

ALMEMO® Measuring Modules for DC Voltage and DC Current ZA 9900 AB / ZA 9901 AB



- Acquisition of the momentary, maximum, minimum and average value, plus transferring data of each measuring point scan to the ALMEMO® device.
- DC voltage or DC current signal are scanned with 1kHz.
- Pure digital data transmission to the measuring instrument.
- Connector sockets electrically isolated and overvoltage-protected.

Technical Data

| | | | |
|------------------------------|--|----------------------|---|
| Accuracy: | 0.1% of fin. val. ±2 digits for DC Current 20 A: ± 4 digits | Housing: | polystyrene, dimensions L100 x W54 x H31mm |
| Sampling rate: | 1kHz | Sockets: | touchproof, Ø 4mm |
| Resolution: | 12bit, ±2048 digits | Operating voltage: | 6 ... 14V through ALMEMO® device |
| Meas. period/transient time: | 0.1s | Current consumption: | < 40mA (connector and module) |
| Meas. cycle, maximum: | 14h | | |
| Electrical isolation: | 1kV permanent, 4kV for 1s | | |
| Nominal conditions | 23 °C ±2 K, 10 to 90 % r.H. (non-condensing) | | |

- New:** Digital ALMEMO® D7 measuring plug with galvanic isolation up to 50 V, see chapter “Input connectors”
Dynamic measurement of DC voltage up to 20 V or DC up to 20 mA.
- Fast measurement with up to 1000 mops.
 - Or high resolution of up to 200 000 digits.
 - Accuracy independent from the measuring instrument.

Types (incl. touchproof connecting cable)

Order no.

DC Voltage:

| Measuring range | Resolution | Overload | Internal resistance | |
|-----------------|------------|----------|---------------------|------------------|
| ±2.000 V* | 0.001V | ±400 V | 800 kΩ | ZA9900AB2 |
| ±20.0 V | 0.01V | ±500 V | 1 MΩ | ZA9900AB3 |
| ±200.0 V | 0.1V | ±500 V | 1 MΩ | ZA9900AB4 |
| ±400 V | 1V | ±1000 V | 4 MΩ | ZA9900AB5 |

DC Current:

| Measuring range | Resolution | Overload | Internal resistance | |
|-----------------|------------|----------|---------------------|------------------|
| ±20.00 mA | 0.01mA | ±0.1 A* | 10 Ω | ZA9901AB1 |
| ±200.0 mA | 0.1mA | ±1 A* | 1 Ω | ZA9901AB2 |
| ±2.000 A | 0.001A | ±10 A* | 0.1 Ω | ZA9901AB3 |
| ±10.00 A | 0.01A | ±20 A* | 0.01 Ω | ZA9901AB4 |
| ±20.0 A | 0.1 A | ±30 A* | 0.002 Ω | ZA9901AB5 |

*Without fuse. overload condition only up to 1 minute maximum

DC via external shunt:

| | | | | |
|-----------|-------|-------|-------|------------------|
| ±200.0 mV | 0.1mV | ±40 V | 50 kΩ | ZA9900AB1 |
|-----------|-------|-------|-------|------------------|

DAkS or factory calibration KE90xx electrical for digital measuring module (see chapter Calibration certificates).
DAkS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.