

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

10/2013 • We reserve the right to make technical changes.

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
- 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
- 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 (other options also available)
- 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, splash-proof

Technical data

Precision class	AA (see page 01.05)	Keypad	9 tactile silicone keys (4 soft-keys)
Measuring rate	2.5 / 10 / 50 / 100 mops	Memory	EEPROM sufficient for 200,000 measured values
Measuring inputs	5 ALMEMO® input sockets	Date and time-of-day	Real-time clock, buffered with battery
Electrical isolation	with semiconductor relay?*(50 V) for analog sensors	Power supply	
Option GT	Additional electrical isolation between measuring inputs and power supply (device ground)	Rechargeable battery/ies	3 AA batteries NiMH or alkaline integrated, high-speed charging (2.5 hours)
Additional channels	4 function channels, device-internal	Mains adapter	ZA1312NA7 230 VAC to 12 VDC, 1 A electrically isolated
Sensor power supply		DC adapter cable	electrically isolated ZA2690-UK2 10 to 30 V, 1 A
Rechargeable battery/ies	6 / 9 / 12 V, maximum 0.5 A	Current consumption (without input and output modules)	
Mains adapter	12 V, maximum 0.5 A	Active mode	approx. 17 mA
new: Atmospheric pressure sensor Integrated		With illumination	approx. 25 to 140 mA
Measuring range	700 to 1100 mbar	Sleep mode	approx. 0.05 mA
Accuracy	±2.5 mbar (at 0 to 65 °C)	Housing	209 x 107 x 54 mm (LxWxH) ABS (maximum +70 °C), 570 g
Outputs	2 ALMEMO® sockets, suitable for all output modules (analog / data / trigger / relay cables, memory, etc.)	Protective class	IP54 (if water-proof plugs / sensors are used)
Graphics display	128 x 128 pixels, 16 rows		
Illumination	5 white LEDs, 3 brightness levels		

ALMEMO® 2690-8A



Precision measuring instrument, 5 measuring inputs
Data logger with internal memory or external memory connector (accessory)

Accessories

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

Order no.

ZA1904SD
ZA2690UK2
ZB2590TK2

Connecting cables

Ethernet data cable, electrically isolated **ZA1945DK** Trigger and alarm cable (2 relays, 0.5 A, 50 V) **ZA1006EKG**
 Analog output cable, -1.25 to +2.0 V, 0.1 mV / digit **ZA1601RK** Network technology, Bluetooth modules (see chapter „Networking“)

Order no.

Options

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

Order no.

OA2690GT
OA2690KL
SB0000R2
SA0000Q5
OA2290HS

Standard delivery

3 rechargeable NiMH batteries, rubberized protection, desktop mains unit ZA1312NA7, USB data cable ZA1919DKU,
 Case ZB2490TK2, Operating instructions, manufacturer's test certificate

Order no.

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

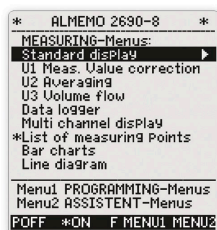
MA26908AKSU

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

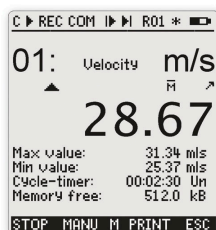
MA26908AKS

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

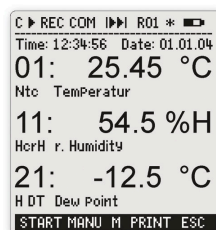
Operating concept as for precision measuring instruments ALMEMO® 2690, 2890 und 5690 / 5790



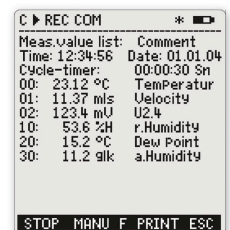
Menu selection



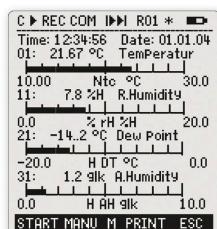
Standard display



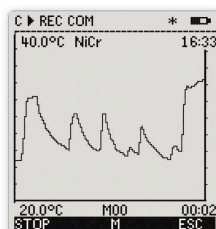
Multi-channel display



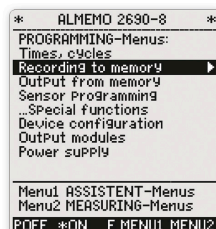
Measuring points list



Bar chart



Line diagram



Programming menu



Assistant menu