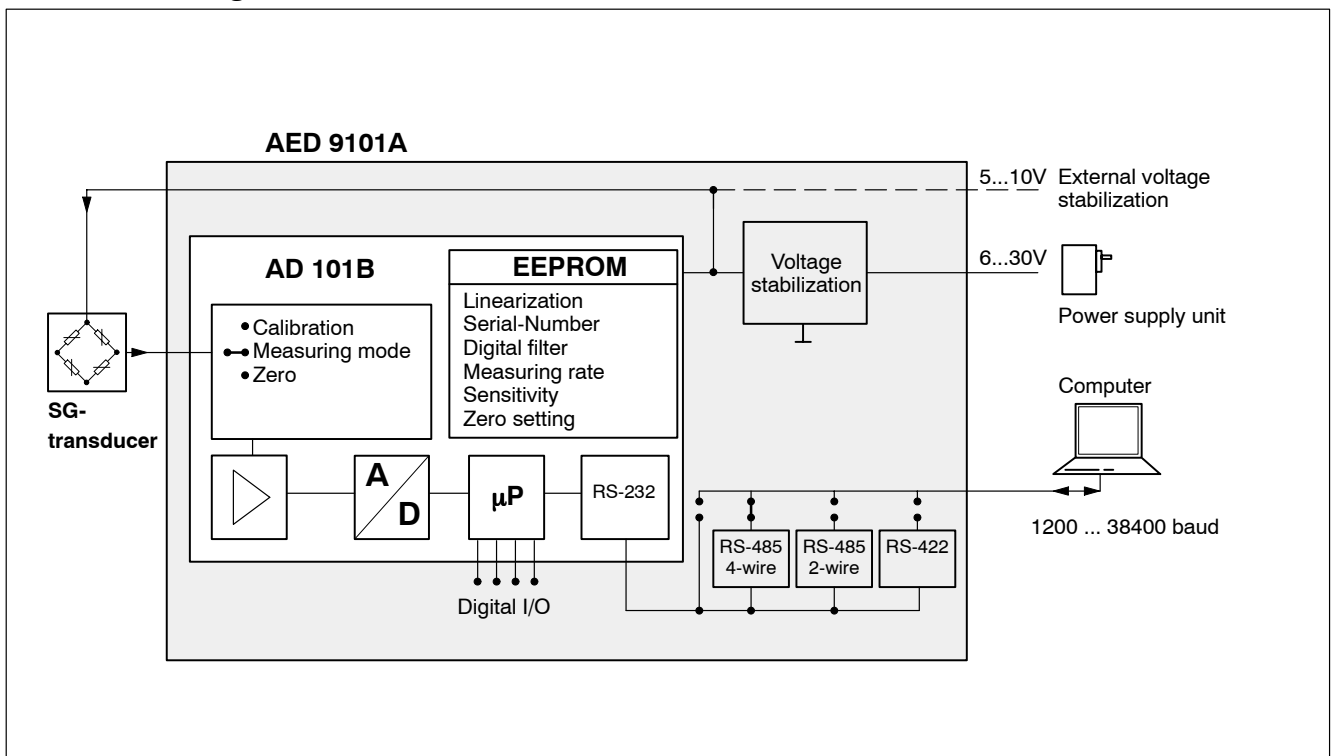
### AD 101B (Amplifier PCB)

- DC amplifier for resistive transducers
- For static and dynamic applications
- Direct computer connection via RS-232 interface
- Test certificate for 6000d class (III) available
- High transmission rate and resolution
- Memory for users setting

### AED 9101A (Basic device)

- EMC protection
- Protection class IP65
- Operating voltage range 6...30V
- Additional interfaces RS-422 and RS-485

