

# ALMEMO® MEASURING INSTRUMENTS

**new!**

## ALMEMO® 2690-8A *new variant*

**Multi-function measuring instrument and data logger with 5 measuring inputs, 2 outputs for USB, RS232, Ethernet, analog**



### ALMEMO® 2690-8A - new functions

- ▶ High-resolution AD converter, delta-sigma, 24-bit, low power, up to 100 mops (with SD memory card)
- ▶ Improved cold junction compensation with 2 sensors
- ▶ Option: Electrical isolation between measuring inputs and power supply (device ground), higher measuring quality, indispensable where supply is not electrically isolated
- ▶ Integrated atmospheric pressure sensor, for automatic pressure compensation inter alia for pitot tube flow measurement and humidity variables
- ▶ Internal EEPROM measured value memory, capacity now for 200,000 measured values, configurable as linear or ring memory
- ▶ Operation powered by rechargeable batteries (3 AA NiMH cells), high-speed charging (2.5 hours) inside device by means of mains unit (included in delivery)

### Other technical features

- ▶ Modern housing with rubberized impact protection and folding stand, splash-proof
- ▶ 5 ALMEMO® input sockets, electrically isolated, for 5 ALMEMO® sensors, 20 sensor channels, 4 additional internal function channels
- ▶ 2 ALMEMO® output sockets for digital interfaces, analog output, trigger input, alarm contacts, memory card
- ▶ High-quality display with large, brightly illuminated graphics
- ▶ Easy to operate by means of 4 soft-keys and cursor block, menu-guided with wizards and context-sensitive help windows
- ▶ 9 measuring menus (3 can be freely configured by the user from a range of 50 functions)
- ▶ Measured values can be displayed graphically in line chart or bar chart form and from 1 to 20 measured values can be displayed numerically in various sizes.
- ▶ Measuring functions, programming menus, and wizard menus (as with ALMEMO® 2890), (see 01.19)
- ▶ Option KL: Multi-point calibration, calibration data management, user-defined linearization, special ranges in the ALMEMO® connector, e.g. 0.000 to 50.000 W, NTC -5.000 to 46.000 °C, YSI 400
- ▶ Choice of languages : German, English, French (other options also available)
- ▶ Memory connector with micro-SD and standard file format
- ▶ Sleep mode for long-term recording
- ▶ Device software update via interface

### Technical data

Measuring inputs:	5 ALMEMO® input sockets, electr. isol., with semiconductor relay (50 V)
Channels	5 primary channels, maximum 19 additional channels for double sensors and function channels (e.g. differential)
A/D converter	<b>New</b> Delta-sigma, 24-bit, low power, 100 mops see Technical data, p. 01.05
Sensor power supply	Rechargeable battery pack 6 / 9 / 12 V, maximum 0.5 A Mains adapter 12 V, maximum 0.5 A
Outputs	2 ALMEMO® sockets for all output modules (analog, data, trigger, relay cable, memory, etc.)
Standard equipment	
Display	Graphics display, 128 x 128 pixels, 16 rows, illumination 5 white LEDs, 3 brightness levels
Keypad	9 tactile silicone keys (4 soft-keys)
Memory	1-MB EEPROM (200,000 meas. values)
Date and time-of-day	Real-time clock, buffered with battery
<b>New</b> Atm. press. sensor	Integrated Measuring range 700 to 1100 mbar Techn. data as for FDAD12SA s. p. 11.12
Power supply	<b>New</b> Rechargeable battery pack, 3 AA NiMH rechargeable batteries or integr. alkaline, high-speed charging (2.5 hours)
Mains adapter	ZA1312NA8, 230 VAC to 12 VDC, 1 A electr. isolated, DC adapter cable electr. isol., ZA2690-UK2 10 to 30 V, 1 A
Current consumption (without input and output modules)	Active mode approx. 17 mA with illumination approx. 25 to 140 mA Sleep mode approx. 0.05 mA
Housing	(LxWxH) 209 x 107 x 54 mm ABS (maximum +70 °C), 570 g
Protection	IP54 (if water-proof connectors / sensors are used)
Other general data see Technical Data, page 01.05	

### Standard delivery (including manufacturer's test certificate)

- Data logger set ALMEMO® 2690-8A, including 3 AA NiMH rechargeable batteries, connector mains unit ZA1312NA8, USB data cable ZA1919DKU, Case **MA26908AKSU**
- Data logger set ALMEMO® 2690-8A, including 3 AA NiMH rechargeable batteries, connector mains unit ZA1312NA8, RS232 data cable ZA1909DK5, Case **MA26908AKS**
- Option Measuring module, electr. isolated OA2690GT
- Option KL (see 01.17 and 03.03)
- Multi-point calibration, Special measuring ranges OA2690KL
- Option R (see 11.08)
- Temperature ranges for 8 refrigerants SB0000R2
- Option Q5: 500 mops measuring rate (s. 01.05) SA0000Q5
- Top hat rail mounting OA2290HS

### Accessories

- DC adapter cable, 10 to 30 VDC, 12 V / 1 A, electrically isolated ZA2690UK2
- Memory connector with micro-SD card, including USB card reader (see page 04.03) ZA1904SD
- Ethernet data cable, electr. isol., max. 115.2 kbaud ZA1945DK
- Transport case, large, aluminum (see Chapter 07) ZB2590TK2
- Output modules (analog, relay, trigger) (see Chapter 04)
- Network technology, Bluetooth modules (see Chapter 05)

01/2011 We reserve the right to make technical changes.