# **ALMEMO® Measuring Instruments**

# **ALMEMO® 2690-8A**





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, 5 measuring inputs. Runs on rechargeable batteries, charging via the device itself

# Technical data and functions ALMEMO® 2690-8A

- · 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 500 mops
- 5 measuring inputs, electrically isolated
- Integrated atmospheric pressure sensor, for automatic pressure compensation, inter alia for Pitot tube flow measurement and humidity variables
- Over 65 standard measuring ranges
- 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
- Option GT for 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 200,000 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
- Choice of languages: German, English, French
- 2 ALMEMO® output sockets, suitable for digital interfaces, analog output, trigger input, alarm contacts, memory card
- Runs on rechargeable batteries (standard), high-speed charging in the device itself using the mains unit, included in delivery
- Modern housing with rubberized impact protection and folding stand.

#### **Technical data**

AA (see page 16)				
(100), 50, 10 and 2.5 mops				
5 ALMEMO® input sockets				
with semiconductor relays (50 V)				
for analog sensors				
Additional electrical isolation between				
measuring inputs and power supply				
(device ground)				
4 function channels, device-internal				
6 / 9 / 12 V, maximum 0.5 A				
12 V, maximum 0.5 A				
Atmospheric pressure sensor Integrated				
700 to 1100 mbar				
±2.5 mbar (at 23 °C ±5 K)				
2 ALMEMO® sockets, suitable for all				
output modules (analog / data / trigger /				
relay cables, memory, etc.)				
128 x 128 pixels, 16 rows				
5 white LEDs, 3 brightness levels				

Keypad	9 tactile silicone keys (4 soft-keys)
Memory	EEPROM
	sufficient for 200,000 measured values
Date and time-of-day	Real-time clock, buffered with battery
Power supply	
Rechargeable battery/ies	3 AA batteries NiMH or alkaline
	integrated, high-speed charging (2.5 hours)
Mains adapter	ZA1312NA12 100 to 240 VAC
	to 12 VDC, 1.5 A electrically isolated
DC adapter cable	electrically isolated
	ZA2690-UK2 10 to 30 V, 1 A
Current consumption (with	out input and output modules)
Active mode	approx. 17 mA
With illumination	approx. 25 to 140 mA
Sleep mode	approx. 0.05 mA
Housing	209 x 107 x 54 mm (LxWxH)
	ABS, 570 g
Environmental conditions a	nd general technical data
see page 16 onwards	



# Precision measuring instrument, 5 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 ZA2690UK2 ZB2590TK2

Connecting cables			Order no.
Ethernet data cable, electrically isolated Analog output cable, electrically isolated, 1 x 20 mA Analog output cable, electrically isolated, 2 x 10 V	ZA1945DK ZA1601RI ZA1602RU	Trigger and alarm cable (2 relays, 0.5 A, 50 V) Network technology, wireless modules (see chapter	ZA1006EKG ,,Networking")

Options	Order no.
Measuring module electrically isolated Multi-point adjustment, special linearization, management of calibration data Temperature ranges for 8 refrigerants Measuring rate 500 mops (SD card required) DIN rail mounting	OA2690GT OA2690KL SB0000R2 SA0000Q5 OA2290HS

Standard delivery Order no.

3 rechargeable NiMH batteries, rubberized protection, mains unit ZA1312NA12, USB data cable ZA1919DKU, Case ZB2490TK2, Operating instructions, manufacturer's test certificate

Precision measuring instrument ALMEMO® 2690-8A in case set as above but with RS232 data cable ZA1909DK5

MA26908AKSU

Precision measuring instrument ALMEMO® 2690-8A in case set

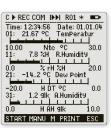
**MA26908AKS** 

DAkkS or works calibration KE90xx, electrical, for measuring instrument, see chapter "Calibration certificates". DAkkS calibration meets all the requirements regarding test resources laid down in DIN EN ISO/IEC 17025.

# Operating concept as for precision measuring instruments ALMEMO® 2690, 2890 and 5690 / 5790



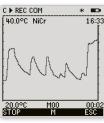
Menu selection



Bar chart



Standard display



Line diagram



Multi-channel display



Programming menu



Measuring points list



Assistent menu