ALMEMO® 8590 /8690 series

ALMEMO® precision measuring instrument for measured data acquisition, with data logger function. Comprehensive range of functions for all application areas. Increased measuring accuracy, fast measuring rate 9 measuring inputs. Operates as data logger or PC interface, also with rechargeable batteries.

Technical data and functions, ALMEMO® 8590 /8690

- 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
- 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 option Internal EEPROM sufficient for 100,000 measured values (option S) configurable as linear or ring memory - or memory connector with micro SD (accessory)
- Sleep mode for long-term recording
- 2 ALMEMO® output sockets, suitable for digital interfaces, analog output, trigger input, alarm contacts, memory card
- 5 LEDs for indicating various operating states
- Key for switching on and start / stop measuring
- Complete sensor and device programming by means of AMR-Control software (included in delivery).

Technical data ALMEMO® 8590 /8690

Precision class	AA (see page 01.04)
Measuring rate	(100), 50, 10 and 2.5 mops
Measuring inputs Electrical isolation for analog sensors	9 ALMEMO® input sockets with semiconductor relays (50 V) Additional electrical isolation between measuring inputs and power supply (device ground)
Additional channels	4 function channels, device-internal
Outputs	2 ALMEMO® sockets, suitable for all output modules (analog / data / trigger / relay cables, memory, etc.)

Operation	1 key, 5 LEDs, 2 coding switches
Internal memory (option S)	Internal EEPROM sufficient for 100,000 measured values, configurable as linear or ring memory
External memory (accessory)	ALMEMO® memory connector with micro SD card
Date and time-of-day	Real-time clock, buffered with lithium battery
Current consumption (without input and output modules)	
Active mode	approx. 25 mA
Sleep mode	approx. 0.05 mA

ALMEMO® 8590 /8690, 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	**ZB3090UK2**

ALMEMO® 8590 /8690, connecting cable

	Order no.
USB data cable, electrically isolated	**ZA1919DKU**
V24 data cable, electrically isolated	**ZA1909DK5**
Ethernet data cable, electrically isolated	**ZA1945DK**
Analog output cable, -1.25 to +2.0 V, 0.1 mV / digit	**ZA1601RK**
Trigger and alarm cable (2 relays, 0.5 A, 50 V)	**ZA1006EKG**
Network technology, Bluetooth modules (see chapter „Networking“)	

ALMEMO® 8590-9

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

Technical data and functions

- Technical data and functions, as for ALMEMO® 8590 / 8690

Technical data

Technical data, as for ALMEMO® 8590 / 8690	
Sensor power supply	Mains adapter 12 V, maximum 0.5 A
Power supply	
Mains adapter	ZB1212NA10 100 to 240 VAC to 12 VDC, 2 A, electrically isolated
DC adapter cable	ZB3090UK2 10 to 30 VDC, 1 A, electrically isolated
Housing	180 x 49 x 137 mm (LxWxH) Polystyrene (PS) Weight approx. 490 g

Options

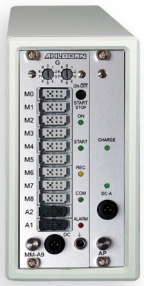
Options	Order no.
Internal data memory sufficient for 100,000 values	**OA8590S**
Multi-point adjustment, special linearization, management of calibration data	**OA8590KL**
Temperature ranges for 8 refrigerants (see 10.08)	**SB0000R2**
Measuring rate for 1 measuring channel, 400 mops (SD card required)	**SA0000Q4**
DIN rail mounting	**OA2290HS**

Standard delivery

Order no.

Mains plug assembly ZB1212NA10, operating instructions, manufacturer‘s test certificate
Precision measuring instrument ALMEMO® 8590-9 for measured data acquisition **MA85909**

ALMEMO® 8690-9A



Precision measuring instrument, 9 measuring inputs
Data logger option with internal memory or external memory connector (accessory)
Runs on rechargeable batteries, charging via the device itself

Technical data and functions

- Technical data and functions, as for ALMEMO® 8590 / 8690
- Runs on rechargeable batteries, high-speed charging in the device itself using mains unit, included in delivery

Technical data

Technical data, as for ALMEMO® 8590 / 8690	
Rechargeable battery pack	8 rechargeable NiMH batteries, 9 to 11 V, 1600 mAh With intelligent high-speed charging (3.5 hours)
Sensor power supply	
Mains adapter	12 V, maximum 0.5 A
Runs on rechargeable batteries	9 to 11.5 V, maximum 0.5 A
Power supply	
Mains adapter	ZB1212NA10 100 to 240 VAC, to 12 VDC, 2 A
DC adapter cable	electrically isolated ZB3090-UK2 10 to 30 VDC, 12 VDC, 1 A
Housing	218 x 77 x 145 mm (LxWxH) Polystyrene (PS) Weight approx. 1.2 kg

Options

Options	Order no.
Internal data memory sufficient for 100,000 values	**OA8590S**
Multi-point adjustment, special linearization, management of calibration data	**OA8590KL**
Temperature ranges for 8 refrigerants (see 10.08)	**SB0000R2**
Measuring rate for 1 measuring channel, 400 mops (SD card required)	**SA0000Q4**
DIN rail mounting	**OA2290HS**

Standard delivery

Order no.

Rechargeable batteries, mains plug assembly ZB1212NA10, Operating instructions, manufacturer‘s test certificate
Precision measuring instrument ALMEMO® 8690-9A for measured data acquisition **MA86909A**

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.

06/2018 • We reserve the right to make technical changes.