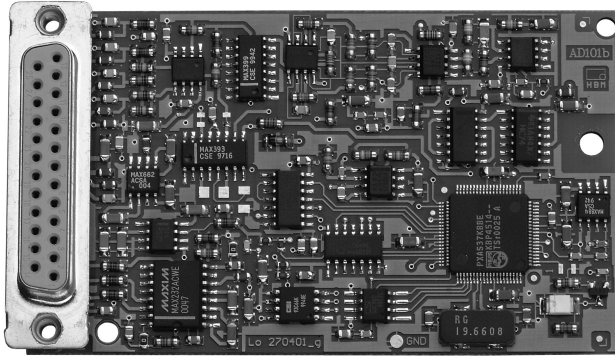


AD101B

Digital transducer electronics

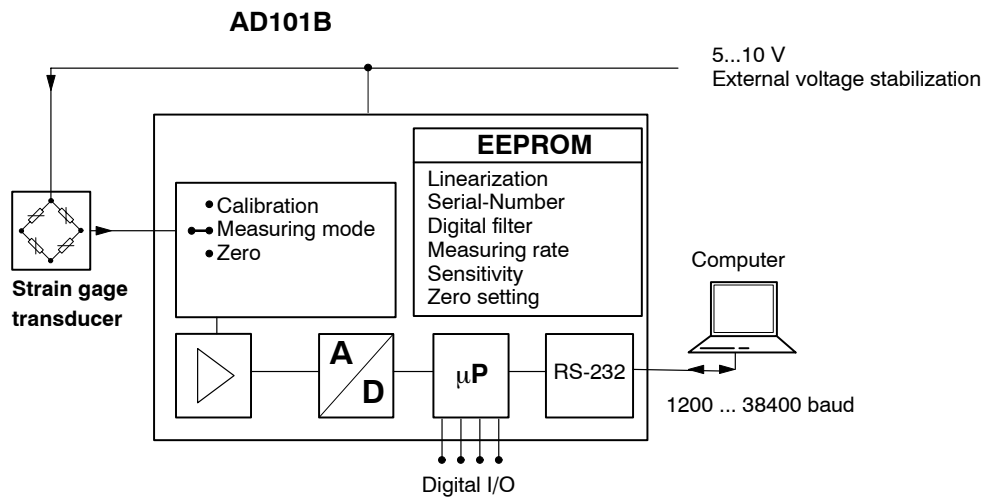
AD101B Amplifier PCB



Special features

- DC Amplifier PCB for Strain gage transducers
- For static and dynamic applications
- Direct computer connection via RS-232 interface
- Test certificate for 6000 digits class III available
- High transmission rate and resolution
- Memory for users settings

Functional diagram



Specifications

| Type | AD101B | |
|---|---|--|
| Accuracy class | 0.01 | |
| Number of trade values, acc. to EN 455501 (R76) (with internal calibration) | d | 6000 |
| Input sensitivity | $\mu\text{V/e}$ | 1 |
| Measuring range | mV/V | ± 2.0 |
| Input signal range | | ± 3.0 |
| Measuring signal resolution, max. | Bit | 20 (at 1 Hz) |
| Measuring rate (depending on output format and baud rate) | Hz | 600 ... 4.7 |
| Cut-off frequency of the digital filter, adjustable | Hz | 40 ... 0.25 (± 3 dB) |
| Bridge excitation voltage U_B ¹⁾ | V_{DC} | 5 ... 10 (= operating voltage!) |
| Measuring signal input, Strain gage transducers (Full bridge) | Ω | $\geq 40 \dots 4000$ |
| Transducer connection | | 6-wire circuit |
| Input resistance (differential) | $M\Omega$ | > 15 |
| Transducer cable length | m | ≤ 100 in case of calibration incl. cable |
| Interface cable length RS-232 | m | ≤ 15 (25 pol. female connector) |
| Calibration signal | mV/V | 2 ± 0.01 % |
| Temperature stability of the calibration signal | ppm/ $^{\circ}\text{C}$ | 10 |
| Linearity error (related to full scale) | % | ± 0.01 |
| Temperature effect on zero point (related to full scale) | %/10K | typ. ± 0.005 ; max. 0.01 |
| measuring sensitivity (related to actual value) | | typ. ± 0.005 ; max. 0.01 |
| Interface | | RS-232 |
| Baud rate, adjustable | baud | 1200 ... 38400 |
| Operating voltage | V_{DC} | 5 ... 10 residual ripple ≤ 1 mV (p.p.) |
| Current consumption (without load cell) | mA | ≤ 80 |
| Temperature range: | | |
| Nominal temperature | $^{\circ}\text{C}$ [$^{\circ}\text{F}$] | $-10 \dots +40$ [$+14 \dots +104$] |
| Service temperature | | $-20 \dots +60$ [$-4 \dots +140$] |
| Storage temperature | | $-25 \dots +85$ [$-13 \dots 185$] |
| Dimensions | mm | 93 x 53 x 17 |
| Weight | g | ~ 40 |
| Protection class according to DIN 40050 (IEC 529) | | IP00 |

¹⁾ Depending on the external operating voltage supply

Accessories, to be ordered separately

Basic devices AED9101B (see separate Data Sheets) offering:

- EMC protection
- Protection class IP65
- Operating voltage range 6...30 V
- additional interfaces
- electrically isolated in- and outputs

Documentation

- 1-AED/FIT-Doc (CD-ROM with operating manual and AED_Panel32 panel program)

Modifications reserved.

All details describe our products in general form only. They are not to be understood as express warranty and do not constitute any liability whatsoever.

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