# ALMEMO<sup>®</sup> Measuring Instruments

## ALMEMO<sup>®</sup> 202



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

### Technical data and functions

## Professional measuring instrument from our latest V7 generation

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

The ALMEMO<sup>®</sup> 202 professional measuring instrument provides a programming menu for the end-to-end programming of all the parameters needed for digital ALMEMO<sup>®</sup> D6 and D7 sensors. The required measuring ranges are selected (with ALMEMO<sup>®</sup> 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 energysaving 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<sup>®</sup> D6 and D7 sensors

All new digital ALMEMO<sup>®</sup> D6 and D7 sensors for a wide variety of measurable variables can be connected and evaluated. ALMEMO<sup>®</sup> 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<sup>®</sup> D7 sensors the ALMEMO<sup>®</sup> system is enhanced by many new functions and applications.

ALMEMO<sup>®</sup> D7 sensors operate via an all-digital interface to the ALMEMO<sup>®</sup> 202 professional measuring instrument ensuring high-speed serial transmission of all measured values.

The measuring ranges of ALMEMO<sup>®</sup> D7 plugs are independent of the ALMEMO<sup>®</sup> 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<sup>®</sup> 202 professional measuring instrument can be set individually for quick-acting and slow-acting sensors.

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

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



## **ALMEMO®** Measuring Instruments

7 silicone keys (of which 4 soft-keys)

### ALMEMO<sup>®</sup> 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

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Measuring inputs	2 ALMEMO <sup>®</sup> input sockets for all digital ALMEMO <sup>®</sup> D6 and D7 sensors and for ALMEMO <sup>®</sup> standard sensors	Date and time-of-day	Real-time clock, buffered by device battery
		Memory, internal	99 measured values, can be called onto display
Precision class	with the DIGI measuring range depends on the digital ALMEMO <sup>®</sup> sensor being used	External mem. (accessory)	ALMEMO <sup>®</sup> plug-in memory with micro SD card, 512 MB (sufficient for up to 30 million measured values)
Measuring rate	total sampling rate up to 1000 mops sensors and ALMEMO <sup>®</sup> standard sensor (DIGI):	Power supply	
for ALMEMO® D6 s		Battery set	3 AA alkaline batteries
10 and 2.5 mops, for ALMEMO <sup>®</sup> D7 sensors: up to 1000 mops (depending on sensor).		Mains adapter	ZA1312NA10 100 to 240 VAC to 12 VDC, 2 A electrically isolated
Channels	Up to 20 measuring channels with ALMEMO <sup>®</sup> D7 sensors	DC adapter cable	ZA2690-UK 10 to 30 V, 0.25 A electrically isolated
Sensor power supply	6 / 9 / 12 V, maximum 0.4 A	Current consumption (without input and output modules)Active modeapprox. 35 mAWith display illuminationapprox. 70 mASleepmodeapprox. 0.05 mA	
Outputs	2 ALMEMO <sup>®</sup> sockets, suitable for all output modules (analog / data / trigger /		
Standard equipment	relay cables, etc.)	Housing	127 x 83 x 42 mm (LxWxH) ABS Weight 290 g
Display	Graphics display, 128 x 64 pixels, 8 rows Illumination 2 white LEDs		<u> </u>

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### Accessories

Mains adapter 12 V / 2 A DC adapter cable, 10 to 30 VDC, 12 V / 0.25A, electrically isolated Rubberized impact protection, gray Magnetic fastening DIN rail mounting Instrument case Network technology, Bluetooth modules (see chapter "Networking")

### Connecting cables

USB data cable, electrically isolated Ethernet data cable, electrically isolated Analog output cable, electrically isolated, 1 x 20mA Analog output cable, electrically isolated, 2 x 10V V24 data cable, electrically isolated 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 <sup>®</sup> 202 professional measuring instrument	MA202

ALMEMO® 202 professional measuring instrument

33/2020 • We reserve the right to make technical changes

Order no. ZA1312NA10

ZA2690UK ZB2490GS2

**ZB2490MH** 

**ZB2490HS** 

ZB2490TK2

Order no.

**ZA1919DKU** 

ZA1945DK

ZA1601RI

ZA1602RU

ZA1909DK5