

# ALMEMO® Measuring Instruments

## ALMEMO® 2890-9



**ALMEMO® precision measuring instrument with data logger function. Comprehensive range of functions for all application areas. Increased measuring accuracy, fast measuring rate. Generously dimensioned graphics display, bright illumination. 9 measuring inputs Runs on rechargeable batteries, charging via the device itself**

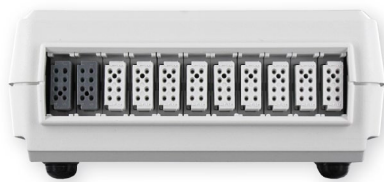
## Technical data and functions

- Increased measuring accuracy and stability
- Fast measuring rate, up to 50 measuring operations per second  
With SD memory card, up to 100 mops, optional for 1 channel up to 400 mops
- 9 measuring inputs, electrically isolated
- Over 65 standard measuring ranges
- New measuring range Pt100 with very high resolution of 0.001 K in range -8 to +65 °C
- Support for ALMEMO® plugs with multi-point adjustment, special linearization, and special measuring ranges
- Option KL for independent multi-point adjustment or special linearization programmable in 30 points and management of calibration data saved in the sensor connector and the measuring instrument
- Higher measuring quality thanks to electrical isolation between measuring inputs and device power supply (device ground)
- Improved cold junction compensation with 2 sensors
- Data logger with internal EEPROM, sufficient for 100,000 measured values, configurable as linear or ring memory
- Memory connector with micro SD (accessory)
- Sleep mode for long-term recording
- Generously dimensioned graphics display, bright illumination, large display of measured values
- Measured values can be displayed graphically in line chart or bar chart form or numerically in various sizes.
- 3 user-defined menus can be freely configured from a range of 50 functions.
- Easy to operate by means of 4 soft-keys and cursor block, menu-guided with wizards and context-sensitive help windows
- Additional thumb-wheel for extra cursor speed
- Choice of languages : German, English, French (other options also available)
- 2 ALMEMO® output sockets, suitable for digital interfaces, analog output, trigger input, alarm contacts, memory card
- Runs on rechargeable batteries (as standard), high-speed charging in the device itself using mains unit, included in delivery

## Technical data

Precision class	AA (see page 01.05)	Keypad	9 membrane keys (4 soft-keys), thumb-wheel
Measuring rate	2.5 / 10 / 50 / 100 mops (measuring operations per second)	Memory, EEPROM	sufficient for 100,000 measured values
Measuring inputs	9 ALMEMO® input sockets	Date and time-of-day	Real-time clock, buffered with battery
Electrical isolation for analog sensors	with semiconductor relays (50 V) Additional electrical isolation between measuring inputs and power supply (device ground)	Power supply	Rechargeable battery pack 6 rechargeable NiMH batteries, 1600 mA Integrated high-speed charging (2.5 h)
Additional channels	4 function channels, device-internal	Mains adapter	ZB1112NA7 230 VAC to 12 VDC, 1 A electrically isolated
Sensor power supply	Rechargeable battery/ies 9 or 12 V, maximum 0.5 A Mains adapter 12 V, maximum 0.3 mA	DC adapter cable	electrically isolated ZB2590-UK 10 to 30 V, 1 A
Outputs	2 ALMEMO® sockets, suitable for all output modules (analog / data / trigger / relay cables, memory, etc.)	Current consumption (without input and output modules)	Active mode approx. 37 mA With illumination approx. 45 to 100 mA Sleep mode approx. 0.05 mA
Standard equipment		Housing	204 x 109 x 44 mm (LxWxH) ABS (maximum 70 °C), 550g
Display			
Graphics display	128 x 128 pixels, 16 rows		
Illumination	5 white LEDs, 3 brightness levels		

## ALMEMO® 2890-9



**Precision measuring instrument, 9 measuring inputs**  
**Data logger with internal memory or external memory connector (accessory)**

### Accessories

#### Order no.

Memory connector with micro SD, including USB card reader (see chapter „General accessories“)  
 DC adapter cable, 10 to 30 VDC, 12 V / 1 A, electrically isolated  
 Generously dimensioned carry case, aluminum profile frame / ABS

**ZA1904SD**  
**ZB2590UK**  
**ZB2590TK2**

### Connecting cables

#### Order no.

USB data cable, electrically isolated  
 V24 data cable, electrically isolated  
 Ethernet data cable, electrically isolated  
 Analog output cable, -1.25 to +2.0 V, 0.1 mV / digit  
 Trigger and alarm cable (2 relays, 0.5 A, 50 V)  
 Network technology, Bluetooth modules (see chapter „Networking“)

**ZA1919DKU**  
**ZA1909DK5**  
**ZA1945DK**  
**ZA1601RK**  
**ZA1006EKG**

### Options

#### Order no.

Multi-point adjustment, special linearization, management of calibration data  
 Temperature ranges for 8 refrigerants  
 Measuring rate 400 mops (SD card required)

**OA2690KL**  
**SB0000R2**  
**SA0000Q4**

### Standard delivery

#### Order no.

Rechargeable battery pack, desktop mains unit ZA1312NA7, case ZB2490TK2,  
 Operating instructions, manufacturer's test certificate

#### Precision measuring instrument ALMEMO® 2890-9

**MA28909**

DAkkS / DKD or works calibration KE90xx, electrical, for measuring instrument (see chapter „Calibration certificates“)

