Data logger ALMEMO® 2690-8A





ALMEMO® data logger Precision measuring instrument 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
- 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

Precision class	AA (see general technical specifications)
Measuring rate	(100), 50, 10 and 2.5 mops
Measuring inputs	5 ALMEMO® input sockets
Electrical isolation	with semiconductor relays (50 V) for analog sensors
Option GT (standard from order no. H2411x)	Additional electrical isolation between measuring inputs and power supply (device ground)
Additional channels	4 function channels, device-internal
Sensor power supply	
Rechargeable battery/ies	6 / 9 / 12 V, maximum 0.5 A
Mains adapter	12 V, maximum 0.5 A
Atmospheric pressure sensor	Integrated
Measuring range	700 to 1100 mbar
Accuracy	±2.5 mbar (at 23 °C ±5 K)
Outputs	2 ALMEMO® sockets, suitable for all output modules (analog / data / trigger / relay cables, memory, etc.)
Graphics display	128 x 128 pixels, 16 rows
Illumination	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 (without 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	see general technical data

11/2025 • We reserve the right to make technical changes.

ALMEMO® 2690-8A



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“)	**ZA1904SD**
DC adapter cable, 10 to 30 VDC, 12 V / 1 A, electrically isolated	**ZA2690UK2**
Generously dimensioned carry case, aluminum profile frame / ABS	**ZB2590TK2**

Connecting cables

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

Options

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

Standard delivery

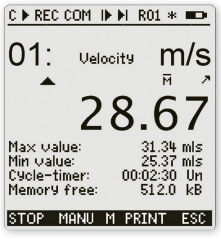
	Order no.
3 rechargeable NiMH batteries, rubberized protection, mains unit ZA1312NA12, USB data cable ZA1919DKU, Case ZB2490TK2, Operating instructions, manufacturer‘s test certificate	
Precision measuring instrument ALMEMO® 2690-8A in case set	**MA26908AKSU**
as above but with RS232 data cable ZA1909DK5	
Precision measuring instrument ALMEMO® 2690-8A in case set	**MA26908AKS**

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

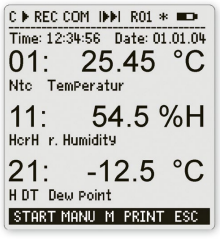
Operating concept as for precision measuring instruments ALMEMO® 2690, 2890 and 5690 / 5790



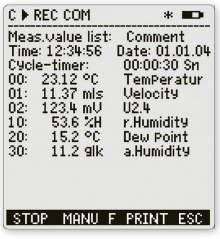
Menu selection



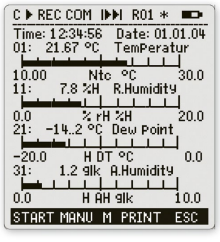
Standard display



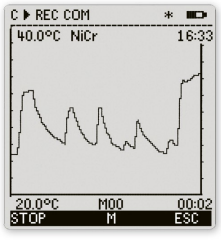
Multi-channel display



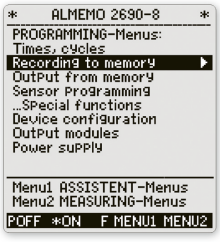
Measuring points list



Bar chart



Line diagram



Programming menu



Assistent menu