

ALMEMO® 202



ALMEMO® professional measuring instrument, latest V7 generation with data logger function
Two measuring inputs for all digital ALMEMO® D6 and D7 sensors, for ALMEMO® standard sensors with the DIGI measuring range. Special functions for applications using ALMEMO® D7 sensors

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.) |

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| 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 |

Standard equipment**Accessories**

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

Connecting cables

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

Option

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

Standard delivery

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