**Technical data and functions**

**Professional measuring instrument from our latest V7 generation**

Professional measuring instrument ALMEMO® 202 provides numerous outstanding functions for special applications using digital ALMEMO® D6 sensors and the latest ALMEMO® D7 sensors.

**Brightly lit graphics display, easy and convenient operation by means of soft-keys**

The white, illuminated graphics display ensures that functions and measured values can be viewed in the clearest way possible. The device is easy and convenient to operate by means of 4 soft-keys and a cursor block. The menu guidance is clearly structured and easy-to-understand.

The sensor display shows the measured values together with all relevant sensor-specific functions, e.g. temperature compensation, atmospheric pressure compensation. Measured values, peak values, average values, and limit values can all be displayed in an easy-to-understand way in various forms, namely lists or bar charts.

Users can even configure their own customized user menus from a range of 50 different parameters to display exactly those parameters required by a particular application. Choice of languages: German, English, French

**End-to-end programming of all parameters for ALMEMO® D6 and D7 sensors**

The ALMEMO® 202 professional measuring instrument provides a programming menu for the end-to-end programming of all the parameters needed for digital ALMEMO® D6 and D7 sensors. The required measuring ranges are selected (with ALMEMO® D7 sensors up to 10 measuring channels) and other relevant sensor parameters are configured, e.g. moving average, atmospheric pressure compensation, temperature compensation.

**One measuring instrument for every need**

This compact, handy device can, as an option, be fitted with rubberized impact protection for mobile use. The latest energy-saving technology ensures long operating times. For stationary applications a DIN rail mounting is available.

**Data logger for all storage applications**

To save measured values an external memory is available in the form of a plug-in SD card.

For autonomous long-term monitoring the data logger can also be run in energy-saving sleep mode.

**Two measuring inputs for all digital ALMEMO® D6 and D7 sensors**

All new digital ALMEMO® D6 and D7 sensors for a wide variety of measurable variables can be connected and evaluated. ALMEMO® standard sensors with the DIGI measuring range can also be used, e.g. for crossflow turbines and high-voltage modules for thermocouples and DC and AC voltages.

The ALMEMO® 202 supports all ALMEMO® functions.

**New digital ALMEMO® D7 sensors**

With these digital ALMEMO® D7 sensors the ALMEMO® system is enhanced by many new functions and applications. ALMEMO® D7 sensors operate via an all-digital interface to the ALMEMO® 202 professional measuring instrument ensuring high-speed serial transmission of all measured values.

The measuring ranges of ALMEMO® D7 plugs are independent of the ALMEMO® measuring instrument being used and can be expanded as and when required for new applications.

Measured values can be displayed with up to 8 digits (depending on range) and the units with up to 6 characters. Sensor designation and information can be up to 20 characters.

Each connected D7 sensor has its own processor. They all work in parallel at their own sensor-specific sampling rate. D7 sensors thus attain very high measuring speeds in dynamic measuring operations. Scanning times on the ALMEMO® 202 professional measuring instrument can be set individually for quick-acting and slow-acting sensors.

The ALMEMO® D7 plug can process up to 10 channels for measured values and function values. This includes new applications, especially for multi-purpose sensors (e.g. Meteo sensors) and for linking up to complex third-party devices (e.g. chemical analysers, power analysers).

**Other equipment**

The two ALMEMO® output sockets can be used to connect a PC / network and an ALMEMO® output interface with relays and analog output at the same time.

With option KL it is possible - for a digital ALMEMO® sensor (e.g. ALMEMO® D6 / D7 temperature or pressure sensors) - to program multi-point adjustment or linearization in the ALMEMO® plug itself. This option is possible with all digital ALMEMO® plug versions. Standard connector (DIGI), ALMEMO® D6 and D7 plugs.
# ALMEMO® 202

**Professional measuring instrument, latest V7 generation**

**Two measuring inputs for all digital ALMEMO® D6 and D7 sensors**

**for ALMEMO® standard sensors with the DIGI measuring range**

**Data logger with external memory connector (accessory)**

## Technical data

| Measuring inputs | 2 ALMEMO® input sockets for all digital ALMEMO® D6 and D7 sensors and for ALMEMO® standard sensors with the DIGI measuring range |
| Precision class | depends on the digital ALMEMO® sensor being used |
| Measuring rate | for ALMEMO® D6 sensors and ALMEMO® standard sensors with the DIGI measuring range 2.5 / 10 mops (measuring operations per second) for ALMEMO® D7 sensors Up to 1000 mops (depending on sensor) |
| Channels | Up to 20 measuring channels with ALMEMO® D7 sensors |
| Sensor power supply | 6 / 9 / 12 V, maximum 0.4 A |
| Outputs | 2 ALMEMO® sockets, suitable for all output modules (analog / data / trigger / relay cables, etc.) |

## Standard equipment

- **Display**: Graphics display, 128 x 64 pixels, 8 rows
- **Illumination**: 2 white LEDs
- **Keypad**: 7 silicone keys (of which 4 soft-keys)
- **Date and time-of-day**: Real-time clock, buffered by device battery
- **Memory, internal**: 99 measured values, can be called onto display
- **External mem. (accessory)**: ALMEMO® plug-in memory with micro SD card, 512 MB (sufficient for up to 30 million measured values)

## Power supply

- **Battery set**: 3 AA alkaline batteries
- **Mains adapter**: ZA1312NA10 100 to 240 VAC to 12 VDC, 2 A electrically isolated
- **DC adapter cable**: ZA2690-UK 10 to 30 V, 0.25 A electrically isolated
- **Current consumption (without input and output modules)**: Active mode approx. 35 mA With display illumination approx. 70 mA Sleepmode approx. 0.05 mA
- **Housing**: 127 x 83 x 42 mm (LxWxH) ABS Weight 290 g

## Accessories

- **Mains adapter 12 V / 2 A**: Order no. ZA1312NA10
- **DC adapter cable, 10 to 30 VDC, 12 V / 0.25A, electrically isolated**: Order no. ZA2690UK, ZB2490GS2, ZB2490MH, ZB2490HS, ZB2490TK2
- **Rubberized impact protection, gray**: Order no. ZB2490GS2
- **Magnetic fastening**: Order no. ZB2490MH
- **DIN rail mounting**: Order no. ZB2490HS
- **Instrument case**: Order no. ZB2490TK2
- **Network technology, Bluetooth modules (see chapter „Networking“)**: Order no. ZA1919DKU, ZA1909DK5

## Connecting cables

- **USB data cable, electrically isolated**: Order no. ZA1919DKU, ZA1909DK5
- **Ethernet data cable, electrically isolated**: Order no. ZA1945DK
- **Analog output cable, -1.25 to 2.0 V, 0.1 mV / digit**: Order no. ZA1601RK
- **V24 data cable, electrically isolated**: Order no. ZA1909DK5
- **Network technology, Bluetooth modules (see chapter „Networking“)**: Order no. ZA1919DKU, ZA1909DK5

## Option

- **Multi-point adjustment and/or linearization can - with all digital ALMEMO® plug versions - be programmed by users themselves**: Order no. OA202KL

## Standard delivery

- **Measuring instrument, batteries, operating instructions, ALMEMO® 202 professional measuring instrument**: Order no. MA202