## Functional diagram



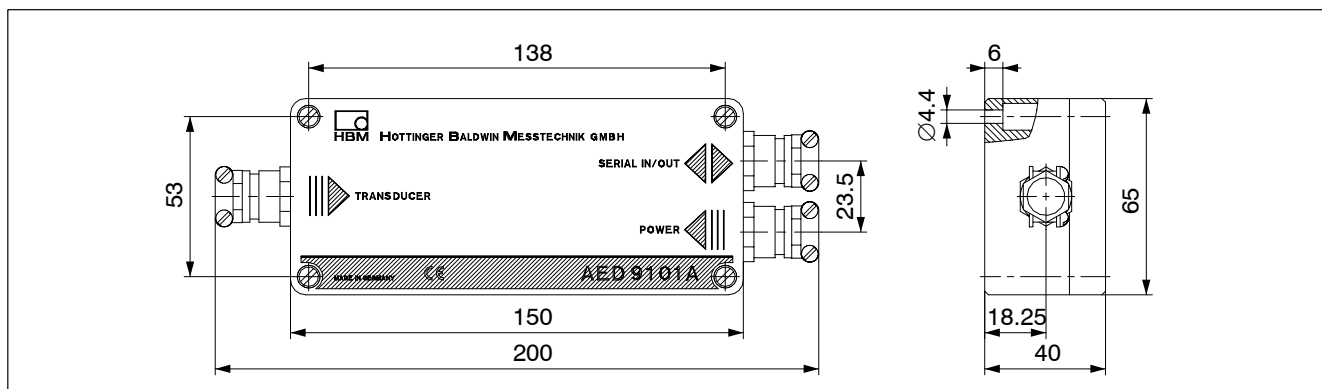
## Technical Data

Type		AED 9101 A (Basic device)	AD 101B (Amplifier PCB)
<b>Accuracy class</b> (with internal calibration)		-	<b>0.01</b>
Number of trade values, accord. to EN 455501 (R76)	d	6000	
Input sensitivity	µV/e	1	
Measuring range	mV/V	±2.0	
Input signal range		±3.0	
Measuring signal resolution, max.	Bit	±20 (at 1Hz)	
Measuring rate (depending on output format and baud rate)	Hz	600 ... 4.7	
Cut-off frequency of the digital filter, adjustable		40 ... 0.25 (±3dB)	
Bridge excitation voltage U <sub>B</sub> (DC)	V	5	5 ... 10 (= operating voltage!)
Measuring signal input, SG transducers (Fullbridge)	Ω	≥40 *) 6-wire circuit >15	
Transducer connection	MΩ		
Input resistance (differential)			
Transducer cable length	m	≤10 (≤100 in case of calibration incl. cable)	
Interface cable length RS-232 RS-422 / RS-485		≤15 (screw terminal) ≤1000	≤15 (25pol. female connector) -
Calibration signal	mV/V	2±0.01%	
Temperature stability of the calibration signal	ppm/°C	10	
Linearity error (related to full scale)	%	±0.01	
Temperature effect on zero point (related to full scale) measuring sensitivity (related to act. value)	%/10K	typ. ± 0.005; max. 0.01 typ. ± 0.005; max. 0.01	
Interfaces		RS-422; RS-485; RS-232 (selectable by slide switches)	RS-232
Baud rate, adjustable	baud	1200 ... 38400	
Operating voltage (DC)	V	6 ... 30	5 ... 10 residual ripple ≤50mV (p.p.)
Current consumption (without load cell)	mA	≤60	**)
Nominal temperature range Service temperature range Storage temperature range	°C [°F]	-10 ... +60 [+14 ... +140] -20 ... +70 [-4 ... +158] -40 ... +85 [-40 ... +185]	
Dimensions	mm	200 x 65 x 40	93 x 53 x 17
Weight, approx.	g	400	40
Protection class according to DIN 40050 (IEC 529)		IP65	IP00

\*) Dependent upon the external operating voltage supply

\*\*\*) Current consumption = ≤80mA +  $\frac{\text{Excitation voltage } U_B}{\text{Bridge resistance } R_B}$

### Basic device AED 9001A (Dimensions in mm; 1mm = 0.03937 inches)



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