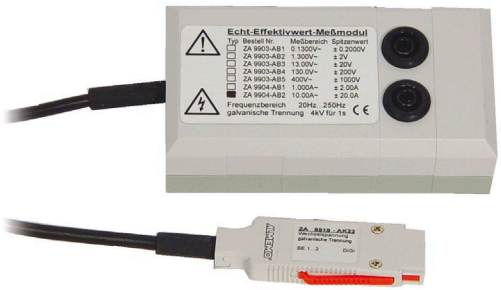
True/Effective Measuring Modules for AC Voltages and AC Current ZA 9903 AB / ZA 9904 AB



- Independent, full digital acquisition of the true/effective values of an AC variable.
- Measuring signals with any course of a curve are digitised with 1kHz.
- Pure digital data transmission to the measuring instrument.
- Acquisition of the frequency through a second measuring channel.
- Connector sockets electrically isolated and overvoltage-protected.

Technical Data

TRMS	
Accuracy:	0.1% of fin. val. ± 2 digits
Sampling rate:	1kHz
Resolution:	12 bit, ± 2048 digits for Uss
Frequency range:	20.0 … 250Hz
Meas. period/transient time:	0.5s
Frequency	
Accuracy:	± 0.1Hz
Sampling rate:	1kHZ
Resolution:	0.1Hz
Sensitivity:	10% of final value
Frequency range:	20.0 … 250Hz
Meas. period/transient time:	0.5s

Electrical isolation:	1kV permanent, 4kV for 1s
Housing:	polystyrene, dim. L 100 x W 54 x H 31mm
Sockets:	touchproof, Ø 4mm
Operating voltage:	6 … 14V through ALMEMO® device
Current consumption:	< 40mA (connector and module)

Types (incl. touchproof connecting cable) — Order no.

AC Voltage

Meas. range	Resolution	Peak	Overload	Internal resistance	
130.0mV$_{eff}$ [1)]	0.1mV	±0.2V	±400V	0.5MΩ	**ZA9903AB1**
1.300V$_{eff}$	1mV	±2V	±400V	0.8MΩ	**ZA9903AB2**
13.00V$_{eff}$	10mV	±20V	±500V	1MΩ	**ZA9903AB3**
130.0V$_{eff}$	0.1V	±200V	±500V	1MΩ	**ZA9903AB4**
400V$_{eff}$	1V	±1000V	±1000V	4MΩ	**ZA9903AB5**

[1)] When using the measuring module for the purposes of current measurement with an external shunt. the shunt must be looped into the neutral conductor (not into the phase).

AC Current

Meas. range	Resolution	Peak	Overload	Internal resistance	
1.000A$_{eff}$	1mA	±2A	±10A [2)]	0.10Ω	**ZA9904AB1**
10.00A$_{eff}$	10mA	±20A	±20A [2)]	0.01Ω	**ZA9904AB2**

[2)] Without fuse, overload condition only up to 1 minute maximum

DAkkS / DKD or factory calibration KE90xx electrical for digital measuring module (see chapter Calibration certificates)